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VIRGINIA ELECTRIC AND POWER COMPANY  
NORTH ANNA POWER STATION  
P. O. BOX 402  
MINERAL, VIRGINIA 22117

10 CFR 50.73

March 31, 1992

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

Serial No. N-92-009  
NAPS:JHL  
Docket No. 50-339  
License No. NPF-7

Dear Sirs:

The Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Unit No. 2.

Report No. 50-339/92-003-00

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

Very Truly Yours,

  
G. E. Kane  
Station Manager

Enclosure:

cc: U.S. Nuclear Regulatory Commission  
101 Marietta Street, N.W.  
Suite 2900  
Atlanta, Georgia 30323

Mr. M. S. Lesser  
NRC Senior Resident Inspector  
North Anna Power Station

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COLLECT WITH THIS INFORMATION  
COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN  
ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S.  
NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE  
PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND  
BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) <b>NORTH ANNA POWER STATION UNIT 2</b>	DOCKET NUMBER (2) <b>050003391</b>	PAGE (3) <b>1 OF 6</b>
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TITLE (4)  
**PRESSURIZER AND MAIN STEAM SAFETY VALVE SETPOINTS OUT OF TOLERANCE DUE TO SETPOINT DRIFT**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REPORT NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
03	06	92	92	003	00	03	31	92		050000
DOCKET NUMBER(S) 050000										

OPERATING MODE (9) **6** THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following): (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.73(a)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.73(a)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Part 3 of Form 300A)
20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
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)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>G. E. Kane, Station Manager</b>	TELEPHONE NUMBER	
	AREA CODE <b>703</b>	<b>894-2101</b>

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	ABRV		D243	Y					
X	SBRV		C710	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1,000 spaces, i.e., approximately three single-space typewritten lines): (16)

On March 6, 1992, with Unit 2 in Mode 6 (Refueling), the "as found" set pressures for the three Pressurizer Safety Valves and 8 of 15 Main Steam Safety Valves (MSSVs) were found to be outside the setpoint tolerances allowed by Technical Specifications 3.4.2, 3.4.3.1 and 3.7.1.1, respectively. This event is reportable pursuant to 10CFR50.73(a)(2)(i)(B) for conditions prohibited by Technical Specifications 3.4.2, 3.4.3.1 and 3.7.1.1.

The safety valves were sent to Wyle Labs for testing to ensure conformance to Technical Specifications requirements. The "as found" set pressures for the three Pressurizer Safety Valves and 8 MSSVs were found to be outside Technical Specification tolerances. In addition, leakage was noted from the three Pressurizer Safety Valves and the 15 MSSVs following "as found" testing.

The safety valves will be repaired and readjusted to be within the correct setpoint tolerance allowed by Technical Specifications.

This event posed no significant safety implications because the safety valves would have performed their safety function in the event of an overpressure condition. The health and safety of the public were not affected at any time during this event.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  North Anna Power Station Unit 2	DOCKET NUMBER (2)  0   5   0   0   0   3   3   9	LER NUMBER (6)				PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9   2	—   0   0   3	—   0   0	0   2	OF 0   6	

TEXT (If more space is required, see additional NRC Form 302A's) (17)

1.0 Description of the Event

On March 6, 1992, with Unit 2 in Mode 6 (Refueling), the "as found" set pressures for the A, B, and C Pressurizer Safety Valves (EIS System Identifier AB, Component Identifier RV, Vendor Identifier D243) (2-RC-SV-2551A, 2-RC-SV-2551B, and 2-RC-SV-2551C) were found to be out of tolerance. The "as found" set pressures were not within the lift set pressure of 2485 psig +/- 1 percent allowed by Technical Specification 3.4.2 and 3.4.3.1.

It was also identified that the "as found" set pressures for 8 of 15 Main Steam Safety Valves (MSSVs) (EIS System Identifier SB, Component Identifier RV, Vendor Identifier C710) were found to be outside the lift set pressures allowed by Technical Specification 3.7.1.1.

These conditions are reportable pursuant to 10CFR50.73(a)(2)(i)(B) for conditions prohibited by Technical Specifications.

The three Pressurizer Safety Valves were sent to Wyle Laboratories for the performance of periodic test procedure 2-PT-50, "Pressurizer Code Safety Valve Setpoint Verification". Each valve was functionally tested for the "as found" set pressure and leak tightness.

The "as found" set pressures for the A, B, and C Pressurizer Code Safety Valves were found to be outside the setpoint tolerance allowed by Technical Specifications. Specifically, the "A" safety valve was found to have a lift set pressure above the maximum allowed. The "B" and "C" safety valves were found to have lift set pressures below the minimum allowed. In addition, the three safety valve leaked following the "as found" testing. A list of the "as found" set pressures is provided in Attachment 1.

The 15 MSSVs were also sent to Wyle Laboratories to determine the "as found" set pressures and the amount of disc to seat leakage. Testing was performed in accordance with periodic test procedure 2-PT-70, "Main Steam Code Safety Valve Setpoint Verification".

