

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On June 12, 1981 while in Mode 1 operation, the casing cooling pump (2-RS-P-3A)/
/0/3/ / was declared inoperable when it failed to meet the acceptance criteria of the /
/0/4/ / periodic test. Since the casing cooling pump was repaired within 7 days as /
/0/5/ / required by T.S. 3.6.2.2, the health and safety of the public was not affected./
/0/6/ / This event is reportable pursuant to T.S. 6.9.1.9.b. /
/0/7/ / /
/0/8/ / /

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
/0/9/ /S/B/ (11)	/A/ (12)	/C/ (13)	/P/U/M/P/X/X/ (14)	/P/ (15)	/Z/ (16)
LER/RO REPORT NUMBER	EVENT YEAR	SEQUENTIAL REPORT NO.	OCCURRENCE CODE	REPORT TYPE	REVISION NO.
(17)	/8/1/	/-/	/0/4/9/	/ \ /	/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
/E/ (18)	/Z/ (19)	/Z/ (20)	/Z/ (21)	/0/0/0/0/ (22)	/Y/ (23)	/N/ (24)	/A/ (25)	/L/0/8/8/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The failure of the pump was due to misalignment of the bearing holders and /
/1/1/ / caps. This caused the power supply breaker to open on overcurrent due to the /
/1/2/ / excessive load created by this misalignment. The bearings were aligned and the /
/1/3/ / pump operated for 30 minutes to verify that the corrective actions were /
/1/4/ / adequate. /

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

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)	8108030409 810709 PDR ADDCK 05000339 S PDR	NRC USE ONLY
/2/0/ /N/ (44)	/ NA /		/ / / / / / / / / / / / /

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Virginia Electric and Power Company
North Anna Power Station, Unit #2
Docket No. 50-339
Report No. LER 81-049/03L-0

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Description of Event

On June 12, 1981 while performing periodic test (2PT-64.4A) on the casing cooling pump (2-RS-P-3A), the pump tripped and was declared inoperable as per T.S. 3.6.2.2.

Probable Consequences of Occurrence

The casing cooling system provides an independent chilled water supply to the suction of the outside containment recirculation spray pump to ensure an adequate NPSH during a postulated LOCA. Since the casing cooling pump was restored within the requirements of the action statement of T.S. 3.6.2.2, the health and safety of the public were not affected.

Cause of Event

The failure of the pump was due to the power supply breaker opening on overcurrent. The overcurrent condition was created by excessive electrical loading on the motor due to misaligned bearings. The misalignment occurred when a preventative maintenance check of the pump required repacking of the pump shaft thrust bearing. This was performed on May 24, 1981. This required removal of the bearing cap that maintains axial alignment of the pump shaft. When the cap was replaced, the technical manual procedure for realigning the shaft and establishing impeller position was used, but the retaining bolts were not properly tensioned. This allowed the axial alignment to shift when the pump was operated thereby creating the excessive load on the motor.

The initial pump operation following the preventive maintenance (PM-M-20-P/A-11) was not long enough to create sufficient misalignment to allow this problem to surface. The subsequent operability check of the pump, via the periodic test (2-PT-64.4A) performed on June 12, 1981, provided sufficient run time to reveal this problem.

Immediate Corrective Action

The bearings were cleaned and aligned. When completed, the pump was operated for 30 minutes to verify the adequacy of the corrective action.

Scheduled Corrective Action

No further action required.

Actions Taken to Prevent Recurrence

This event was the result of personnel error. The individual involved was reinstructed on the technical manual procedure.

Generic Implications

There are no generic implications as a result of this event.