

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) NORTH ANNA POWER STATION, UNIT 1										DOCKET NUMBER (2) 0 5 0 0 0 3 3 8 1				PAGE (3) 1 OF 2		
TITLE (4) PRESSURIZER PORVS OPENING IN MODE 5 AFTER RCP START																
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)			
0 8	1 4	8 5	8 5	0 1 0	0 1	1 1	1 4	8 5					0 5 0 0 0			
OPERATING MODE (9) 5		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)														
POWER LEVEL (10) 0 1 0 1 0		20.402(b)				20.406(e)				80.73(a)(2)(iv)				73.71(b)		
		20.406(a)(1)(i)				80.36(a)(1)				80.73(a)(2)(v)				73.71(e)		
		20.406(a)(1)(ii)				80.36(a)(2)				80.73(a)(2)(vii)				<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 365A)		
		20.406(a)(1)(iii)				80.73(a)(2)(i)				80.73(a)(2)(viii)(A)				SPECIAL REPORT		
		20.406(a)(1)(iv)				80.73(a)(2)(ii)				80.73(a)(2)(viii)(B)						
		20.406(a)(1)(v)				80.73(a)(2)(iii)				80.73(a)(2)(x)						
LICENSEE CONTACT FOR THIS LER (12)																
NAME E. WAYNE HARRELL										TELEPHONE NUMBER AREA CODE 7 0 3 8 9 4 - 5 1 5 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)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)												<input checked="" type="checkbox"/> NO				

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

On August 14, 1985, North Anna Unit 1 was in Mode 5 preparing to return to power following a maintenance outage. Reactor Coolant System (RCS) temperature was approximately 135°F and pressure was approximately 350 PSIG. The Pressurizer was solid (100% level) with the Pressurizer Power Operated Relief Valves (PORVs) in automatic control. Adjustments made to stabilize RCS pressure after a Reactor Coolant Pump start caused both Pressurizer Power Operated Relief Valves to momentarily open twice. PORV actuation limited RCS pressure to 400 PSIG which is below the Technical Specification limit of 430 PSIG which is required when RCS temperature is below 140°F. This event is reportable as a Special Report pursuant to Technical Specification 3.4.9.3.

The PORVs have two different setpoints which change with RCS temperature. Procedures used to start Reactor Coolant Pumps will be revised to increase Reactor Coolant System temperature, if possible, to decrease the probability of lifting a PORV when starting a Reactor Coolant Pump.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

FACILITY NAME (1) NORTH ANNA POWER STATION, UNIT 1	DOCKET NUMBER (2) 0 5 0 0 0 3 3 8 8 5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 5	0 1 0	0 1	0 2	OF	0 2

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

On August 14, 1985, North Anna Unit 1 was in Mode 5 preparing to return to power following a maintenance outage. Reactor Coolant System (RCS) (EIIIS system identifier AB) temperature was approximately 135°F and pressure was approximately 350 PSIG. The Pressurizer was solid (100% level). Both Pressurizer (EIIIS component identifier PZR) Power Operated Relief Valves (PORVs) (EIIIS component identifier RV) were in automatic control to provide low temperature over pressurization protection. The 'A' loop Reactor Coolant Pump (RCP) was started and then secured because of rapidly decreasing RCS pressure due to air trapped in the system. RCS pressure was increased and stabilized by operator actions. The 'C' loop Reactor Coolant Pump was then started which again caused RCS pressure to decrease rapidly. Subsequent adjustments made to charging and letdown flow rates by the control room operator to increase RCS pressure caused both pressurizer PORVs to momentarily open twice. The control room operator was attempting to maintain RCS pressure high enough to have a sufficient pressure drop across the RCP seal and low enough to prevent PORV actuation. This event is reportable as a Special Report pursuant to Technical Specification 3.4.9.3.

PORV actuation initially reduced RCS pressure. Subsequent adjustments made to charging and letdown flow rates by the control room operator reduced RCS pressure below the PORV setpoint. Technical Specification 3.4.9.3 requires the PORVs to open at less than or equal to 430 PSIG when RCS cold leg temperature is less than 140°F. The PORVs opened at approximately 400 PSIG. The maximum pressure during this transient was approximately 400 PSIG.

The PORVs have two different setpoints which change with RCS temperature. When RCS cold leg temperature is less than 140°F, the PORVs are required to open at less than or equal to 430 PSIG. When RCS cold leg temperature is less than or equal to 320°F and greater than or equal to 140°F, the PORVs are required to open at less than or equal to 505 PSIG. To decrease the probability of lifting a PORV, procedures used to start Reactor Coolant Pumps will be revised to state Reactor Coolant System temperature should be increased to greater than 140°F, when possible, before starting a Reactor Coolant Pump. RCS temperature can be increased by reducing the amount of heat removed by the Residual Heat Removal System.

Unit 2 LER 82-024/03 and Unit 1 LER 84-011-00 describe events which resulted in PORV actuation.



VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION
P. O. BOX 402
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November 14, 1985

U. S. Nuclear Regulatory Commission
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016 Phillips Building
Washington, D.C. 20555

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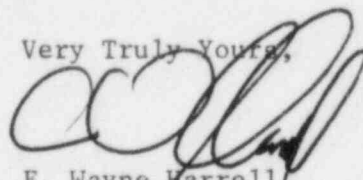
Dear Sirs:

The Virginia Electric and Power Company hereby submits the following
update Licensee Event Report applicable to North Anna Unit No. 1.

Report No. LER 85-010-01

This report has been reviewed by the Station Nuclear Safety and Operating
Committee and will be forwarded to Safety Evaluation and Control for their
review.

Very Truly Yours,



E. Wayne Harrell
Station Manager

Enclosures (3 copies)

cc: Dr. J. Nelson Grace, Regional Administrator
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11