**Charles R. Pierce**
Regulatory Affairs Director

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SOUTHERN COMPANY

JUL 0 2 2015

Docket Nos.: 50-348

NL-15-0963

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

Joseph M. Farley Nuclear Plant – Unit 1
Licensee Event Report 2015-002-00
Technical Specification Shutdown Due To Reactor Coolant Pump Trip

Ladies and Gentlemen:

This Licensee Event Report is being submitted pursuant to the requirements of the Code of Federal Regulations, 10 CFR 50.73(a)(2)(i)(A), for a plant shutdown required by Technical Specifications.

This letter contains no NRC commitments. If you have any questions regarding the submittal, please contact Ms. Julie Collier at (334) 814-4639.

Sincerely,

C. R. Pierce

C. R. Pierce
Regulatory Affairs Director

CRP/jac/lac

Enclosure: Unit 1 Licensee Event Report 2015-002-00

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer
Mr. M. D. Meier, Vice President – Regulatory Affairs
Mr. D. R. Madison, Vice President – Fleet Operations
Mr. B. J. Adams, Vice President – Engineering
Ms. B. L. Taylor, Regulatory Affairs Manager - Farley
RTYPE: CFA04.054

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. S. A. Williams, NRR Project Manager - Farley
Mr. P. K. Niebaum, Senior Resident Inspector - Farley

**Joseph M. Farley Nuclear Plant – Unit 1**

**Licensee Event Report 2015-002-00**

**Enclosure**

**Technical Specification Shutdown Due To Reactor Coolant Pump Trip**

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 1/31/2017

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 and Information Collections Branch (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.

# LICENSEE EVENT REPORT (LER)

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**4. TITLE**

Technical Specification Shutdown Due To Reactor Coolant Pump Trip

| 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 |
| 05 | 07 | 2015 | 2015 | – 002 – | 00 | 7 | 2 | 2015 | FACILITY NAME | DOCKET NUMBER |

**9. OPERATING MODE**

1

**10. POWER LEVEL**

27 %

**11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §:** *(Check all that apply)*

| | | | |
|---|---|---|---|
| ☐ 20.2201(b) | ☐ 20.2203(a)(3)(i) | ☐ 50.73(a)(2)(i)(C) | ☐ 50.73(a)(2)(vii) |
| ☐ 20.2201(d) | ☐ 20.2203(a)(3)(ii) | ☐ 50.73(a)(2)(ii)(A) | ☐ 50.73(a)(2)(viii)(A) |
| ☐ 20.2203(a)(1) | ☐ 20.2203(a)(4) | ☐ 50.73(a)(2)(ii)(B) | ☐ 50.73(a)(2)(viii)(B) |
| ☐ 20.2203(a)(2)(i) | ☐ 50.36(c)(1)(i)(A) | ☐ 50.73(a)(2)(iii) | ☐ 50.73(a)(2)(ix)(A) |
| ☐ 20.2203(a)(2)(ii) | ☐ 50.36(c)(1)(ii)(A) | ☐ 50.73(a)(2)(iv)(A) | ☐ 50.73(a)(2)(x) |
| ☐ 20.2203(a)(2)(iii) | ☐ 50.36(c)(2) | ☐ 50.73(a)(2)(v)(A) | ☐ 73.71(a)(4) |
| ☐ 20.2203(a)(2)(iv) | ☐ 50.46(a)(3)(ii) | ☐ 50.73(a)(2)(v)(B) | ☐ 73.71(a)(5) |
| ☐ 20.2203(a)(2)(v) | ☒ 50.73(a)(2)(i)(A) | ☐ 50.73(a)(2)(v)(C) | ☐ OTHER |
| ☐ 20.2203(a)(2)(vi) | ☐ 50.73(a)(2)(i)(B) | ☐ 50.73(a)(2)(v)(D) | Specify in Abstract below or in NRC Form 366A |

**12. LICENSEE CONTACT FOR THIS LER**

| FACILITY NAME | TELEPHONE NUMBER *(Include Area Code)* |
|---|---|
| Julie A. Collier – Licensing Engineer | (334) 814-4639 |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | N/A | | | | | |

