

**Virginia Electric and Power Company
Surry Power Station
5570 Hog Island Road
Surry, Virginia 23883**

June 30, 2008

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

Serial No.: 08-0342
SPS: PAK
Docket No.: 50-281
License No.: DPR-37

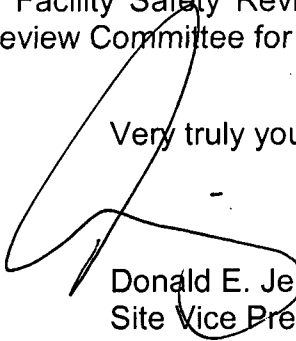
Dear Sirs:

Pursuant to 10CFR50.73, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to Surry Power Station Unit 2.

Report No. 50-281/2008-001-00

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

Very truly yours,


Donald E. Jernigan,
Site Vice President Surry Power Station

Enclosure

Commitments contained in the LER: The Pressurizer Safety Valve maintenance strategy will be revised prior to the next refueling outage to address aging issues.

JE22
NRR

cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

NRC Senior Resident Inspector
Surry Power Station

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 Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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 SURREY POWER STATION, UNIT 2	2. DOCKET NUMBER 05000 281	3. PAGE 1 OF 3
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4. TITLE
Pressurizer Safety Valves Fail as Found Setpoint

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
05	02	2008	2008	-- 001 --	00	06	30	2008	FACILITY NAME	DOCUMENT NUMBER 05000
									FACILITY NAME	DOCUMENT NUMBER 05000

9. OPERATING MODE N	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: <i>(Check all that apply)</i>									
	<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)						
10. POWER LEVEL 0%	<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)	<input type="checkbox"/> VOLUNTARY LER						

12. LICENSEE CONTACT FOR THIS LER

NAME B. L. Stanley, Director Station Safety and Licensing	TELEPHONE NUMBER (Include Area Code) (757) 365-2003
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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
X	AB	RV	C710	N					

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 May 2, 2008 with Unit 2 shut down for a refueling outage, a pressurizer safety valve (PSV) 2-RC-SV-2551C as found lift setting was 2368 psig, which is 4.7% below the nominal value of 2485 psig. Technical Specification (TS) 3.1.A.3.b specifies the as found tolerance shall not exceed +/- 3% (2410-2510 psig).

On May 9, 2008, PSV 2-RC-SV-2551B failed to lift within the as found set pressure requirement. The as found lift setting also did not meet the +/- 3% tolerance allowed by TS 3.1.A.3.b. This PSV exhibited an as found lift setpoint of 2399 psig which was 3.51% below the nominal value of 2485 psig.

The as found PSV lift settings were evaluated and it was determined that the PSVs were capable of performing their safety function and operation with the low as found lift setpoints was within the limits assumed in the accident analysis. Therefore, the health and safety of the public were not affected.

There were no significant safety consequences associated with this event. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) "Any operation or condition prohibited by the plant's Technical Specifications".

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

1. FACILITY NAME SURRY POWER STATION UNIT 2	2. DOCKET 05000 - 281	6. LER NUMBER			3. PAGE 2 OF 3
		YEAR 2008	SEQUENTIAL NUMBER --001 --	REV. NO. 00	

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

1.0 DESCRIPTION OF THE EVENT

On April 27, 2008, Unit 2 was shut down to start a refueling outage. As part of the outage scope, pressurizer safety valve (PSV) 2-RC-SV-2551C was sent to Wyle Laboratories in Huntsville, Alabama for setpoint testing. The PSV was tested in accordance with station testing procedures developed pursuant to the Surry Power Station ASME Section XI Testing Program for Pumps and Valves. This PSV failed to lift within the +/- 3% requirement (i.e., 2485 +/- 3% (2410-2510 psig)) for as found setpoint (TS 3.1.A.3.b); 2-RC-SV-2551C as found lift setting was 2368 psig which is 4.7% below the nominal value of 2485 psig. In accordance with requirements of ASME Section XI, the remaining two PSVs were subsequently sent to Wyle for setpoint testing.

On May 9, 2008 PSV 2-RC-SV-2551B failed to lift within the as found set pressure requirement. The as found lift setting did not meet the +/- 3% tolerance allowed by TS 3.1.A.3.b. (i.e., 2485 +/- 3% (2410-2510 psig)). This PSV exhibited an as found lift setpoint of 2399 psig which was 3.51% below 2485 psig.

The as found setpoints were evaluated and it was determined that the PSVs were capable of performing their safety function and operation with the low as found lift setpoints was within the limits assumed in the accident analysis.

This event is reportable pursuant to 10 CFR 50.73(a)(2)(i))(B) "Any operation or condition prohibited by the plant's Technical Specifications".

2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS

The lower PSV lift pressure would have continued to provide overpressure protection. An evaluation was conducted regarding the as found bench test lift of PSV 2-RC-SV-2551C being found 2 psig lower than the nominal high pressure reactor trip setpoint (2370 psig). Events that would increase pressure in the reactor coolant system are a loss of load or loss of all feedwater flow. Redundant trip signals of the turbine trip and steam generator low level trip signals would have actuated before the PSV as found setpoint would have been reached. Although not credited in the safety analysis, pressurizer spray and pressurizer PORVs would keep pressure lower than the bench test setpoint achieved. Thus, there is no concern regarding this as found setpoint from a safety analysis standpoint as the current safety analysis remains bounding.

3.0 CAUSE

An apparent cause evaluation was performed and determined that, while there was no clear indication that the PSV as found setpoint was directly attributable to a specific cause, the most likely cause is aging of the valve components.

4.0 IMMEDIATE CORRECTIVE ACTION(S)

PSV 2-RC-SV-2551C was completely disassembled and the valve internals were VT-3 inspected. The valve internal components were cleaned and polished. The valve internals were visually and dimensionally inspected. The valve internals (i.e. nozzle seat step, spindle ball, disc holder angle, disc insert and nozzle seating areas) were reworked, machined and lapped. PSV 2-RC-SV-2551C

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		YEAR 2008	SEQUENTIAL NUMBER --001 --	REV NO. 00	

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was reassembled for the steam set pressure and steam seat tightness testing. PSV 2-RC-SV-2551C satisfactorily passed both steam set pressure and steam seat tightness testing.

In accordance with the requirements of ASME section XI, the remaining two PSVs were sent to Wyle labs for setpoint testing.

5.0 ADDITIONAL CORRECTIVE ACTIONS

The other two PSVs on Unit 2 were setpoint tested.

PSV 2-RC-SV-2551B as found set pressure was 2399 psig which is 3.5% lower than the TS required range of 2410 - 2510 psig. PSV 2-RC-SV-2551B was completely disassembled and valve internals were VT-3 inspected and dimensions verified. The disk insert was replaced due to the disc seat step being near minimum tolerance. The spring assembly was replaced and the valve re-assembled and satisfactorily tested.

PSV 2-RC-SV-2551A was tested satisfactorily and subsequently re-installed.

6.0 ACTIONS TO PREVENT RECURRENCE

The PSV test program is based on Section XI of the ASME Code. The EPRI Safety and Relief Valve Testing and Maintenance Guide lists several factors as potential causes of lift low. All but two of these factors, aging and spring relaxation, do not apply in this case. Failure rate of as found set pressure testing can be reduced if the valves are rebuilt prior to actual failure. The PSV maintenance strategy will be revised prior to the next refueling outage to address aging issues.

7.0 SIMILAR EVENTS

None.

8.0 MANUFACTURER/MODEL NUMBER

Crosby, HB-BP-86E