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Southern Nuclear Operating Company
the southern electric system

November 19, 1992

Docket No. 50-348

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Joseph M. Farley Nuclear Plant - Unit 1
Licensee Event Report No. LER 92-006-00

Gentlemen:

Joseph M. Farley Nuclear Plant, Unit 1, Licensee Event Report No. 92-006-00 is being submitted in accordance with 10 CFR 50.73.

If you have any questions, please advise.

Respectfully submitted,

J. D. Woodard

EFB:cht

Enclosure

cc: Mr. S. D. Ebneter
Mr. G. F. Maxwell

NRC Form 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Joseph M. Farley Nuclear Plant - Unit 1	0 5 0 0 0 3 4 8	1 OF 3

TITLE (4)
LOSP Actuation Due To Inadvertent Contact While Installing Jumper

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQ NUM	REV	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
1 0	2 8	9 2	9 2	0 0 6	0 0	1 1	1 9	9 2		0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)					
		20.402(b)	20.405(c)	X	50.73(a)(2)(iv)		73.71(b)
POWER LEVEL	0 0 0	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)
		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	
	AREA CODE	
R. D. Hill, General Manager - Nuclear Plant	205	899-5156

COMPLETE ONE LINE FOR EACH FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES(If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (16)

On 10-28-92 at 2220, an inadvertent actuation of an engineered safety feature (ESF) occurred when an electrician performing a surveillance test procedure allowed a jumper he was installing in the B1G sequencer to make contact with an adjacent terminal inside the sequencer. The inadvertent contact resulted in generation of a load shed signal which caused the normal power supply breaker to 'B' train 4160 volt bus 1G to open. This caused the 'B' train loss of site power (LOSP) sequencer to operate.

All equipment functioned properly in response to the 'B' train LOSP signal.

This event was discussed with personnel in plant safety meetings the next day as part of FNP's ongoing self-verification program. The electrician involved has been coached on the proper techniques for landing jumpers in congested spaces. Procedural enhancements have been made to aid in the prevention of recurrence of this incident. Plant personnel whose job requirements include installing jumpers were trained on the procedural enhancements prior to performing any further work involving installation of jumpers. Annual Maintenance retraining will include instruction on the procedure for jumper installation.

Also, the B1G sequencer was inspected for evidence of arcing or other damage and none was found.

Plant and System Identification

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

Summary of Event

During the performance of FNP-1-STP 40.2, "B Train Sequencer SI With Off-site Power Available and Load Shedding Circuit Test", an electrician, while working inside the B1G sequencer [JE], made contact with a terminal adjacent to the one on which he was attempting to install a jumper. This inadvertent contact resulted in the generation of a load shed signal (LOSP) on the 'B' train safety related electrical busses.

Description of Event

On 10-28-92 at 2220, FNP-1-STP-40.2, "B Train Sequencer SI with Off-Site Power Available and Load Shedding Circuit Test" was in progress.

An electrician, attempting to install a jumper in accordance with the test procedure, made inadvertent contact with an adjacent terminal inside the B1G sequencer. The electrician did not use an adequately insulated jumper nor did he apply appropriate insulating material to prevent inadvertent contact with adjacent terminals. This inadvertent contact resulted in the generation of a load shed signal which caused the normal power supply breaker to 'B' train 4160 volt bus 1G to open and the 'B' train LOSP sequencer to operate.

The 1B and 2C diesel generators started as required and the 1B diesel generator energized the 1G 4160 volt bus. All equipment functioned properly in response to the 'B' train loss of site power.

The control room operators performed the actions of FNP-1-AOP-5.0, "Loss of A or B Train Electrical Power". Off-site power was restored to the 'B' train electrical busses and the 1B and 2C diesel generators were secured.

Cause of Event

This ESF actuation was caused by personnel error. An electrician made inadvertent contact with an adjacent terminal inside the B1G sequencer while attempting to install a jumper per STP-40.2. This inadvertent contact resulted in generation of a load shed signal, which caused the normal power supply breaker to 'B' train 4160 volt bus 1G to open.

Reportability Analysis and Safety Assessment

This event is reportable due to the actuation of an Engineered Safety Feature, namely the loss of power to 'B' train 4160 volt safety related electrical bus 1G.

All equipment functioned properly in response to this event.

The health and safety of the public was not affected.

Corrective Action

A team of FNP personnel held a critique and preliminary investigation meeting immediately following the event. A root cause investigation was then initiated.

This event was discussed with personnel in plant safety meetings as part of FNP's ongoing self-verification program. The electrician involved has been coached on the proper techniques for landing jumpers in congested spaces. Procedural enhancements have been made to aid in the prevention of recurrence of this incident. Plant personnel, whose job requirements include installing jumpers, were trained on the procedural enhancements prior to performing further work involving installation of jumpers. Annual Maintenance retraining will include instruction on the procedure for jumper installation.

Also, the B1G sequencer was inspected for evidence of arcing or other damage and none was found.

Additional Information

The following LERs have been submitted by FNP for an inadvertent load shed on a safety related bus due to accidental contact while connecting jumpers or using tools: LER 85-003-00 (Unit 1), 87-005-00 (Unit 2), 87-006-00 (Unit 2) and 88-024-00 (Unit 1)

The appropriate nonemergency 4 hour report was made to the NRC at 2231 on 10-28-92.

The unit was defueled at the time of the activation.

This event would not have been more severe during power operations because this surveillance test procedure is only performed in Modes 5, 6 or defueled.