

March 18, 2024

ND-24-0046

10 CFR 50.73(a)(2)(i)(B)

Docket No.: 52-025

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

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant (VEGP) – Unit 3  
Licensee Event Report 2024-001-00  
Condition Prohibited by Technical Specification Limiting Condition of Operation 3.1.6 Control  
Bank Overlap Limits Exceeded Due to Inadequate Procedure Guidance

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B), Southern Nuclear Operating Company is submitting the enclosed Licensee Event Report for VEGP Unit 3.

This letter contains no regulatory commitments. If you have questions regarding the enclosed information, please contact Will Garrett at (706) 848-7154.

Respectfully submitted,

Jamie Coleman  
Director, Regulatory Affairs  
Southern Nuclear Operating Company

JC/kjd/cbg

Enclosure: Unit 3 Licensee Event Report 2024-001-00

CC:

Regional Administrator, Region II  
VPO Project Manager  
Senior Resident Inspector – Vogtle Units 3 & 4  
Director, Environmental Protection Division - State of Georgia

**Vogtle Electric Generating Plant - Unit 3**

**Licensee Event Report 2024-001-00**

**Condition Prohibited by Technical Specification Limiting Condition of Operation 3.1.6 Control  
Bank Overlap Limits Exceeded Due to Inadequate Procedure Guidance**

**Enclosure**

**Unit 3 Licensee Event Report 2024-001-00**



## 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/>

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, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to [Infocollections.Resource@nrc.gov](mailto:Infocollections.Resource@nrc.gov), and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: [oira\\_submission@omb.eop.gov](mailto:oira_submission@omb.eop.gov). The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

## 1. Facility Name

Vogtle Electric Generating Plant, Unit 3

☐ 050  
☒ 052

## 2. Docket Number

00025

## 3. Page

1 OF 2

## 4. Title

Condition Prohibited by Technical Specification Limiting Condition of Operation 3.1.6 Control Bank Overlap Limits Exceeded Due to Inadequate Procedure Guidance

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved	
Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year	Facility Name	Docket Number
01	18	2024	2024	- 001 -	00	03	18	2024	Facility Name	<input type="checkbox"/> 050
									Facility Name	<input type="checkbox"/> 052

## 9. Operating Mode

1

## 10. Power Level

100

## 11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	10 CFR Part 50	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 73.1200(a)
<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 73.1200(b)
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	<input type="checkbox"/> 73.1200(c)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.1200(d)
<input type="checkbox"/> 20.2203(a)(2)(i)	10 CFR Part 21	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	10 CFR Part 73	<input type="checkbox"/> 73.1200(e)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 21.2(c)	<input type="checkbox"/> 50.69(g)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.77(a)(1)	<input type="checkbox"/> 73.1200(f)
<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.77(a)(2)(i)	<input type="checkbox"/> 73.1200(g)
<input type="checkbox"/> 20.2203(a)(2)(iv)		<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(2)(ii)	<input type="checkbox"/> 73.1200(h)
<input type="checkbox"/> 20.2203(a)(2)(v)		<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)		

☐ OTHER (Specify here, in abstract, or NRC 366A).

## 12. Licensee Contact for this LER

Licensee Contact Will Garrett, Licensing Manager – Vogtle Units 3 &amp; 4

Phone Number (Include area code)  
(706) 848-7154

## 13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS

## 14. Supplemental Report Expected

☒ No ☐ Yes (If yes, complete 15. Expected Submission Date)

## 15. Expected Submission Date

Month	Day	Year

## 16. Abstract (Limit to 1326 spaces, i.e., approximately 13 single-spaced typewritten lines)

On January 20, 2024, at approximately 2000 EDT, with Vogtle Electric Generating Plant (VEGP) Unit 3 in Mode 1 at 100 percent power, a condition prohibited by the plant technical specifications (TS) was discovered after entry was made into Limiting Condition of Operation (LCO) 3.1.6, Condition B "Control bank sequence or overlap limits not met". Operators responded timely by entering Condition B of LCO 3.1.6 and completing the TS required actions to verify shutdown margin within the limits specified in the Core Operating Limits Report (COLR) and to restore overlap to within limits. The tip-to-tip distance between two control rod banks was one step less than allowed by the COLR, but this was not identified during three recently performed surveillances, which resulted in missed entries into Condition B of LCO 3.1.6. The cause was determined to be inadequate surveillance procedure guidance to specify an effective method to verify control rod overlap. The corrective action to revise the surveillance procedure was completed.

This event is being reported under 10 CFR 50.73(a)(2)(i)(B). VEGP Units 1, 2, and 4 were unaffected by this event.



**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/>)

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<b>1. FACILITY NAME</b>	<input type="checkbox"/> 050	<b>2. DOCKET NUMBER</b>	<b>3. LER NUMBER</b>		
Vogtle Electric Generating Plant, Unit 3	<input checked="" type="checkbox"/> 052	00025	YEAR	SEQUENTIAL NUMBER	REV NO.
			2024	001	00

**NARRATIVE****EVENT DESCRIPTION**

On January 20, 2024, at approximately 2000 EDT, with Vogtle Electric Generating Plant (VEGP) Unit 3 in Mode 1 at 100 percent power, the tip-to-tip overlap between two control rod banks [EIS: AA / ROD] was discovered to be one step less than the required COLR limit during the performance of a 12-hour technical specification (TS) surveillance. When operators identified the surveillance requirement not satisfied, they responded timely by entering LCO 3.1.6 Condition B "Control bank sequence or overlap limits not met" and completing the required actions to verify shutdown margin and to restore the overlap to within limits. Upon further investigation, it was discovered that three recent performances of this surveillance did not determine the two control rod banks had tip-to-tip distance exceeding the COLR limits. This resulted in missed entries into Condition B of LCO 3.1.6 and exceeding the TS required action completion times. At the time of discovery, the plant staff was using a method of manually calculating the overlap tip-to-tip distance and comparing to the COLR limits, which correctly evaluated not meeting the surveillance requirement. Other methods to determine the tip-to-tip distance allowed by the surveillance were used in the performance of the surveillances that were missed. These other allowed methods were determined to be ineffective because they relied upon receiving a control rod out of sequence indication or alarm [EIS: AA / ALM] which was not received during these specific surveillance performances.

There were no structures, systems, or components that were inoperable at the beginning of the event that contributed to the event. This event is reportable under 10 CFR 50.73(a)(2)(i)(B) as operation or condition prohibited by plant's TS.

**EVENT CAUSE ANALYSIS**

The cause of the control rod overlap limit not being detected during surveillance was inadequate procedure guidance to specify an effective overlap verification method (e.g., manual calculation) to detect abnormal conditions absent receiving a control rod out of sequence indication or alarm.

**SAFETY ASSESSMENT**

There were no safety consequences due to this event because all control rods remained operable, core power distribution remained within applicable limits, and shutdown margin was maintained during each occurrence. The operators responded timely upon discovery of the event by successfully performing LCO 3.1.6 Condition B required actions to verify shutdown margin and restore the control bank overlap to within limits. No safety systems were required to respond as a result of the event. VEGP Units 1, 2, and 4 were unaffected by this event.

**CORRECTIVE ACTIONS**

A standing order was established to provide timely instruction to the operating shifts, and the surveillance procedure was revised to require operators to manually record rod position and calculate the tip-to-tip distance to verify the overlap is within the COLR limits following control rod movements.

Additional corrective actions, as applicable, associated with this event will be taken in accordance with the plant corrective action program.

**PREVIOUS SIMILAR EVENTS**

None