**14. SUPPLEMENTAL REPORT EXPECTED**

☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

**15. EXPECTED SUBMISSION DATE**

| MONTH | DAY | YEAR |
|---|---|---|
| | | |

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

At 0740 CDT on May 7, 2015, while at 27 percent power in Mode 1, the Unit 1 reactor was shut down and entered Mode 3. This shutdown was required by Technical Specification 3.4.4 Condition A which was entered at 0509 when the 1B Reactor Coolant Pump (RCP) tripped. The cause of the 1B RCP trip was a loss of the 1B electrical bus during the transfer of station loads from 1B Start Up Auxiliary Transformer (SAT) to the 1B Unit Auxiliary Transformer (UAT).

The cause of this event was that jumpers were inappropriately left in place because of a failure to adhere to standards during the project management process for the 1B UAT design change. Lapses in standards occurred at various levels of the organization in project oversight, work planning preparation and review, and proper post modification testing. Immediate actions were the removal of the jumpers and the completion of extensive post modification testing. Additional corrective actions will be taken to reinforce planning and project management standards and strengthen post modification testing development guidance.

NRC FORM 366A (02-2014) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 01/31/2017

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 and Information Collections Branch (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.

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

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NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

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

DESCRIPTION OF EVENT

At 0740 CDT on May 7, 2015, while at 27 percent power in Mode 1, the Unit 1 reactor was shut down per operating procedures and entered Mode 3. This shutdown was required by Technical Specification (T.S.) 3.4.4 Condition A which was entered at 0509 when the 1B Reactor Coolant Pump (RCP) tripped. The cause of the 1B RCP trip was a loss of the 1B electrical bus when the transfer of station loads from 1B Start Up Auxiliary Transformer (SAT) to the 1B Unit Auxiliary Transformer (UAT) failed due to jumpers having been inappropriately left in place during maintenance work associated with the installation of a new 1B UAT. The 1B Circulating Water pump also tripped when the 1B bus was de-energized. The plant also entered T.S. 3.4.2 condition A for Reactor Coolant System Minimum Temperature for Criticality due to the transient in loop temperature caused by the loss of the 1B RCP. This condition was exited after 15 minutes.

In 2006 a new transformer for the 1B UAT was partially installed in the Low Voltage Switchyard (LVSY). It remained on a storage pad in the LVSY since that time. Factory installed jumpers were in place to protect the current transformers. During the Unit 1 refueling outage in April and May of 2015 the design package to complete the installation was implemented as a station reliability enhancement initiative. While ascending in power from 1R26, the operating crew was transferring station loads from the 1B SAT to the 1B UAT when an unexpected actuation of the 1B UAT protective relaying occurred resulting in the loss of the 1B bus and subsequently the 1B RCP due to the jumpers having not been removed prior to energizing the 1B UAT.

CAUSE OF EVENT

The cause of this event was that jumpers were inappropriately left in place because of a failure to adhere to station standards during the project management process for the 1B UAT design change. Lapses in standards occurred at various levels of the organization in project oversight, work planning preparation and review, and proper post modification testing.

The causal analysis for this event is still in progress. This LER will be supplemented if information in this LER is affected by the final approved causal analysis.

REPORTABILITY ANALYSIS AND SAFETY ASSESSMENT

This event is reportable as required by 10 CFR 1 50.73(a)(2)(i)(A) due to a Unit 1 shutdown required by Technical Specifications. Technical Specification 3.4.4 Condition A was entered at 0509 when the 1B RCP tripped. The abnormal operating procedure was entered for loss of reactor coolant flow. The reactor was shut down at 0740 and mode 3 was entered to complete the required TS action. All safety related equipment operated as designed in association with this event. There was no loss of safety function and no radioactive release associated with this event. There was no actual consequence detrimental to the health and safety of the public.

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 and Information Collections Branch (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.

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**NARRATIVE**

## CORRECTIVE ACTION

Immediate actions were the removal of the jumpers and the completion of extensive post modification testing. Additional corrective actions will be taken to reinforce planning and project management standards and strengthen post modification testing development guidance.

## ADDITIONAL INFORMATION

Other system affected: No systems other than those mentioned in this report were affected by this event.

Commitment Information: This report does not create any licensing commitments

Previous Similar Events: None