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10 CFR 50.73

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION
P. O. BOX 402
MINERAL, VIRGINIA 23117

October 17, 1990

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

Serial No. N-90-015
NAPS/JHL
Docket No. 50-339
License No. NPF-7

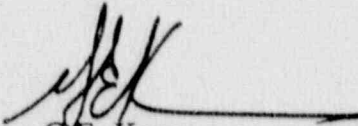
Dear Sirs:

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

Report No. LER 90-005-00

This report has been reviewed by the Station Nuclear Safety and Operating Committee and will be forwarded to Corporate Nuclear Safety for their 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 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 1	PAGE (3) 1 OF 5
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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	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
10	05	90	90	005	00	10	17	90			0 5 0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)											

OPERATING MODE (9) 6	POWER LEVEL (10) 0 0 0	20.402(b)	20.406(e)	50.73(a)(2)(iv)	73.71(b)
		20.406(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.406(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(c)(2)(viii)(A)	
		20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME G. E. Kane, Station Manager	TELEPHONE NUMBER
	AREA CODE 710 3 8 9 4 - 2 1 0 1

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

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

At 0950 hours on October 5, 1990, with Unit 2 in Mode 6 (Refueling), the "as found" set pressures for the 3 Pressurizer Safety Valves and 10 of 15 Main Steam Safety Valves (MSSVs) were found to be outside the setpoint tolerances allowed by Technical Specifications 3.4.3 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 3.4.2, 3.4.3.1 and 3.7.1.1, respectively. The "as found" set pressures for the 3 pressurizer safety valves and 10 MSSVs were found to be outside the tolerance of Technical Specifications 3.4.2, 3.4.3.1 and 3.7.1.1. However, the expected peak pressure was found to be less than the design basis pressure.

The safety valves were repaired and readjusted, as necessary 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.

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

1.0 Description of the Event

At 0950 hours on October 5, 1990, with Unit 2 in Mode 6 (Refueling), the "as found" set pressures for the A, B, and C Pressurizer Code Safety Valves (EIIIS 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 10 of 15 Main Steam Line Code Safety Valves (MSSVs) (EIIIS 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. This 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 3 Pressurizer Code 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 the setpoint tolerance allowed by Technical Specifications. Specifically, the "A" and "C" safety valves were found to have lift set pressures above the maximum allowed. The "B" safety valve was found to have a lift set pressure below the minimum allowed. In addition, the "B" 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 10 of 15 MSSVs were found to have lift set pressures outside the set pressures allowed in Technical Specification 3.7.1.1. Specifically, 9 MSSVs had "as found" set pressures that were above the maximum allowed. Only 1 MSSV had an "as found" set pressure that was below the minimum allowed. Following "as found" testing, 8 MSSVs were leaking. A list of the "as found" setpoints is provided in Attachment 2.

2.0 Significant Safety Consequences and Implications

This event posed no significant safety implications because the impact of having high "as found" set pressure settings for the Pressurizer Code Safety Valves and MSSVs has been reviewed and the

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-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.

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

expected peak pressure was found to be less than the design basis pressure. There is no impact on having low "as found" set pressures because the safety valves would have performed their intended safety function. The health and safety of the general public are not affected.

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 considered normal.

4.0 Corrective Actions

The Pressurizer Code Safety Valves were refurbished and retested, as necessary, at Wyle Laboratories to within the allowable limits of Technical Specification 3.4.2 and 3.4.3.1. Following the necessary refurbishment and testing, none of the safety valves exhibited leakage.

The MSSVs were refurbished and retested, as necessary, at Wyle Laboratories to within the allowable leakage limits of Technical Specification 3.7.1.1. Following the necessary refurbishment and testing, none of the safety valves exhibited leakage.

5.0 Additional Corrective Actions

An evaluation will be conducted to determine if the tolerance for the Pressurizer Safety Valve and MSSV setpoints can be increased from +/- 1 percent. If additional tolerance can be justified, a Technical Specification change will be considered.

6.0 Similar Events

Previous similar events where Pressurizer Code 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), and on Unit 2 on March 23, 1982 (LER 82-014/03L-0), September 13, 1987 (LER 87-008-00), and April 12, 1989 (LER 89-006-00).

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) and April 12, 1989 (LER 89-005-00).

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: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20655, 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 9 0	LER NUMBER (6)			PAGE (3)	
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

ATTACHMENT 1

VALVE	SET PRESSURE (PSIG)	AS FOUND (PSIG)
2-RC-SV-2551A	2485 +/- 25	2544
2-RC-SV-2551B	2485 +/- 25	2448
2-RC-SV-2551C	2485 +/- 25	2532

LICENSEE EVENT REPORT (LER)
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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 (F-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.

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

ATTACHMENT 2

VALVE	SET PRESSURE (PSIG)	AC FOUND (PSIG)
2-MS-SV-201A	1085 +/- 11	1077
2-MS-SV-201B	1085 +/- 11	1084
2-MS-SV-201C	1085 +/- 11	1097
2-MS-SV-202A	1095 +/- 11	1055
2-MS-SV-202B	1095 +/- 11	1115
2-MS-SV-202C	1095 +/- 11	1120
2-MS-SV-203A	1110 +/- 11	1122
2-MS-SV-203B	1110 +/- 11	1129
2-MS-SV-203C	1110 +/- 11	1117
2-MS-SV-204A	1120 +/- 11	1136
2-MS-SV-204B	1120 +/- 11	1125
2-MS-SV-204C	1120 +/- 11	1140
2-MS-SV-205A	1135 +/- 11	1144
2-MS-SV-205B	1135 +/- 11	1154
2-MS-SV-205C	1135 +/- 11	1149