

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On November 16, 1982, with Unit 1 in Mode 3, Heat Tracing Circuit ET-117N (Boron /
/0/3/ / Injection Tank Outlet Piping) failed. The piping temperature was verified to be /
/0/4/ / greater than 145°F. Seven hours later the temperature was less than 145°F. Again /
/0/5/ / on November 28, 1982 the temperature was less than 145°F. The pipe was returned /
/0/6/ / to greater than 145°F within 6 hours in both instances; therefore, the health /
/0/7/ / and safety of the general public were not affected. This event is reportable /
/0/8/ / pursuant to T.S. 6.9.1.9.b. /

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

/0/9/ /S/F/ (11) /E/ (12) /A/ (13) /H/E/A/T/E/R/ (14) /Z/ (15) /Z/ (16)
LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION
REPORT NO. NO.

(17) NUMBER /8/2/ /- /0/7/0/ /- /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

/A/ (18) /X/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /N/ (24) /A/ (25) /N/0/8/0/
(26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The normal Heat Trace Circuit failed open on 11-16-82. The redundant circuit was /
/1/1/ / energized. The piping was returned to greater than 145°F using heat lamps. Cir- /
/1/2/ / cuit ET-117N was replaced and temporary insulation was installed. On 11-28-82 /
/1/3/ / the pipe temperature dropped below 145°F due to loose temporary insulation. The /
/1/4/ / insulation was tightened and 145°F restored. /

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

ACTIVITY CONTENT 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 (43)
TYPE DESCRIPTION
/1/9/ /Z/ (42) / NA /

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

NFC USE ONLY

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

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PDR ADOCK 05000338
S PDR

Virginia Electric and Power Company
North Anna Power Station, Unit No. 1
Docket No. 50-338
Report No. LER 82-070/03L-0

Attachment: Page 1 of 1

Description of Event

On November 16, 1982, with Unit 1 in Mode 3, Heat Tracing Circuit ET-117N (Boron Injection Tank Outlet Piping) failed. The temperature was immediately verified to be greater than 145°F but had dropped below 145°F by the next 8 hour surveillance. The same circuit and ET-116N (an adjacent circuit) both indicated less than 145°F on November 28, 1982.

Probable Consequences of Occurrence

In both cases the temperature was restored to greater than 145°F within 6 hours. Flow was verified by draining a small quantity of water from a drain valve in the affected piping. Since the temperature was returned to above the minimum setpoint quickly and the boric acid solution did not solidify, the health and safety of the general public were not affected.

Cause of Event

The event on November 16, 1982 was caused by failure of the normal channel of Heat Trace Circuit 117. This channel failed and the redundant channel was energized. When the insulation was removed to replace the Heat Tracing, the pipe temperature dropped below 145°F.

On November 28, 1982 the circuits that dropped below 145°F were on the same section of piping that had the insulation removed on November 16, 1982. The temporary insulation that was in place had become loose and allowed the temperature to drop.

Immediate Corrective Action

In both cases, heat lamps were used to restore the piping to greater than 145°F. In the first case, the failed channel of heat tracing was replaced. In the second case, additional temporary insulation was installed to reduce the heat loss from the piping.

Scheduled Corrective Action

Permanent lagging will be installed on the affected piping.

Actions Taken to Prevent Recurrence

No further action is required.

Generic Implications

There are no generic implications associated with this event.