U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK / / / / / / / / (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

/0/1/ /V/A/N/A/S/1/ (2) /0/0/-/0/0/0/0/0/-/0/0/ (3) /4/1/1/1/1/ (4) / / / (5)
LICENSEE CODE — LICENSE NUMBER — LICENSE TYPE — CAT

/0/1/ REPORT SOURCE /L/ (6) /0/5/0/0/0/3/3/8/ (7) /1/2/0/7/8/2/ (8) /1/2/2/2/8/2/ (9)
DOCKET NUMBER — EVENT DATE — REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On December 7, 1982 while in Mode 4, the pressure in the B nitrogen reservoir for/
/0/3/ / the pressurizer PORV (PCV-1455C) dropped below the minimum pressure required to /
/0/4/ / maintain the PORV operable. The redundant PORV remained operable and the affect-/
/0/5/ / ed PORV was returned to service within the time frame of the T.S. 3.4.9.3 Action /
/0/6/ / Statement. Therefore, the health and safety of the public were not affected. /
/0/7/ / This event is reportable pursuant to T.S. 6.9.1.9.b. /
/0/8/ / /

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
/0/9/	/C/J/ (11)	/B/ (12)	/C/ (13)	/V/A/L/V/E/X/ (14)	/F/ (15)	/B/ (16)

(17)	LER/RO REPORT NUMBER	EVENT YEAR	SEQUENTIAL REPORT NO.	OCCURRENCE CODE	REPORT TYPE	REVISION NO.
		/8/2/	/-/ /0/9/1/	/\/ /0/3/	/L/	/-/ /0/

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
/B/ (18)	/Z/ (19)	/Z/ (20)	/Z/ (21)	/0/0/0/0/ (22)	/Y/ (23)	/N/ (24)	/A/ (25)	/M/1/2/0/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / This event was caused by excessive nitrogen leakage through the B nitrogen /
/1/1/ / reservoir relief valve (RV-GN-108-B-1). The relief valve was repaired and the /
/1/2/ / PORV (PCV-1455C) was returned to service. /
/1/3/ / /
/1/4/ / /

	FACILITY STATUS	%POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
/1/5/	/G/ (28)	/0/0/0/ (29)	/ NA /	/A/ (31)	/ Operational Event /

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
/1/6/	/Z/ (33)	/Z/ (34)	/ NA /	/ NA /

	PERSONNEL EXPOSURES NUMBER	TYPE	DESCRIPTION (39)
/1/7/	/0/0/0/ (37)	/Z/ (38)	/ NA /

	PERSONNEL INJURIES NUMBER	DESCRIPTION (41)
/1/8/	/0/0/0/ (40)	/ NA /

	LOSS OF OR DAMAGE TO FACILITY TYPE	DESCRIPTION (43)
/1/9/	/Z/ (42)	/ NA /

	PUBLICITY ISSUED	DESCRIPTION (45)	NRC USE ONLY
/2/0/	/N/ (44)	/ NA /	/ / / / / / / / / / / / / /

NAME OF PREPARER W. R. CARTWRIGHT PHONE (703) 894-5151

Virginia Electric and Power Company
North Anna Power Station, Unit No. 1 Attachment: Page 1 of 1
Docket No. 50-338
Report No. LER 82-091/03L-0

Description of Event

On December 7, 1982, shortly after placing the PORV Overpressure Protection System in service (RCS cold leg temperature less than or equal to 320°F) the B nitrogen reservoir for PORV-1455C was isolated from the system due to excessive leakage from the high pressure relief valve RV-CN-108B-1. This rendered the PORV-1455C inoperable and is reportable pursuant to T.S. 6.9.1.9.b.

Probable Consequences of Occurrence

The operability of the PORV's in a cold shutdown condition is required to ensure that the RCS pressure boundary is not overpressurized in the non-ductile range. The redundant PORV remained operable and there was no pressure transient. Therefore, there was no effect on the health and safety of the public.

Cause of Event

This event was caused by excessive nitrogen leakage through the relief valve on the PORV-1455C nitrogen reservoir. The excessive leakage was due to the improper installation of a newly designed seat and disc package in the relief valve.

Immediate Corrective Action

The affected Nitrogen System to PORV-1455C was removed from service and the Action Statement of T.S. 3.4.9.3 entered. The relief valve was repaired and the system returned to service in 50 hours.

Scheduled Corrective Action

No further corrective action is required.

Actions Taken to Prevent Recurrence

The inoperability of the PORV Nitrogen Systems has occurred repeatedly since the systems were installed. As a result, an extensive redesign and modification effort has been undertaken. The installation of the seat and disc package described in this event was part of this effort. Since the installation of these parts and the repair of the relief valve described in this event, the overall system leakage has been reduced dramatically and the system operability improved.

Generic Implications

This type of failure has no generic implications.