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June 29, 2004



Docket No.: 50-425

NL-04-1137

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

Vogtle Electric Generating Plant  
Licensee Event Report 2-2003-001  
Technical Specification Required Shutdown Not Performed  
Following Issuance of NOED

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73, Southern Nuclear Operating Company hereby submits a Vogtle Electric Generating Plant licensee event report for a condition that occurred on November 5, 2003.

If you have any questions, please advise.

Sincerely,

A handwritten signature in black ink that reads "Jeffrey T. Gasser". The signature is written in a cursive style with a long horizontal line extending to the right.

Jeffrey T. Gasser

JTG/TDH/daj

Enclosure: LER 2-2003-001

cc: Southern Nuclear Operating Company  
Mr. J. B. Beasley, Jr., Executive Vice President  
Mr. W. F. Kitchens, General Manager – Plant Vogtle  
Mr. S. Barger, Assistant General Manager, Plant Support – Plant Vogtle  
RType: CVC7000

U. S. Nuclear Regulatory Commission  
Dr. W. D. Travers, Regional Administrator  
Mr. C. Gratton, NRR Project Manager – Vogtle  
Mr. J. Zeiler, Senior Resident Inspector – Vogtle

Handwritten initials "JED2" in black ink, located in the bottom right corner of the page.

APPROVED BY OMB NO. 3150-0104 EXPIRES 7/31/2004  
 Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@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 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)**

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME Vogtle Electric Generating Plant – Unit 2	2. DOCKET NUMBER 05000-425	3. PAGE 1 OF 4
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4. TITLE  
**TECH. SPEC. REQUIRED SHUTDOWN NOT PERFORMED FOLLOWING ISSUANCE OF NOED**

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER(S)
11	05	2003	2003	001	01	06	29	2004		05000
									FACILITY NAME	DOCKET NUMBER(S)
										05000

9. OPERATING MODE I	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § : (Check all that apply)									
10. POWER LEVEL 100	<input type="checkbox"/>	20.2201(b)	<input type="checkbox"/>	20.2203(a)(3)(ii)	<input type="checkbox"/>	50.73(a)(2)(ii)(B)	<input type="checkbox"/>	50.73(a)(2)(ix)(A)		
	<input type="checkbox"/>	20.2201(d)	<input type="checkbox"/>	20.2203(a)(4)	<input type="checkbox"/>	50.73(a)(2)(iii)	<input type="checkbox"/>	50.73(a)(2)(x)		
	<input type="checkbox"/>	20.2203(a)(1)	<input type="checkbox"/>	50.36(c)(1)(i)(A)	<input type="checkbox"/>	50.73(a)(2)(iv)(A)	<input type="checkbox"/>	73.71(a)(4)		
	<input type="checkbox"/>	20.2203(a)(2)(i)	<input type="checkbox"/>	50.36(c)(1)(ii)(A)	<input type="checkbox"/>	50.73(a)(2)(v)(A)	<input type="checkbox"/>	73.71(a)(5)		
	<input type="checkbox"/>	20.2203(a)(2)(ii)	<input type="checkbox"/>	50.36(c)(2)	<input type="checkbox"/>	50.73(a)(2)(v)(B)	<input type="checkbox"/>	OTHER		
	<input type="checkbox"/>	20.2203(a)(2)(iii)	<input type="checkbox"/>	50.46(a)(3)(ii)	<input type="checkbox"/>	50.73(a)(2)(v)(C)	<input type="checkbox"/>	Specify in Abstract below or in NRC Form 366A		
	<input type="checkbox"/>	20.2203(a)(2)(iv)	<input type="checkbox"/>	50.73(a)(2)(i)(A)	<input type="checkbox"/>	50.73(a)(2)(v)(D)	<input type="checkbox"/>			
	<input type="checkbox"/>	20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)(B)	<input type="checkbox"/>	50.73(a)(2)(vii)	<input type="checkbox"/>			
<input type="checkbox"/>	20.2203(a)(2)(vi)	<input type="checkbox"/>	50.73(a)(2)(i)(C)	<input type="checkbox"/>	50.73(a)(2)(viii)(A)	<input type="checkbox"/>				
<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)(B)	<input type="checkbox"/>				

12. LICENSEE CONTACT FOR THIS LER

NAME Mehdi Sheibani, Nuclear Safety and Compliance	TELEPHONE NUMBER (Include Area Code) (706) 826-3209
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
B	JG	HS	G223	N					

14. SUPPLEMENTAL REPORT EXPECTED

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	MONTH 07	DAY 01	YEAR 2004
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16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On October 26, 2003, personnel were performing Technical Specification (TS) surveillances on the Solid State Protection System (SSPS). A switch in the test circuit that is used to test memories logic functions would not operate properly in all positions. This prevented successful completion of the surveillance testing for some functions, which was due by November 5, 2003. After this time, following completion of a 24-hour TS Required Action Completion Time, a unit shutdown would have been required to be initiated per the action requirements of the TS. A telephone conversation with NRC personnel was conducted on November 4, 2003. During this conversation, the NRC granted a notice of enforcement discretion (NOED) allowing the TS surveillance requirements to be late without enforcement for a period of 28 days. The 28 days represented a reasonable period of time for a written request, to change the TS, to be processed by the NRC. The TS change allowed the required surveillance testing to be delayed until after the end of the fuel cycle in Spring 2004, or until the next unit shutdown to Mode 5 (Cold Shutdown), whichever comes first. On December 3, 2003, the requested TS change was approved. The cause of the event was found to be a failure of a reset pushbutton in the same circuit as the test switch. After the defective pushbutton switch was replaced, the deferred surveillance testing was completed satisfactorily. Similar pushbuttons will be replaced during the next refueling outage in each unit.

