

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

June 16, 2016

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

Serial No.: 16-193
NAPS: DPM
Docket No.: 50-338
License No.: NPF-4


Dear Sirs:

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. 50-338/2016-003-00

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,



Gerald T. Bischof
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

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NRR



LICENSEE EVENT REPORT (LER)
(See Page 2 for required number of digits/characters for each block)

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.

1. FACILITY NAME North Anna Power Station, Unit 1	2. DOCKET NUMBER 05000338	3. PAGE 1 OF 3
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4. TITLE
Engineered Safety Feature Actuation Due to Loss of Power to "A" Reserve Station Service Transformer

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
04	29	2016	2016	003	00	06	16	2016	FACILITY NAME	05000
									FACILITY NAME	05000

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
	<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 100	<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 Gerald T. Bischof, Site Vice President	TELEPHONE 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	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

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

On April 29, 2016, at approximately 2214 hours, with Units 1 and 2 operating at 100 percent power Mode 1, a fault occurred on Switchyard Transformer 3 34.5kV leads resulting in 34.5 kV Bus 5 lockout relays actuating causing the offsite power feed to the "A" Reserve Station Service Transformer to be lost. This resulted in the loss of power to the Unit 1 "J" Emergency Bus and the automatic start of the 1J Emergency Diesel Generator (EDG). The cause was an external event involving wildlife contacting the load side leads of Transformer 3. The 1J Emergency Bus was transferred to its 2B Station Service alternate supply and the 1J EDG was secured and returned to automatic. Post incident inspection and testing of Transformer 3 and Bus 5 were completed satisfactory and subsequently returned to service. At 0048 hours on April 30, 2016, an 8-hour Non-Emergency Report was made to the NRC in accordance with 10 CFR 50.72(b)(3)(iv)(A) as a condition that resulted in valid actuation of Engineered Safety Features (ESF). Units 1 and 2 continued to operate safely during the event. The health and safety of the public were not affected by this event.

NRC FORM 366A (11-2015)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0104	EXPIRES: 10/31/2018
		LICENSEE EVENT REPORT (LER) CONTINUATION SHEET	

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
North Anna Power Station, Unit 1	05000338	YEAR	SEQUENTIAL NUMBER	REV NO.
		2016	-003	-00

NARRATIVE

1.0 DESCRIPTION OF THE EVENT

On April 29, 2016, at approximately 2214 hours, with Units 1 and 2 operating at 100 percent power in Mode 1, the load side leads of switchyard Transformer 3 (EIIS System- FK, Component- XFMR) faulted, causing 34.5kV Bus 5 lockout relays (EIIS System- EA, Component- RLY) to actuate. This resulted in the loss of "A" Reserve Station Service Transformer (RSST) (EIIS System- EA, Component- XFMR) which supplies the Unit 1 "J" (1J) Emergency Bus (EIIS System- EK, Component- BU). The 1J Emergency Diesel Generator (EDG) (EIIS System -EK, Component - DG) automatically started and loaded to re-energize the bus as designed. The 1J Emergency Bus was transferred to its 2B Station Service alternate supply and the 1J EDG was secured and returned to automatic at approximately 2334 hours.

As a result of the event, the Unit 1 Moisture Separator Reheater (MSR) flow control valves (FCVs) (EIIS System- SB, Component- FCV) went closed and reactor power reduced to approximately 96 percent. In addition, the Unit 1 "A" Charging Pump (EIIS System- CB, Component- P) automatically started due to the under-voltage condition on the 1J Emergency Bus. The MSR FCVs were reopened at approximately 2257 hours and Unit 1 "A" Charging Pump was secured and returned to automatic at approximately 2346 hours. Following a post incident inspection and testing, Transformer 3 and Bus 5 were returned to service.

2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS

Units 1 and 2 continued to operate, as designed, following the loss of offsite power. No significant safety consequences resulted from this event because the 1J EDG powered the emergency bus, as designed. Offsite power sources were restored in a timely manner and the associated EDG was secured and returned to automatic. The health and safety of the public were not affected by this event.

3.0 CAUSE

It was determined that the cause of this event was due to raccoons contacting between the radiator (ground) and the load side leads of the Switchyard Transformer 3 just below the "A" phase conductors going from the transformer low side bushings to the Bus 5 "A" phase pipe bus, creating a phase to ground fault.

LICENSEE EVENT REPORT (LER)
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1. FACILITY NAME	2. DOCKET NUMBER	6. LER NUMBER		
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North Anna Power Station, Unit 1	05000338	2016	-003	-00

4.0 IMMEDIATE CORRECTIVE ACTION(S)

The 1J Emergency Bus was transferred to its 2B Station Service alternate supply. The 1J EDG and Unit 1 "A" Charging Pump were secured and returned to automatic.

5.0 ADDITIONAL CORRECTIVE ACTIONS

Transformer 3 and Bus 5 were inspected, tested, and returned to service.

Control Operations conducted a review of actions needed to mitigate animal intrusion.

6.0 ACTIONS TO PREVENT RECURRENCE

Animal guards are being installed on Switchyard Bus 3, Bus 4, Bus 5. These are being installed per Engineering Technical Evaluation ETE-NA-2015-0054 and tracked through the corrective action and work management processes.

7.0 SIMILAR EVENTS

LER N1-2014-001-00, Engineered Safety Feature Actuation Due to Loss of Power to "C" Reserve Station Service Transformer due to a crow making contact with Bus 5 "A" phase to ground.

8.0 MANUFACTURER/MODEL NUMBER

None

9.0 ADDITIONAL INFORMATION

Unit 2 continued to operate at 100 percent power in Mode 1 during the event.

There were no failures of any system or component, all protective relaying worked as designed.