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May 31, 2012

Docket No.: 50-348

NL-12- 0771

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Joseph M. Farley Nuclear Plant – Unit 1
Licensee Event Report 2012-003-00
Unplanned A Train LOSP during SI with LOSP Testing

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73 (a)(2)(iv)(A), Southern Nuclear Operating Company (SNC) is submitting the enclosed Licensee Event Report. This letter contains no NRC commitments. If you have any questions, please contact Doug McKinney at (205) 992-5982.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Lynch".

T. A. Lynch
Vice President – Farley

TALWDO

Enclosure: Unit 1 Licensee Event Report 2012-003-00

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cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. B. L. Ivey, Vice President – Regulatory Affairs
Mr. B. J. Adams, Vice President – Fleet Operations
Mr. M. J. Ajluni, Director – Nuclear Licensing
RTYPE: CFA04.054

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. R. E. Martin, NRR Project Manager – Farley
Mr. E. L. Crowe, Senior Resident Inspector – Farley

**Joseph M. Farley Nuclear Plant – Unit 1
Licensee Event Report 2012-003-00
Unplanned A Train LOSP during SI with LOSP Testing**

Enclosure

Unit 1 Licensee Event Report 2012-003-00

LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME Joseph M. Farley Nuclear Plant, Unit 1	2. DOCKET NUMBER 05000 348	3. PAGE 1 OF 4
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4. TITLE
Unplanned A Train LOSP during SI with LOSP Testing

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
04	05	2012	2012	- 003 -	00	05	31	2012	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE 6	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)			
10. POWER LEVEL 000	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER	
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A	

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME J.M. Farley Nuclear Plant, W. D. Oldfield – Principal Licensing Engineer	TELEPHONE NUMBER (include Area Code) (334) 814-4765
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO			

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On April 5, 2012 at approximately 12:24, with Unit 1 in mode 6, an unplanned loss of power on A-train 4160 volt emergency bus 1F occurred during a scheduled outage test, Safety Injection (SI) with Loss of Off-Site Power (LOSP). Prior to the event, the 1-2A Emergency Diesel Generator (EDG) was solely aligned to the 1F bus and successfully carrying all the loads per the test sequence. During subsequent restoration steps the 1-2A EDG should have been paralleled to the grid, however, a human performance error was made and this procedure step was not correctly performed. When the B1F Sequencer Test Trip Override Switch (TTOS) was selected to the 'On' position, the EDG output breaker (DF08-1) opened to generate an LOSP signal on the 1F bus. As a result, the B1F Sequencer functioned to automatically re-close DF08-1, and automatically start all LOSP loads. All systems functioned as designed for this condition. Since core cooling was aligned to the A-train prior to the event, the A-train 1A Residual Heat Removal (RHR) pump was deenergized when the LOSP occurred. This pump is not an LOSP load and therefore did not automatically restart. The 1A RHR pump was manually restarted one minute after the LOSP to reestablish core cooling after an increase in reactor coolant system (RCS) temperature of approximately four degrees. Unit 2 was unaffected and remained at 100 percent power during the event.

Once the error was recognized, the surveillance test procedure was properly executed to restore off-site power and shutdown the 1-2A EDG without further complications.

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CONTINUATION SHEET**

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NARRATIVE

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

Description of Event

On April 5, 2012 at approximately 12:24, with Unit 1 in mode 6, an unplanned loss of power on A-train 4160 volt emergency bus 1F [EK] occurred during a scheduled outage test of the SI/LOSP signal. Prior to the event, the 1-2A Emergency Diesel Generator (EDG) [EK] was solely aligned to the 1F bus and successfully carrying all the loads per the test sequence. During subsequent restoration steps the 1-2A EDG should have been paralleled to the grid, however, a human performance error was made and this procedure step was not correctly performed. When the B1F Sequencer Test Trip Override Switch (TTOS) was selected to the 'On' position, the EDG output breaker (DF08-1) opened to generate an LOSP signal on the 1F bus.

