

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

April 1, 1996

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Serial No.: 96-164  
SPS:VLA  
Docket No.: 50-280  
License No.: DPR-32

Dear Sirs:

Pursuant to Surry Power Station Technical Specifications, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to Surry Power Station Unit 1.

**REPORT NUMBER**

50-280/96-002-00

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

Very truly yours,

  
D. A. Christian  
Station Manager

Enclosure

copy: Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

M. W. Branch  
NRC Senior Resident Inspector  
Surry Power Station

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9604080160 960401  
PDR ADOCK 05000280  
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**LICENSEE EVENT REPORT (LER)**

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Surry Power Station, Unit 1

DOCKET NUMBER (2)

05000 - 280

PAGE (3)

1 OF 4

TITLE (4)

Containment Isolation Valve Inoperable Greater Than Technical Specification Requirements Due to Personnel Error

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	03	96	96	-- 002 --	00	04	01	96	Surry Unit 2	05000 - 281
									FACILITY NAME	DOCKET NUMBER
										05000 -

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR:(Check one or more) (11)								
		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(c)		
POWER LEVEL (10)	100%	20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)		
		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER		
		20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)		
		20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)				
		20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)				

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Including Area Code)
D. A. Christian, Station Manager	(804) 357-3184

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On March 3, 1996, Unit 1 was at 100% power. Containment isolation trip valve, 1-RC-TV-1519A, was tested in accordance with Operations Periodic Test, 1-OPT-ZZ-011. When 1-RC-TV-1519A was tested on March 3, 1996, the recorded stroke time was 6.62 seconds. During a review on March 5, 1996, the recorded stroke time was determined to be outside of the acceptance range. The acceptable range as specified by 1-OPT-ZZ-011 for closure is 11.2 to 18.6 seconds. Trip valve 1-RC-TV-1519A was re-tested on March 5, 1996 due to the questionable data recorded during the March 3, 1996 test. The valve was declared inoperable due to unsatisfactory test results on March 5, 1996 and a four hour Technical Specification (TS) 3.8.C action statement was initiated at 1240 hours to deactivate 1-RC-TV-1519A in the closed position. TS 3.8.C requires that containment isolation valves must be restored to operability within four hours, or that the affected penetration must be isolated with a deactivated isolation valve. The valve was isolated and verified to be closed. The containment penetration was therefore isolated and the action statement was exited at 1348 hours.

Due to trip valve 1-RC-TV-1519A being in the proper position for containment isolation, the health and safety of the public were not affected at any time during this event.

The individuals involved were counseled concerning inadequate self-checking regarding this event. A Level II Root Cause Evaluation (RCE) was initiated. Actions to prevent recurrence will be developed from the RCE.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B), due to operation in a condition prohibited by TS.

**LICENSEE EVENT REPORT (LER)**

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Surry Power Station, Unit 1	05000 - 280	96	- 002 -	00	2 OF 4

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

**1.0 DESCRIPTION OF THE EVENT**

On March 3, 1996, Unit 1 was at 100% power. Containment isolation trip valve, 1-RC-TV-1519A {EIS-AB-ISV}, was tested in accordance with Operations Periodic Test, 1-OPT-ZZ-011, Testing of Miscellaneous Containment Trip Valves. Trip valve 1-RC-TV-1519A is located just outside containment and is normally closed. The valve is opened for the purpose of supplying primary grade water to containment.

A licensed operator was recording the stroke time data required by 1-OPT-ZZ-011. Another licensed operator was cycling the trip valve. A pre-job brief was performed to discuss the additional opening of the Pressurizer Relief Tank (PRT) makeup valve, 1-RC-HCV-1519B, {EIS-CA-TK}, and to note the concern that 1-RC-TV-1519A should be cycled quickly to minimize the level increase in the PRT. At approximately 2015 hours, while 1-RC-TV-1519A was being cycled open, the primary grade water low pressure annunciator came in and distracted the operator taking the stroke time data. He responded to the annunciator just before 1-RC-TV-1519A was timed closed. The operator holding the stopwatch read the time out loud and showed the data taker the stopwatch reading. A time of 6.62 seconds was recorded which is about half the lower limit of the acceptable range. The operator recognized that the recorded time was faster than the reference time (14.9 seconds), but failed to check the acceptable range specified in 1-OPT-ZZ-011 (11.2 to 18.6 seconds). The acceptance criteria is based on the ASME code, Section XI which indicates the valve had completed a full stroke.

At 2028 hours, 1-OPT-ZZ-011 was turned in for supervisor review and approval, and the operator indicated that the OPT had been completed satisfactorily. During the OPT review, the Unit 1 Senior Reactor Operator (SRO) failed to identify that the acceptance criteria for 1-RC-TV-1519A had not been met. So, the valve was not declared inoperable as required, and no follow-on tasks were performed.

