

Virginia Electric and Power Company  
North Anna Power Station  
P. O. Box 402  
Mineral, Virginia 23117

August 27, 2011

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

Serial No.: 11-358  
NAPS: RAP  
Docket No.: 50-338, 339  
License No.: NPF-4, NPF-7

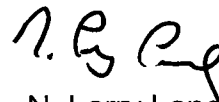
Dear Sirs:

Pursuant to 10CFR50.73, Virginia Electric and Power Company hereby submit the following Licensee Event Report applicable to North Anna Power Station Units 1 and 2.

Report No. 50-338/2011-002-00

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,



N. Larry Lane  
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

JE22  
NRR

**LICENSEE EVENT REPORT (LER)**

(See reverse 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 Section (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.

<b>1. FACILITY NAME</b> NORTH ANNA POWER STATION , UNIT 1 and 2	<b>2. DOCKET NUMBER</b> 05000 338	<b>3. PAGE</b> 1 OF 3
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**4. TITLE**  
Condition Prohibited by Technical Specifications When a Non-Seismic System was Aligned to a Seismic 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	DOCUMENT NUMBER
06	29	2011	2011	-- 002 --	00	08	27	2011	North Anna Power Station	05000 339
									FACILITY NAME	DOCUMENT NUMBER
										05000

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

Specify in Abstract below or in NRC Form 366A

**12. LICENSEE CONTACT FOR THIS LER**

FACILITY NAME F. Mladen, Director Station Safety and Licensing	TELEPHONE NUMBER (Include Area Code) (540) 894-2108
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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

<b>14. SUPPLEMENTAL REPORT EXPECTED</b> <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	<b>15. EXPECTED SUBMISSION DATE</b>	MONTH	DAY	YEAR

**ABSTRACT** (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On June 29, 2011, with both Units 1 and 2 operating 100 percent power, Mode 1, a condition prohibited by Technical Specifications was identified. North Anna Power Station has had a long standing practice of aligning the non-seismic Refueling Purification (RP) system to the seismic Refueling Water Storage Tank (RWST) for purification purposes prior to refueling outages while in Modes 1-4. This has been done without entering the one-hour completion time of Technical Specification 3.5.4 Condition B. In 1996 this practice was questioned by the NRC and it was determined that a weakness existed in that administrative controls were not in place to promptly isolate the RP system from the RWST following a seismic event. As a result administrative controls to isolate the RP system from the RWST were added to operating procedures and the Updated Final Safety Analysis Report (UFSAR) was updated to discuss this mode of operation. Recent Operating Experience (OE) determined that aligning the RP system to the RWST when the RWST is required to be operable per Technical Specification is not allowed. Therefore, this is a condition prohibited by Technical Specifications and reportable pursuant to 10 CFR 50.73(a)(2)(i)(B). This event had no significant safety consequence since a seismic event had not occurred while the RP system was in service on the RWST.

LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET

1. FACILITY NAME  NORTH ANNA POWER STATION UNIT 1 and 2	2. DOCKET  05000 - 338	6. LER NUMBER			3. PAGE  2 OF 3
		YEAR	SEQUENTIAL NUMBER	REV NO.	
		2011	--002 --	00	

**NARRATIVE**

**1.0 DESCRIPTION OF THE EVENT**

North Anna Power Station (NAPS) has had a long standing practice of aligning the non-seismic Refueling Purification (RP) system (EISS System DA) to the Refueling Water Storage Tank (RWST) (EISS System BQ, Component TK) for purification purposes prior to outages. In 1996 this practice was questioned by the NRC and it was determined that a weakness existed in that administrative controls were not in place to promptly isolate the RP system from the RWST following a seismic event. As a result administrative controls to isolate the RP system from the RWST were added to operating procedures and the Updated Final Safety Analysis Report (UFSAR) was updated to discuss this mode of operation. Recent Operating Experience (OE) and questions by the NRC Resident Inspector Staff at NAPS has led to a re-evaluation of this practice. Subsequently, it has been determined that aligning the RP system to the RWST when the RWST is required to be operable per Technical Specification (TS) 3.5.4 is not allowed. Prior NRC approval should have been obtained to perform this activity without entering the TS Action. Therefore, this is a condition prohibited by Technical Specification and reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).

**2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS**

This event had no significant safety consequence since a seismic event had not occurred while the RP system was in service on the RWST. Additionally, a risk assessment was performed with having RP aligned to the RWST; the resulting risk increase on core damage frequency was less than 1E-6 (GREEN). The risk was mitigated by the low probability of a seismic event and the use of a dedicated operator to isolate the non-seismic piping. Therefore, the health and safety of the public were not affected by this event.

This event is reportable pursuant to 10 CFR 50.73 (a)(2)(i)(B) for a condition prohibited by Technical Specifications.

**3.0 CAUSE**

The direct cause of this event was incorrect application of the use of compensatory measures, i.e. manual operator actions, when placing the non-seismic RP system in service on seismically qualified systems/components (RWST) during modes of operation when they are needed to perform their safety function. Manual operator actions had been evaluated and deemed acceptable in accordance with processes and procedures in place at that time. However, recently it has been determined that licensees cannot use compensatory measures when compromising the seismic qualification of a system/component.

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		2011	--002 --	00	

**NARRATIVE**

**4.0 IMMEDIATE CORRECTIVE ACTION(S)**

Operating procedures associated with placing the non-seismic RP system in service on seismic systems were suspended.

**5.0 ADDITIONAL CORRECTIVE ACTIONS**

The UFSAR will be updated to reflect current operating practices.

An assignment has been created in the Corrective Action System to evaluate the extent of condition.

Additional corrective actions being considered include evaluating what is required to qualify the RP system as seismic and revising operating procedures to allow operation of the RP system on the RWST in Modes 5, 6 and defueled.

**6.0 ACTIONS TO PREVENT RECURRENCE**

The actions noted above are sufficient to preclude recurrence.

**7.0 SIMILAR EVENTS**

There have been no similar events at North Anna.

**8.0 ADDITIONAL INFORMATION**

Both Units were in Mode 1, 100 percent power, at the time of this event and were not affected.