As a result, the B1F Sequencer functioned to automatically re-close DF08-1, and automatically start all LOSP loads. This included the 1C Component Cooling Water Pump (CCW) [CC], the 1A High Head Safety Injection Pump (discharge isolation valve was closed prior to the event) [BQ], and the 1A and 1B Service Water Pumps [BI]. All systems functioned as designed for this condition. Since core cooling was aligned to the A-train prior to the event, the A-train, 1A Residual Heat Removal (RHR) [BP] pump was deenergized when the LOSP occurred. This pump is not an LOSP load and therefore did not automatically restart. The 1A RHR pump was manually restarted one minute after the LOSP to reestablish core cooling after a slight increase in reactor coolant system (RCS) temperature of approximately four degrees. Unit 2 was not affected and remained at 100 percent power during the event.

Once the error was recognized, the surveillance test procedure was properly executed to restore off-site power and shutdown the 1-2A EDG without further complications.

In accordance with 10 CFR 50.72(b)(3)(iv)(A) for a valid actuation of the emergency core cooling and emergency AC electrical power systems, an eight hour non-emergency report was issued on April 5, 2012 at 17:21, Event Notification number 47809.

Cause of Event

The direct cause of the event was the failure to correctly perform a procedural step to parallel the 1-2A EDG with off-site power and return it to automatic standby operation. As a result, when the B1F Sequencer Test Trip Override Switch (TTOS) was selected to the 'On' position, the EDG output breaker (DF08-1) opened to generate an LOSP signal on the 1F bus. Additional human factor weaknesses were identified in the step structuring at the point of error in the test procedure. Furthermore, a contributing cause was the failure to identify and brief on critical steps in the procedure.

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Safety Assessment

This event had no adverse effect on the safety and health of the public. There were no safety system functional failures and all systems functioned as designed.

The Farley onsite standby power source is provided from four EDGs (1-2A, 1B, 2B, and 1C). EDGs 1-2A and 1C are A-Train and EDGs 1B and 2B are B-Train. Farley also has a fifth diesel generator (2C) that serves as a station blackout diesel, which can be manually aligned to supply B-Train power to either unit and power LOSP loads.

During the restoration portion of the test procedure, EDG 1-2A was operating and tied to the 1F Emergency Bus. During subsequent restoration steps the 1-2A EDG should have been paralleled to the grid, however, a human performance error was made and this procedure step was not correctly performed. When the B1F Sequencer Test Trip Override Switch (TTOS) was selected to the 'On' position, the EDG output breaker (DF08-1) opened to generate an LOSP signal on the 1F bus. Sensing the LOSP condition, the B1F Sequencer properly functioned to re-close DF08-1 and sequentially start and connect loads on emergency Bus 1F. Loads are automatically and sequentially started per design to prevent overloading of the EDG. The EDG output breaker closure and sequencing of shutdown loads are required functions of an EDG and therefore had no adverse effect on the safety and health of the public.

The A-train 1A RHR pump was deenergized when the LOSP occurred. This pump is not an LOSP load and therefore did not automatically restart since a safety injection (SI) signal was not present. The 1A RHR pump was manually restarted one minute after the LOSP to reestablish core cooling after a slight increase in reactor coolant system (RCS) temperature of approximately four degrees. The B-train 1B EDG was operable and the B-train 1B RHR pump was available to be started if needed. Since both RHR trains were available and the 1A RHR pump was restarted, a loss of safety function did not occur.

This event is reportable pursuant to 10 CFR 50.73 (a)(2)(iv)(A) for a system actuation.

Corrective Action

Once the error was recognized, the surveillance test guidance was properly executed to restore off-site power, shutdown the 1-2A EDG, and successfully complete the SI with LOSP test procedure.

Causal analysis was completed and additional actions to enhance the procedure and improve the identification of critical steps were identified; and will be tracked to closure in the corrective action program (CAP).

Industry Operating Experience (OE) on the event has been issued.

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NARRATIVE

Additional Information

Similar Events:

LER 2010-001-00 Unit 2 – Unplanned LOSP during SI with LOSP Testing

LER 2009-001-00 Unit 1 and 2 – EDG 1C Auto Start due to Inadvertent Relay Actuation