

**Virginia Electric and Power Company  
North Anna Power Station  
1022 Haley Drive  
Mineral, Virginia 23117**

July 25, 2024

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

Serial No.: 24-249  
NAPS: RAP  
Docket Nos.: 50-338  
License Nos.: NPF-4

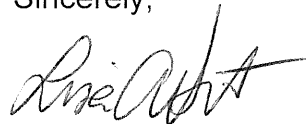
Dear Sir or Madam:

Pursuant to 10CFR50.73, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Power Station Unit 1.

Report No. 50-338/2024-001-00

This report has been reviewed by the Facility Safety Review Committee and will be forwarded to the Management Safety Review Committee for its review.

Sincerely,



Lisa Hilbert  
Site Vice President  
North Anna Power Station

Enclosure

Commitments contained in this letter: None

cc: United States Nuclear Regulatory Commission  
Region II  
Marquis One Tower  
245 Peachtree Center Ave., NE, Suite 1200  
Atlanta, Georgia 30303-1257

NRC Senior Resident Inspector  
North Anna Power Station



### 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 [Infocollects.Resource@nrc.gov](mailto:Infocollects.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. 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 North Anna Power Station	<input checked="" type="checkbox"/> 050	2. Docket Number 00338	3. Page 1 OF 2
	<input type="checkbox"/> 052		

4. Title  
Unit 1 Automatic Reactor Trip due to PRNI High Negative Rate

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
05	29	2024	2024	001	00	07	25	2024	<input type="checkbox"/> 050	
									Facility Name	Docket Number
									<input type="checkbox"/> 052	

9. Operating Mode 1	10. Power Level 100%
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11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

<input type="checkbox"/> 10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 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 checked="" 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)	<input type="checkbox"/> 10 CFR Part 21	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 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 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 Lisa Hilbert, Site Vice President	Phone Number (Include area code) (540) 894-2101
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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
X	AA	CON	W893	Y					

14. Supplemental Report Expected		15. Expected Submission Date		
<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)	Month	Day	Year
		09	26	2024

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

On May 29, 2024, at 0624 hours with Unit 1 in Mode 1, 100% power, an automatic reactor trip occurred due to power range nuclear instrument high negative rate. The cause of the negative rate was due to control rod K4 dropping into the core. A 4-hour report was made per 10 CFR 50.72(b)(2)(iv)(B) for a Reactor Protection System (RPS) Actuation and an 8-hour report was made per 10 CFR 50.72(b)(3)(iv)(A) for a valid Engineered Safety Feature actuation for the Auxiliary Feedwater (AFW) Pumps actuating as designed during the event.

The direct cause of this event was the loss of continuity to the stationary gripper coil for control rod K4. The cause of the loss of continuity is yet to be determined and a supplement will be submitted upon completion of the cause evaluation.

Unit 2 was not impacted by this event. This event is reportable per 10 CFR 50.73(a)(2)(iv)(A) for RPS actuation and valid AFW actuation. The health and safety of the public were not affected by this event.



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

(See NUREG-1022, R.3 for instruction and guidance for completing this form  
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1. FACILITY NAME North Anna Power Station	<input checked="" type="checkbox"/> 050	2. DOCKET NUMBER 00338	3. LER NUMBER		
	<input type="checkbox"/> 052		YEAR 2024	SEQUENTIAL NUMBER 001	REV NO. 00

**NARRATIVE**

1.0 Description of Event

On May 29, 2024, at 0624 hours with Unit 1 in Mode 1, 100% power, an automatic reactor trip occurred due to power range nuclear instrument (EIS Component DET, System IG) high negative rate. The cause of the negative rate was due to control rod (EIS Component ROD, System AA) K4 dropping into the core. The Auxiliary Feedwater (AFW) Pumps (EIS Components P, System BA) actuated as designed during this event. The reactor trip and AFW pumps starting are reportable per 10 CFR 50.73(a)(2)(iv)(A) as System Actuations.

The direct cause of this event was the loss of continuity to the stationary gripper coil for control rod K4. The cause of the loss of continuity is yet to be determined and a supplement will be submitted upon completion of the cause evaluation.

2.0 Significant Safety Consequences and Implications

No significant safety consequences resulted from this event due to plant equipment performing as designed. The health and safety of the public were not affected by this event.

3.0 Cause of the Event

The direct cause of this event was the loss of continuity to the stationary gripper coil for control rod K4. The cause of the loss of continuity is yet to be determined and a supplement will be submitted upon completion of the cause evaluation.

4.0 Immediate Corrective Action

The plug for control rod K4 was replaced.

5.0 Additional Corrective Actions

This information will be provided in the supplement.

6.0 Actions to Prevent Recurrence

This information will be provided in the supplement.

7.0 Similar Events

No similar events have been noted at North Anna.

8.0 Additional Information

Unit 2 was not impacted by this event. The health and safety of the public were not affected by this event.