

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On September 21, 1983, with Unit 1 at 100 percent power and one High Head Safety /
/0/3/ / Injection (HHSI) pump out of service, a second HHSI pump was removed from service/
/0/4/ / at 2350 due to high bearing vibrations. This is contrary to the LCO of T.S. /
/0/5/ / 3.5.2 which requires two operable HHSI pumps in Mode 1. Since the remaining HHSI/
/0/6/ / pump was operable and a second HHSI pump was restored to operable within the time/
/0/7/ / limits of the Action Statement, the health and safety of the public were not /
/0/8/ / affected. This event is reportable 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) /B/ (13) /P/U/M/P/X/X/ (14) /B/ (15) /Z/ (16)
SEQUENTIAL OCCURRENCE REPORT REVISION
LER/RO EVENT YEAR REPORT NO. CODE TYPE NO.
(17) REPORT

NUMBER /8/3/ /-/ /0/6/1/ / / /0/3/ /X/ /-/ /3/

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

/X/ (18) /A/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /Y/ (24) /N/ (25) /P/0/2/5/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The "1C" HHSI pump was tagged out for maintenance at the time of the event. The /
/1/1/ / "1A" HHSI pump was removed from service due to high thrust bearing vibrations. /
/1/2/ / The "1C" HHSI pump was tested satisfactorily and returned to service at 1931 on /
/1/3/ / September 22, 1983. /
/1/4/ /

FACILITY METHOD OF
STATUS %POWER OTHER STATUS (30) DISCOVERY DISCOVERY DESCRIPTION (32)
/1/5/ /E/ (28) /1/0/0/ (29) / NA / /B/ (31) / Surveillance Test /

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/ /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 /

NAME OF PREPARER E. Wayne Harrell

PHONE (703) 894-5151

NRC USE ONLY

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PDR ADDCK 05000338
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Virginia Power

North Anna Power Station, Unit No. 1

Attachment: Page 1 of 2

Docket No. 50-338

Attachment to LER 83-061/03X-3

Description of Event

On September 21, 1983, with Unit 1 at 100 percent power and the "1C" High Head Safety Injection Pump (HHSI) out of service, the "1A" HHSI pump was removed from service due to high thrust bearing vibrations (2.8 mils) encountered during the monthly surveillance test. This is contrary to the LCO of T.S. 3.5.2 requiring two operable HHSI pumps in Mode 1 and reportable pursuant to T.S. 6.9.1.9.b.

Probable Consequences of Occurrence

Operability of the Emergency Core Cooling System (ECCS) ensures sufficient core cooling is available in the event of a LOCA or steam line rupture. Since the remaining HHSI pump was operable throughout the event and a second HHSI pump was restored to operable within the time limits of the Action Statement of T.S. 3.5.2, the health and safety of the public were not affected.

Cause of Event

The "1C" HHSI pump was tagged out at the time of the event in order to facilitate design change work on the Service Water System. At 2350, the "1A" HHSI pump was found to have high thrust bearing vibrations (2.8 mils.) via the monthly surveillance test. The "1A" pump was secured and removed from service and the "1B" pump was started.

An inspection of the "1A" HHSI pump revealed a warped pump shaft which resulted in the high thrust bearing vibrations.

Immediate Corrective Action

The "1C" HHSI pump was tested satisfactorily and restored to operable status at 1931 on September 22, 1983.

Scheduled Corrective Action

The pump shaft of the "1A" HHSI pump was replaced and the pump was tested satisfactorily on October 15, 1983 pursuant to the applicable requirements.

Five of the six HHSI pump shafts have been replaced on the two units at North Anna. The remaining shaft is scheduled to be replaced with the latest generation shaft by October 1, 1985.

Action Taken To Prevent Recurrence

An investigation revealed that new shafts often require straightening at the factory. This used to be accomplished by peening the high side of the bow. It is believed that during operation the shaft tends to revert back to its original shape as the stresses created during peening are relieved. Present peening methods should eliminate this problem.

Generic Implications

There are no generic implications associated with this event.

NORTH ANNA POWER STATION
P.O. BOX 402
MINERAL, VIRGINIA 23117

June 6, 1985

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

Serial No. N-83-141A
NO/PLB/11
Docket No. 50-338
License No. NPF-4

Dear Sirs:

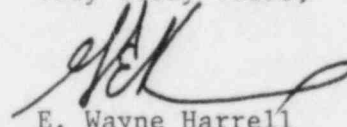
Pursuant to North Anna Power Station Technical Specifications, Virginia Power hereby submits the following Updated Licensee Event Report for North Anna Unit No. 1. This updated report revises the date by which all corrective maintenance is scheduled to be completed.

Report No.
LER 83-061/03X-3

Applicable Technical Specifications
T.S. 6.9.1.9.b

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
for Station Manager

Enclosures (3 copies)

cc: Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
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Atlanta, Georgia 30323

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