

Thomas A. Lynch
Vice President - Farley

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January 9, 2012

Docket Nos.: 50-348
50-364

NL-11-2445

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

Joseph M. Farley Nuclear Plant – Units 1 and 2
Licensee Event Report 2011-S01-00
Loss of Power to Security Systems

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 73.71 Section (d) and 10 CFR 73 Appendix G Section I(c), 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

TAL/WDO

Enclosure: Units 1 and 2 Licensee Event Report 2011-S01-00

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cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Chief Nuclear Officer
Ms. P. M. Marino, Vice President – Engineering
Mr. B. L. Ivey, Vice President – Regulatory Affairs
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 – Units 1 and 2
Licensee Event Report 2011-S01-00
Loss of Power to Security Systems**

Enclosure

Units 1 and 2 Licensee Event Report 2011-S01-00

NRC FORM 366 (10-2010)		U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013																																					
LICENSEE EVENT REPORT (LER)																																							
1. FACILITY NAME Joseph M. Farley Nuclear Plant, Unit 1		2. DOCKET NUMBER 05000 348	3. PAGE 1 OF 3																																				
4. TITLE Loss of Power to Security Systems																																							
5. EVENT DATE <table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>MONTH</th><th>DAY</th><th>YEAR</th></tr> <tr><td>11</td><td>15</td><td>2011</td></tr> </table>		MONTH	DAY	YEAR	11	15	2011	6. LER NUMBER <table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>YEAR</th><th>SEQUENTIAL NUMBER</th><th>REV NO.</th></tr> <tr><td>2011</td><td>- S01 -</td><td>00</td></tr> </table>		YEAR	SEQUENTIAL NUMBER	REV NO.	2011	- S01 -	00																								
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FACILITY NAME J.M. Farley Nuclear Plant, W. D. Oldfield – Principal Licensing Engineer		TELEPHONE NUMBER (Include Area Code) 334 814-4765																																					
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT																																							
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14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO						15. EXPECTED SUBMISSION DATE <table border="1" style="width:100%; border-collapse: collapse;"> <tr><th>MONTH</th><th>DAY</th><th>YEAR</th></tr> <tr><td> </td><td> </td><td> </td></tr> </table>				MONTH	DAY	YEAR																											
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ABSTRACT <i>(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)</i> <p>On November 15, 2011 at approximately 06:05, with Unit 1 at 100 percent and Unit 2 at 88 percent power, all security equipment lost power including card readers, microwaves, and cameras. The security uninterruptable power supply (UPS) did not operate to keep the security equipment functional. Security compensatory measures were established within approximately ten minutes and remained in effect until the power was restored to all security equipment. There was never any indication of undetected access, evidence of tampering, or on-going security threat. Power was restored to all security equipment through the operation of a UPS manual bypass switch. All loads were systematically restored and successfully tested before compensatory measures were relaxed on November 15, 2011 at 18:00.</p> <p>A one-hour non emergency report was made on November 15, 2011 at 07:03 in accordance with 10 CFR 73 Appendix G Section I(c) for a failure of a safeguard system that could allow undetected access to the protected area or vital areas. The vendor supported troubleshooting revealed that the security UPS failed due to three faulty microswitches in the blown fuse alarm circuitry. These microswitches were replaced and the system was removed from manual bypass to normal operation on November 18, 2011 at approximately 15:00.</p>																																							

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE		
Joseph M. Farley Nuclear Plant, Unit 1	05000 348	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	of	3
		2011	- S01	- 00			

NARRATIVE

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

Description of Event

On November 15, 2011 at approximately 06:05, with Unit 1 at 100 percent and Unit 2 at 88 percent power, all security equipment lost power including card readers, microwaves, and cameras. There was no significant plant equipment out of service that had an impact on this event. The security uninterruptable power supply (UPS) [EE] did not operate to keep the security equipment functional. Security compensatory measures were established within approximately ten minutes and remained in effect until the power was restored to all security equipment. There was never any indication of undetected access, evidence of tampering, or on-going security threat. Power was restored to all security equipment through the operation of an UPS manual bypass switch. All loads were systematically restored and successfully tested before compensatory measures were relaxed on November 15, 2011 at 18:00.

A one-hour non emergency report was made on November 15, 2011 at 07:03 in accordance with 10 CFR 73 Appendix G Section I(c) for a failure of a safeguard system that could allow undetected access to the protected area or vital areas. The vendor supported troubleshooting revealed that the security UPS failed due to three faulty microswitches in the blown fuse alarm circuitry. The faulty 4 amp at 250 volt microswitches (type MAI and part number 540-9197) were manufactured by Bussmann. These microswitches were replaced and the system was removed from manual bypass to normal operation on November 18, 2011 at approximately 15:00.

Cause of Event

The normal alignment of the UPS inverter is "Normal Operation." When the inverter senses an internal fault it automatically switches to static bypass or the alternate power source from a dedicated security diesel. On November 15, 2011, the inverter sensed blown fuses due to three faulty microswitches and attempted to swap to static bypass. However, due to an alarm that came in the previous week (frequency out-of-tolerance) on November 10, 2011, static bypass to the security diesel was unavailable. Therefore, when the inverter sensed blown fuses and attempted to swap to bypass, the bypass was unavailable and the inverter shutdown, resulting in a total loss of security power.

The Security UPS had only been in operation for approximately four months. The vendor indicated that this was not a common equipment fault with this brand of UPS. Therefore, the equipment faults could not have been prevented. However, the event could have been prevented had it been recognized that an immediate response to the alarm received the previous week on November 10, 2011 was needed. As a result, the causal analysis identified weaknesses in system monitoring and knowledge gaps in system operation as contributing causes.

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NARRATIVE

Safety Assessment

Although security systems experienced a loss of power, compensatory measures were established within approximately ten minutes. These compensatory measures were maintained until security system power was restored, loads reestablished, and systems tested. Additional security force officers from other Southern Nuclear (SNC) plants were brought in as added assurance in establishing compensatory measures in the event power was subsequently lost during troubleshooting and/or power transfer operations. A determination was made that no security threat ever existed. Therefore, no risk to plant equipment or operation was identified. Accordingly, there was no safety significance associated with this event, as there were no releases of radioactive materials, no personnel injuries, and no undetected or unauthorized entries made into the protected area or other vital areas. There were no safety system functional failures as a result of this event. This event had no adverse effect on the safety and health of the public.

Corrective Action

The three faulty microswitches were replaced and the system was removed from manual bypass to normal operation.

Causal analysis was initiated and additional corrective actions were identified. These actions related to the new security UPS involve improving equipment monitoring, enhancing operating procedures, and training on system operation will be tracked to closure in the corrective action program.

Additional Information

Similar Events:

None