

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

October 7, 1998

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

Serial No.: 98-594
NAPS: MPW
Docket No.: 50-338
License No.: NPF-4

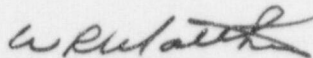
Dear Sirs:

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

Report No. 50-338/98-005-00

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,


W. R. Matthews
Site Vice President

Commitments contained in this letter: None

Enclosure

cc: U. S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303

Mr. M. J. Morgan
NRC Senior Resident Inspector
North Anna Power Station

9810130287 981007
PDR ADOCK 05000338
S PDR

1/1
IE22

LICENSEE EVENT REPORT (LER)

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (1-6 F33), 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)

NORTH ANNA POWER STATION, UNIT 1

DOCKET NUMBER (2)

05000338

PAGE (3)

1 OF 3

TITLE (4)

SAFETY VALVE SETPOINTS OUT OF TOLERANCE DUE TO SETPOINT VARIANCE

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	DOCUMENT NUMBER
09	21	98	98	005	00	10	07	98	FACILITY NAME	05000
									FACILITY NAME	05000

OPERATING MODE (9)	POWER LEVEL (10)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
6	0	20.2201(b)	20.2203(a)(2)(v)	X	50.73(a)(2)(i)	50.73(a)(2)(viii)				
		20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)				
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71				
		20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER				
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below				
		20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)	or in NRC Form 366A				

LICENSEE CONTACT FOR THIS LER (12)

NAME

W. R. Matthews, Site Vice President

TELEPHONE NUMBER (Include Area Code)

(540) 894-2101

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
X	SB	RV	C710	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On September 21, 1998, with Unit 1 in Mode 6, Refueling, the "as found" set pressure for one Main Steam Safety Valve (MSSV) was found to be outside the setpoint tolerance allowed by the Technical Specifications (TS). During subsequent testing the "as found" set pressure for one additional MSSV was found to be outside the setpoint tolerance allowed by the TS. The remaining thirteen MSSVs tested satisfactorily. These failures are reportable pursuant to 10CFR50.73 (a)(2)(i)(B) for a condition prohibited by TS.

The cause of the event is attributed to setpoint variance from what appears to be aging when valves remain in service for extended periods.

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

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

FACILITY NAME (1) North Anna Power Station, Unit 1	DOCKET 05000338	LER NUMBER (6)			PAGE (3) 2 OF 3
		YEAR 98	SEQUENTIAL NUMBER -- 005 --	REVISION NUMBER 00	

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

1. DESCRIPTION OF THE EVENT

Technical Specification 3.7.1.1 requires Main Steam Safety Valves (MSSV) (EIS System SB, Component- RV) to be operable with lift settings as specified in Table 3.7-2. All three MSSV banks (A/B/C) were shipped for testing of their respective "as found" lift pressure settings. The "A" bank was identified as the primary test group. All five "A" bank valves tested satisfactorily.

During testing of the "B" bank on September 21, 1998, MSSV 103B actuated at 1155 psig which is greater than the required "as found" lift set pressure of 1110 psig, plus or minus 3 percent (i.e., 1077 to 1143). The other four valves in the "B" bank tested satisfactorily.

During testing of the "C" bank on September 22, 1998, MSSV 104C actuated at 1211 psig which is greater than the required "as found" lift set pressure of 1120 psig, plus or minus 3 percent (i.e., 1087 to 1153). The other four valves in the "C" bank tested satisfactorily.

2. SAFETY CONSEQUENCES AND IMPLICATIONS

This event posed no significant safety implications because the "as-found" lift setpoints would not have subjected the plant to any overpressure condition more adverse than those previously evaluated in the licensing analysis. Therefore, the health and safety of the public were not affected at any time during this event

This event is reportable pursuant to 10CFR50.73(a)(2)(i)(B) for a condition prohibited by Technical Specifications.

3. CAUSE OF THE EVENT

The cause of the event is attributed to setpoint variance as defined in the Nuclear Maintenance Applications Center (NMAC) Safety and Relief Valve Testing and Maintenance Guide, TR-105872. Lifting at higher than allowable pressure is the leading failure mode for safety valves. Typically in these cases the valves do not initially lift until a higher pressure is applied, then will actuate at lower pressure on subsequent tests, as was the case with the two MSSV failures.

4. IMMEDIATE CORRECTIVE ACTION(S)

The two MSSVs that failed were disassembled, inspected, repaired as necessary (e.g. jacking and lapping), re-assembled, and tested satisfactory.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

FACILITY NAME (1) North Anna Power Station, Unit 1	DOCKET 05000338	LER NUMBER (6)			PAGE (3) 3 OF 3
		YEAR 98	SEQUENTIAL NUMBER -- 005 --	REVISION NUMBER 00	

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

5. ADDITIONAL CORRECTIVE ACTIONS

Part of the revised preventive maintenance activities for the safety valves involves disassembly, inspection, and testing of all five valves in a selected bank. The "A" bank valves were disassembled, inspected, reassembled, and tested satisfactory.

6. ACTIONS TO PREVENT RECURRENCE

The number of failed safety valves dropped from five (i.e., 3 MSSV / 2 PZR) during the last Unit 1 refueling outage to two this refueling outage. The revised preventive maintenance activities implemented following the last refueling outage appear to be effective in reducing the number of failed valves. We will continue with our current program.

7. SIMILAR EVENTS

Previous events where Unit 1 MSSVs have been outside the requirements of TS were included in the following LERs: N1-87-009-00, N1-89-009-00, N1-91-002-00, N1-93-002-00, N1-96-001-00, and N1-97-002-00.

8. ADDITIONAL INFORMATION

During this period, Unit 2 was operating at 100 percent power and was not affected by this event.