

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/2/ (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 /L/ (6) /0/5/0/0/0/3/3/9/ (7) /0/4/0/6/8/3/ (8) /0/4/2/9/8/3/ (9)
SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On April 6, 1983, with Unit 2 in Mode 5, the pressure in the "B" Nitrogen Supply /
/0/3/ / Tank for Pressurizer PORV (PCV-2455C) dropped below the minimum pressure required/
/0/4/ / to consider the PORV operable. Since the redundant PORV remained operable and /
/0/5/ / the nitrogen pressure was restored to the inoperable PORV within the time frame /
/0/6/ / of the Action Statement of T.S. 3.4.9.3, the health and safety of the public were/
/0/7/ / not affected. This event is reportable pursuant to T.S. 6.9.1.9.b. /
/0/8/ /

SYSTEM CAUSE CAUSE COMP. VALVE
CODE CODE SUBCODE COMPONENT CODE SUBCODE SUBCODE

/0/9/ /C/J/ (11) /B/ (12) /A/ (13) /V/A/L/V/E/X/ /F/ /B/
LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION
REPORT NO. REPORT NO.
(17) NUMBER /8/3/ /-/ /0/3/0/ /-/ /0/3/ /L/ /-/ /0/

ACTION FUTURE EFFECT SHUTDOWN ATTACHMENT NPRD-4 PRIME COMP. COMPONENT
TAKEN ACTION ON PLANT METHOD HOURS SUBMITTED FORM SUB. SUPPLIER MANUFACTURER

/X/ (18) /F/ (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/ / Leakage in the Pressurizer PORV Nitrogen Supply System caused the "B" supply tank/
/1/1/ / to depressurize. The tank was repressurized and the PORV returned to service. /
/1/2/ / A design modification intended to reduce the leakage is scheduled to be performed/
/1/3/ / during the current refueling outage. /
/1/4/ /

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

ACTIVITY CONTENT
RELEASED 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/ /G/0/0/ (40) / NA /

LOSS OF OR DAMAGE TO FACILITY
TYPE DESCRIPTION (43) 8305100265 830429
/1/9/ /Z/ (42) / NA / PDR ADOCK 05000339
S PDR

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

NAME OF PREPARER E. WAYNE HARRELL PHONE (703) 894-5151

Virginia Electric and Power Company
North Anna Power Station, Unit No. 2
Docket No. 50-339
Report No. LER 83-030/03L-0

Attachment: Page 1 of 1

Description of Event

On April 6, 1983, with Unit 2 in Mode 5, the nitrogen supply that provides the operating medium for Pressurizer PORV (PCV-2455C) decreased to below the minimum pressure required to maintain the PORV operable. A nitrogen pressure of 1775 psig is required for PORV operability based on the design requirement for 120 valve cycles.

Probable Consequences of Occurrence

The operability of the Pressurizer PORV's in cold shutdown conditions is required to ensure that the reactor coolant pressure boundary is not over pressurized in the non-ductile range. Since the nitrogen tank was repressurized within the time frame of the Action Statement and the redundant PORV remained operable to provide NDT protection, the health and safety of the public were not affected.

Cause of Event

Leakage in the Pressurizer PORV Nitrogen Supply System caused the "B" supply tank to depressurize to the alarm setpoint of 1850 psig. Problems with operation of the recently installed Liquid Nitrogen System delayed repressurization of the tank until the tank pressure decreased to 1760 psig.

Immediate Corrective Action

The "B" Nitrogen Supply tank was repressurized to 2125 psig and the PORV returned to service.

Scheduled Corrective Action

A design modification to reduce leakage in the PORV Nitrogen Supply System is scheduled to be performed during the current Unit 2 refueling outage.

Actions Taken to Prevent Recurrence

No further action is required.

Generic Implications

North Anna Units 1 and 2 have experienced excessive nitrogen system leakage since the system was installed.