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

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
Vogtle Electric Generating Plant - Unit 2	05000-425	YEAR	SEQUENTIAL YEAR	REVISION NUMBER	2 OF 4
		2003	-- 001	-- 01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**A. REQUIREMENT FOR REPORT**

This report is required per 10 CFR 50.73 (a)(2)(i)(B). The performance of a Technical Specification (TS) surveillance was missed and, although the NRC has utilized their discretion in agreeing not to exercise enforcement of the TS requirements for this event, it represented operation of the unit in a condition prohibited by the TS.

**B. UNIT STATUS AT TIME OF EVENT**

At the time of this event, Unit 2 was in Mode 1 (Power Operations) at 100% of rated thermal power. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

**C. DESCRIPTION OF EVENT**

On October 26, 2003, personnel were performing TS surveillances on the Solid State Protection System (SSPS). A switch in the test circuit that is used to test memories logic functions would not operate properly in all positions. This prevented successful completion of the surveillance testing for the following functions:

1. Memory test for feedwater isolation
2. Actuation logic test for feedwater isolation on safety injection or P-14 permissive
3. Permissive P-10 block of source range trip

The surveillance absolute late date was November 5, 2003. After this time, and following expiration of a 24-hour TS Required Action Completion Time, a unit shutdown would have been required to be initiated per the action requirements of TS 3.3.1, 3.3.2 and 3.0.3. A telephone conversation with NRC personnel was conducted on November 4, 2003. During this conversation, the NRC granted a notice of enforcement discretion (NOED) to allow the TS surveillance requirement to be late without enforcement for a period 28 days. The 28 days represented a reasonable period of time for a written request, to change the TS, to be processed by the NRC. The TS change allowed the required surveillance testing to be delayed until after the end of the fuel cycle in Spring 2004, or until the next unit shutdown to Mode 5 (Cold Shutdown), whichever comes first. On December 3, 2003, the requested TS change was approved.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
Vogtle Electric Generating Plant - Unit 2	05000-425	YEAR	SEQUENTIAL YEAR	REVISION NUMBER	3 OF 4
		2003	-- 001	-- 01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**D. CAUSE OF EVENT**

The memories logic test switch was replaced during the Spring 2004 refueling outage. During follow-up testing, it was found that a reset pushbutton in the same circuit was experiencing intermittent failure due to wear and tear and this failure was the cause of the event.

**E. ANALYSIS OF EVENT**

The switch involved is part of the test circuit only, and has no effect on the operation of the SSPS.

There were four options to address this issue. The first was to replace the faulty switch during power operation. This would have involved taking Train B SSPS out of service for at least 36 hours, thus incurring an increase in risk while one train of SSPS is out of service plus the attendant trip risk while working on the SSPS while at power. This alternative was ruled out because of the additional time required beyond the current 24-hour Completion Time to restore a train of SSPS logic and the trip risk. The second option was to shut the unit down to Mode 5 to replace the faulty switch. This would have involved an increase in risk associated with shutting the unit down, plus an additional thermal cycle on the reactor coolant pressure boundary. A third alternative was to complete the required testing using jumpers to mimic the operation of the suspected faulty switch. This would have involved entering the logic cabinet during power operation and installing jumpers which posed a potential trip risk as well as the potential for error. The fourth alternative was to remain at power until the refueling outage scheduled for April 2004. The very small increase in risk associated with this alternative was offset by compensatory actions, and there was no net increase in risk to the health and safety of the public. The compensatory actions included briefing control room operators on the circuits in the Train B SSPS that have not been tested due to the failure of this switch, directing them as to appropriate actions to take in the event of a failure of one of these untested circuits, and increasing operator surveillances of plant parameters indicative of precursors that could challenge the untested functions.

During the 2R10 outage, the pushbutton switch was replaced. Subsequently, the deferred surveillance testing was completed satisfactorily. The basis for deferral of the surveillances was validated by the fact that there were no failures of components during the surveillances after replacement of the defective pushbutton.

Based on these considerations, there is no adverse effect on plant safety or on the health and safety of the public as a result of this condition.

The event does not represent a safety system functional failure.

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

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
Vogtle Electric Generating Plant - Unit 2	05000-425	YEAR	SEQUENTIAL YEAR	REVISION NUMBER	4 OF 4
		2003	-- 001	-- 01	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**F. CORRECTIVE ACTION**

- 1) The memories logic test switch was replaced during the Spring 2004 refueling outage.
  
- 2) An investigation into the cause of the memories logic test switch failure determined that a reset pushbutton had experienced intermittent failure due to wear and tear. Similar SSPS pushbutton switches will be replaced during the upcoming refueling outage in each unit.
  
- 3) The required Technical Specification surveillance was completed prior to Mode 4 during the 2R10 refueling outage.

**G. ADDITIONAL INFORMATION**

1) Failed Component:

Memories Reset pushbutton switch manufactured by Grayhill, Inc.  
Part number 7-26B.

1) Previous Similar Events:

None

3) Energy Industry Identification System Code:

Solid State Protection System – JG  
Main Feedwater System – SJ  
Safety Injection System – BQ  
Nuclear Instrumentation System - JD