

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On December 25 & 26, 1982 while ramping down in power, Quadrant Power Tilt Ratio /  
 /0/3/ / (QPTR) exceeded 1.02 but was less than 1.09 which is contrary to T.S. 3.2.4. Max- /  
 /0/4/ / imum calculated QPTR was 1.0274. On 12-26-82 while leveling power at 100%, Axial /  
 /0/5/ / Flux Difference (AFD) went outside the target band which is contrary to T.S. /  
 /0/6/ / 3.2.1. These events are reportable pursuant to T.S. 6.9.1.9.b. The action /  
 /0/7/ / statements were adhered to and the health and safety of the general public were /  
 /0/8/ / not affected. /

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
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LER/RO REPORT NUMBER	EVENT YEAR	SEQUENTIAL REPORT NO.	OCCURRENCE CODE	REPORT TYPE	REVISION NO.
(17) /R/C/ (11)	/X/ (12)	/Z/ (13)	/Z/Z/Z/Z/Z/Z/ (14)	/Z/ (15)	/Z/ (16)
/8/2/	/-/	/0/7/6/	/ /	/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
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/X/ (18) /Z/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /N/ (24) /Z/ (25) /Z/9/9/9/  
 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The QPTR and AFD deviations existed briefly during power changes for load follow- /  
 /1/1/ / ing purposes. For the first event, QPTR was reduced to < 1.02 by increasing /  
 /1/2/ / reactor power. For the second QPTR event, power was reduced below 50%. Later, /  
 /1/3/ / when increasing power, the QPTR was <1.02 within 2 hours after exceeding 50% pow- /  
 /1/4/ / er. For the AFD event, boric acid was added and AFD returned to the target band. /

FACILITY STATUS	%POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
/1/5/ /F/ (28)	/0/5/4/ (29)	/ NA / (30)	/A/ (31)	/ Annunciator /

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 DEDICARER W. R. CARTWRIGHT

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Virginia Electric and Power Company  
North Anna Power Station, Unit No. 2  
Docket No. 50-339  
Report No. LER 82-076/03L-0

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#### Description of Event

On December 25 and 26, 1982, while ramping down in power, Quadrant Power Tilt Ratio (QPTR) exceeded 1.02 but was less than 1.09 which is contrary to T.S. 3.2.4. The maximum calculated QPTR was 1.0274. Reactor power was less than 55% for both events. On 12-26-82 while leveling power at 100%, Axial Flux Difference (AFD) went outside of the target band which is contrary to T.S. 3.2.1. One penalty minute was accumulated before AFD was returned to within the band. These events are reportable pursuant to T.S. 6.9.1.9.b.

#### Probable Consequences of Occurrence

The Quadrant Power Tilt Ratio limit and the Axial Flux Difference target band limits assure that the power distribution satisfies design values used for the power capability analysis. Because power distribution was returned to within the Technical Specification Limits within the required time period, there were no adverse effects upon the safe operation of the plant and the health and safety of the general public were not affected.

#### Cause of Event

The cause of the power distribution deviations was xenon redistribution which occurred during the load following transients.

#### Immediate Corrective Action

For the first event, QPTR was reduced below 1.02 by increasing reactor power. For the second QPTR event power was reduced to less than 50% when the Quadrant Power Tilt Ratio was discovered to exceed the allowable limit. Later, when increasing power, the QPTR was returned below 1.02 within 2 hours after exceeding 50% power. Boric acid was added to decrease the average core temperature to return the Axial Flux Difference to within the target band.

#### Scheduled Corrective Action

No scheduled corrective action is required.

#### Actions Taken to Prevent Recurrence

No further actions are required.

#### Generic Implications

There are no generic implications associated with this event.