

June 29, 2017

Docket No: 50-424

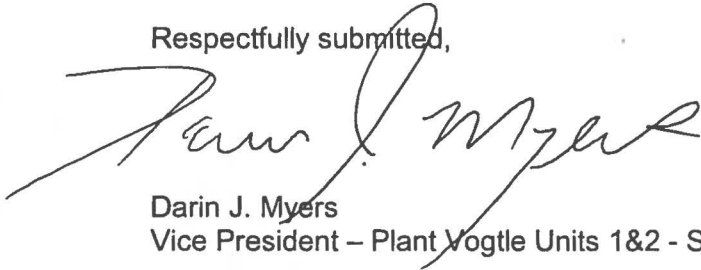
NL-17-1104

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001Vogtle Electric Generating Plant – Unit 1
Licensee Event Report 2017-002-01
Wiring Error results in Automatic Actuation of a Safety System

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(iv)(A), Southern Nuclear Operating Company is submitting the enclosed Licensee Event Report, 2017-002-01 for Vogtle Electric Generating Plant Unit 1. This letter contains no NRC commitments. If you have any questions, please contact Dom Sutton at (706) 848-1428.

Respectfully submitted,

Darin J. Myers
Vice President – Plant Vogtle Units 1&2 - SNC

DJM/KCW

Enclosure: Unit 1 Licensee Event Report 2017-002-01

Cc: Regional Administrator
NRR Project Manager – Vogtle 1 & 2
Senior Resident Inspector – Vogtle 1 & 2
RType: CVC7000

Vogtle Electric Generating Plant – Unit 1
Licensee Event Report 2017-002-01
Wiring Labeling Error results in Automatic Actuation of a Safety System

Enclosure

Unit 1 Licensee Event Report 2017-002-01

NRC FORM 366 (04-2017)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB: NO. 3150-0104		EXPIRES: 03/31/2020			
LICENSEE EVENT REPORT (LER) (See Page 2 for required number of digits/characters for each block)										
(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)										
1. FACILITY NAME Vogtle Electric Generating Plant					2. DOCKET NUMBER 05000424			3. PAGE 1 OF 2		
4. TITLE Wiring Error results in Automatic Actuation of a Safety System										
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
3	17	2017	2017	- 002	- 01	6	29	2017		05000
									FACILITY NAME	DOCKET NUMBER
										05000
9. OPERATING MODE		11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)								
6		<input type="checkbox"/> 20.2201(b)		<input type="checkbox"/> 20.2203(a)(3)(i)		<input type="checkbox"/> 50.73(a)(2)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(viii)(A)		
		<input type="checkbox"/> 20.2201(d)		<input type="checkbox"/> 20.2203(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(ii)(B)		<input type="checkbox"/> 50.73(a)(2)(viii)(B)		
		<input type="checkbox"/> 20.2203(a)(1)		<input type="checkbox"/> 20.2203(a)(4)		<input type="checkbox"/> 50.73(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(ix)(A)		
		<input type="checkbox"/> 20.2203(a)(2)(i)		<input type="checkbox"/> 50.36(c)(1)(i)(A)		<input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)		<input type="checkbox"/> 50.73(a)(2)(x)		
10. POWER LEVEL		<input type="checkbox"/> 20.2203(a)(2)(ii)		<input type="checkbox"/> 50.36(c)(1)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(v)(A)		<input type="checkbox"/> 73.71(a)(4)		
		<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.36(c)(2)		<input type="checkbox"/> 50.73(a)(2)(v)(B)		<input type="checkbox"/> 73.71(a)(5)		
		<input type="checkbox"/> 20.2203(a)(2)(iv)		<input type="checkbox"/> 50.46(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> 73.77(a)(1)		
		<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)(D)		<input type="checkbox"/> 73.77(a)(2)(i)		
		<input type="checkbox"/> 20.2203(a)(2)(vi)		<input type="checkbox"/> 50.73(a)(2)(i)(B)		<input type="checkbox"/> 50.73(a)(2)(vii)		<input type="checkbox"/> 73.77(a)(2)(ii)		
		<input type="checkbox"/> 50.73(a)(2)(i)(C)		<input type="checkbox"/> OTHER		Specify in Abstract below or in NRC Form 366A				
12. LICENSEE CONTACT FOR THIS LER										
LICENSEE CONTACT Dom Sutton, Regulatory Affairs Manager, Vogtle Electric Generating Plant								TELEPHONE NUMBER (Include Area Code) 706-848-1428		
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										
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 March 17, 2017, at approximately 1517 EDT, during refueling operations on Unit 1, power was being restored to the Open Phase system for the 1-B Reserve Auxiliary Transformer (RAT). During restoration, a valid undervoltage actuation signal was sent to the 1-B Emergency Diesel Generator (EDG). The EDG automatically started and tied to the safety bus. This undervoltage condition was caused by a wiring error in the Open Phase system to the 1-B RAT. Unit 1 was in Mode 6 at the time and remained so throughout the event. There was no change in the decay heat removal for the plant. Because this event resulted in the automatic actuation of a system listed in 10 CFR 50.73(a)(2)(iv)(B), this event is reportable under 10 CFR 50.73(a)(2)(iv)(A). This event had no adverse effect on the health and safety of the public, and is of very low safety significance. Unit 2 was unaffected.										

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

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by 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	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Vogtle Electric Generating Plant	05000-424	2017	- 002	- 01

NARRATIVE**A. Event Description**

On March 17, 2017, at approximately 1517 EDT, Unit 1 was in refueling outage 1R20 with the unit in Mode 6 being prepared for fuel offload. After work had been performed on the 1-B Reserve Auxiliary Transformer (RAT) and during power restoration, a valid undervoltage actuation signal was sent to the 1-B Emergency Diesel Generator (EDG). The EDG started and automatically tied to the electrical safety bus. Once the issue was identified and understood by the operators, the EDG was secured and the electrical safety bus was transferred to the appropriate offsite power source. The reactor was Mode 6 at the time of the event and remained so throughout the event. Decay heat was removed via the Residual Heat Removal (RHR) system, to the Component Cooling Water System, to the Nuclear Service Cooling Water system, and finally to the atmosphere.

This report is required per 10CFR50.73(a)(2)(iv)(A) due to an automatic actuation of the Emergency AC power system.

B. Cause of Event

The cause of the event was a wiring error of the Open Phase system alarm and trip circuitry to the RAT. This resulted in a valid undervoltage actuation signal to be sent to the 1 B EDG as power was being restored to the Open Phase system. The EDG properly detected the undervoltage condition and responded per design.

C. Safety Assessment

The EDG properly started and loaded the safety bus as required. At no time was decay heat removal lost to the RCS or the Spent Fuel Pool. Because all safety systems performed their safety function, the safety significance of the event is considered very low.

D. Corrective Actions

The wiring error was discovered using a continuity check during the post-event troubleshooting. The wires from the Open Phase system to the 1-B RAT were found mislabeled and landed on the wrong terminals. The wiring error was subsequently corrected and an extent of condition review was performed to verify proper labels and continuity and no other errors were found.

E. Previous Similar Events:

None