Engineering routinely reviews completed surveillance procedures to ensure that unsatisfactory results are addressed with appropriate corrective actions. A review was conducted on March 5, 1996 that determined that the recorded stroke time recorded on March 3, 1996 was outside of the acceptance range. The acceptable range as specified by 1-OPT-ZZ-011 for closure of trip valve 1-RC-TV-1519A is 11.2 to 18.6 seconds. Trip valve 1-RC-TV-1519A was re-tested on March 5, 1996 due to the questionable data recorded during the March 3, 1996 test. The first test was unsatisfactory at 19.93 seconds, followed by three satisfactory tests at 15, 13.72, and 12.66 seconds. The valve was declared inoperable and a four hour TS 3.8.C action statement was initiated at 1240 hours to deactivate 1-RC-TV-1519A in the closed position. Instrument air to 1-RC-TV-1519A was isolated and tagged out at 1348 hours deactivating 1-RC-TV-1519A in the closed position. The containment penetration was therefore isolated and the action statement was exited.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B), due to operation in a condition prohibited by TS.

**LICENSEE EVENT REPORT (LER)**

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS**

The operability of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere such as during a design basis accident. Even though 1-RC-TV-1519A was inoperable, it was verified to be closed and therefore capable of performing its intended safety function of containment isolation. Since trip valve 1-RC-TV-1519A was left closed, the penetration was isolated as required. In addition, Containment Isolation Check Valve, 1-RC-160, which is the redundant containment isolation valve for this penetration, remained operable during this event. Therefore, the health and safety of the public were not affected at any time during this event.

**3.0 CAUSE OF THE EVENT**

The cause of this event was personnel error due to inadequate self-checking on the part of operations personnel who were responsible for verifying the operability 1-RC-TV-1519A, based on its stroke time.

On March 3, 1996, a licensed operator was recording the stroke time data required by 1-OPT-ZZ-011. Another licensed operator was cycling the trip valve. A pre-job brief was performed to discuss the additional opening of the PRT makeup valve, 1-RC-HCV-1519B and to note the concern that 1-RC-TV-1519A should be cycled quickly to minimize the level increase in the PRT. At approximately 2015 hours, while 1-RC-TV-1519A was being cycled open, the primary grade water low pressure annunciator came in and distracted the operator taking the stroke time data. He responded to the annunciator just before 1-RC-TV-1519A was timed closed. The operator holding the stopwatch read the time out loud and showed the data taker the stopwatch reading. A time of 6.62 seconds was recorded which is about half the lower limit of the acceptable range. The operator recognized that the recorded time was faster than the reference time (14.9 seconds), but failed to check the acceptable range specified in 1-OPT-ZZ-011 (11.2 to 18.6 seconds). The acceptance criteria is based on the ASME Code, Section XI which indicates the valve had completed a full stroke.

At 2028 hours, 1-OPT-ZZ-011 was turned in for supervisor review and approval, and the operator indicated that the OPT had been completed satisfactorily. During the OPT review, the Unit 1 SRO failed to identify that the acceptance criteria for 1-RC-TV-1519A had not been met. So, the valve was not declared inoperable as required, and no follow-on tasks were performed.

Engineering routinely reviews completed surveillance procedures to verify that unsatisfactory results are addressed with appropriate corrective actions. A review was conducted on March 5, 1996 that determined that the recorded stroke time was outside of the acceptable range.

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

**4.0 IMMEDIATE CORRECTIVE ACTIONS**

Upon noting that trip valve 1-RC-TV-1519A had not been tested satisfactorily, the control room was notified and a Deviation Report was submitted.

Trip valve 1-RC-TV-1519A was re-tested on March 5, 1996 due to the questionable data recorded during the March 3, 1996 test. The first test was unsatisfactory at 19.93 seconds, followed by three satisfactory tests at 15, 13.72, and 12.66 seconds. The valve was declared inoperable and a four hour TS 3.8.C action statement was initiated at 1240 hours to deactivate 1-RC-TV-1519A in the closed position. Instrument air to 1-RC-TV-1519A was isolated and tagged out at 1348 hours deactivating 1-RC-TV-1519A in the closed position. The containment penetration was therefore isolated and the action statement was exited. A Deviation Report was submitted for 1-RC-TV-1519A testing unsatisfactorily.

**5.0 ADDITIONAL CORRECTIVE ACTIONS**

The individuals involved were counseled concerning inadequate self-checking regarding this event.

**6.0 ACTIONS TO PREVENT RECURRENCE**

A Root Cause Evaluation (RCE) was initiated to determine the cause of this event. Actions to prevent recurrence will be developed from the RCE.

**7.0 SIMILAR EVENTS**

LER S1-91-003-00: On April 8, 1991, it was determined that TS requirements for the halon system in the station records storage vault had been violated. Halon storage tanks are required to be at least 95% of full charge weight and 90% of full charge pressure. A Quality Assurance review of Periodic Test records discovered that a 1/3/90 test had been performed improperly, resulting in the PT being considered satisfactory, when two of the four storage tanks were actually below the minimum acceptable storage pressure.

LER S1-91-012-00: On July 20, 1991, it was discovered that a pressurizer level indicator had exceeded channel check acceptance criteria for greater than six hours and had not been declared inoperable. The channel was not placed in trip as required by TS.

**8.0 ADDITIONAL INFORMATION**

Unit 2 was at 100% power and not effected during this event.