The "as found" set pressures on 8 of 15 MSSVs were found to have lift set pressures outside the set pressures allowed in Technical Specification 3.7.1.1. Specifically, the 8 MSSVs had "as found" set pressures that were above the maximum allowed. Following "as found" testing, the 15 MSSVs were leaking. A list of the "as found" setpoints is provided in Attachment 2.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 80.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  North Anna Power Station Unit 2	DOCKET NUMBER (2)  05000339	LER NUMBER (6)			PAGE (3)  03 OF 06
		YEAR 92	SEQUENTIAL NUMBER 003	REVISION NUMBER 00	

TEXT (If more space is required, use additional NRC Form 365A's) (1-7)

2.0 Significant Safety Consequences and Implications

This event posed no significant safety implications because the "as found" set pressure settings for the Pressurizer Safety Valves and MSSVs was bounded by the safety analyses for overpressure transients and the acceptance criteria for overpressure accidents would have been met. 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 the event has been determined to be setpoint drift. The industry has experienced a history of setpoint drift for safety valves of this type and is not considered to be unusual.

4.0 Corrective Actions

The Pressurizer Safety Valves will be refurbished and retested, as necessary, at Wyle Laboratories to within the allowable limits of Technical Specification 3.4.2 and 3.4.3 and to ensure there is no leakage.

The MSSVs will be refurbished and retested, as necessary, at Wyle Laboratories to within the allowable leakage limits of Technical Specification 3.7.1.1 and to ensure there is no leakage.

5.0 Additional Corrective Actions

It has been determined that following a modification to the pressurizer loop seal, the Pressurizer Safety Valve setpoint tolerance may be increased from the current +/- 1 percent tolerance. This modification is scheduled for a future refueling outage. A Technical Specifications change for the Pressurizer Safety Valve setpoint tolerance will be considered following the above mentioned modification. A Technical Specifications change for the MSSVs setpoint tolerance will also be considered at this time.

6.0 Similar Events

Previous similar events where Pressurizer Safety Valves have been outside the requirements of Technical Specification 3.4.3 have occurred at North Anna Power Station on Unit 1 on March 2, 1981 (LER 81-040/03L-0), May 6, 1987 (LER 87-008-00), February 5, 1992 (LER 92-002-00) and on Unit 2 on March 23, 1982 (LER 82-014/03L-0), September 13, 1987 (LER 87-008-00), April 12, 1989 (LER 89-046-00) and October 17, 1990 (LER 90-005-00).

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  North Anna Power Station Unit 2	DOCKET NUMBER (2)  05000339	LER NUMBER (6)			PAGE (3)		
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		92	003	00	04	OF	06

TEXT (if more space is required, use additional NRC Form 366A's) (17)

6.0 Similar Events (Continued)

Previous similar events where MSSVs have been outside the requirements of Technical Specification 3.7.1.1 have occurred at North Anna Power Station on Unit 1 on February 8, 1980 (LER 80-009/L3-0), May 8, 1987 (LER 87-009-01), and on Unit 2 on April 21, 1983 (LER 83-027/03L-0), February 21, 1986 (LER 86-001-01), January 21, 1988 (LER 87-009-01), April 12, 1989 (LER 89-005-00) and October 17, 1990 (LER 90-005-00).

7.0 Additional Information

North Anna Unit 1 was in Mode 1 throughout this event and was not affected.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  North Anna Power Station Unit 2	DOCKET NUMBER (2)  0500033992	LER NUMBER (6)				PAGE (3)	
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			003	00	05	06	

TEXT (If more space is required, use additional NRC Form 365A's) (17)

ATTACHMENT 1

VALVE	SET PRESSURE (PSIG)	AS FOUND (PSIG)
2-RC-SV-2551A	2485 +/- 25	2524
2-RC-SV-2551B	2485 +/- 25	2398
2-RC-SV-2551C	2485 +/- 25	2440

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATE BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION. REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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North Anna Power Station Unit 2

YEAR	SEQUENTIAL NUMBER	RETISION NUMBER
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0 | 5 | 0 | 0 | 0 | 3 | 3 | 9 | 9 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 6 | OF | 0 | 6

TEXT (if more space is required, use additional NRC Form 366A's) (17)

ATTACHMENT 2

<u>VALVE</u>	<u>SET PRESSURE (PSIG)</u>	<u>AS FOUND (PSIG)</u>
2-MS-SV-201A	1085 +/- 11	1082
2-MS-SV-201B	1085 +/- 11	1103
2-MS-SV-201C	1085 +/- 11	1105
2-MS-SV-202A	1095 +/- 11	1104
2-MS-SV-202B	1095 +/- 11	1106
2-MS-SV-202C	1095 +/- 11	1097
2-MS-SV-203A	1110 +/- 11	1139
2-MS-SV-203B	1110 +/- 11	1104
2-MS-SV-203C	1110 +/- 11	1154
2-MS-SV-204A	1120 +/- 11	1151
2-MS-SV-204B	1120 +/- 11	1115
2-MS-SV-204C	1120 +/- 11	1140
2-MS-SV-205A	1135 +/- 11	1135
2-MS-SV-205B	1135 +/- 11	1158
2-MS-SV-205C	1135 +/- 11	1158