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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On May 27, 1981, with both units in Mode 1 at 100 percent power, the "B" Service /
/0/3/ / Water Supply Header to the Unit 1 and 2 charging pumps was isolated to repair a /
/0/4/ / pinhole leak in a supply line (3"-WS-74-151-Q3). Since the header was restored /
/0/5/ / to operable status within 72 hours as required by the Action Statement, the /
/0/6/ / health and safety of the general public were not affected. This is contrary to /
/0/ / / T.S. 3.7.4.1 and reportable pursuant to T.S. 6.9.1.9.b. A similar event occurred/
/0/8/ / on April 21, 1981 to this pipe which was reported via LER 81-024. /

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

/0/9/ /W/A/ (11) /E/ (12) /D/ (13) /P/I/P/E/X/X/ (14) /A/ (15) /Z/ (16)

(17) LER/RO REPORT NUMBER | EVENT YEAR | SEQUENTIAL REPORT NO. | OCCURRENCE CODE | REPORT TYPE | REVISION NO.

/8/1/ /-/ /0/4/6/ / \ / /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

/A/ (18) /Z/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /N/ (24) /A/ (25) /G/3/4/4/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The actual cause of the pinhole leak is unknown at this time. However, it is /
/1/1/ / suspected that this leak may have been caused by sulfate reducing bacteria with- /
/1/2/ / in the service water piping. A study is being performed at this time to deter- /
/1/3/ / mine the actual failure mechanism. The affected piping was removed and a new /
/1/4/ / section was welded into place in the Service Water System. /

FACILITY STATUS | %POWER | OTHER STATUS | METHOD OF DISCOVERY | DISCOVERY DESCRIPTION (32)

/1/5/ /E/ (28) /1/0/0/ (29) / NA / (30) /A/ (31) / Operator Observation /

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 (43)
TYPE | DESCRIPTION

/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

8106290249

Virginia Electric and Power Company
North Anna Power Station, Unit 1 Attachment: Page 1 of 1
Docket No. 50-338
Report No. LER 81-046/03L-0

Description of Event

On May 27, 1981, with both units in Mode 1 at 100 percent power, the "B" Service Water Supply Header to the Unit 1 and Unit 2 Charging Pumps was isolated to repair a pinhole leak in the line. The "A" Service Water Supply Header to the charging remained inservice while tne "B" header was being repaired.

Probable Consequences of Occurrence

Since service water was supplied to the charging pumps by the "A" header and since the "B" header was restored to operable status within 72 hours as required by the Action Statement, the health and safety of the general public were not affected

Cause of Event

The actual cause of the pinhole leak is unknown at this time. However, it is suspected that this leak may have been caused by sulfate reducing bacteria within the service water piping. A study is being performed at this time to determine the actual failure mechanism.

Immediate Corrective Action

The affected piping was cut out and a new section was welded into place in the service water system using approved procedures. The replaced welds were liquid penetrant and hydrostatically tested prior to returning the header to service.

Scheduled Corrective Action

There is no scheduled corrective action at this time. However, upon completion of a study being performed to determine the actual mechanism causing corrosion of the service water piping, the appropriate action will be taken.

Actions Taken to Prevent Reccurrence

No action is taken to prevent recurrence at this time.

Generic Implications

This failure may be generic to both units at North Anna Power Station. A study by Lehigh University concerning the corrosion of piping and components at North Anna subjected to service and lake water is being performed at this time. Once this analysis is complete, plans will be formulated to arrest further degradation of system piping and restore damaged material to design specifications. Meanwhile, it is felt that no gross failures will occur since failures of this nature produce small pinhole leaks which would be randomly located in the piping.