

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On May 28, 1983, following a rapid rampdown from 100% to 0% power, the I-131 Dose/  
/0/3/ / Equivalent exceeded the T.S. limit of 1.0 microcurie/gram. The first sample to /  
/0/4/ / exceed the limit was taken 2 hours after the rampdown. Samples were taken at /  
/0/5/ / least every four hours afterwards in accordance with Item 4a of Technical Specif-/  
/0/6/ / ication Table 4.4-4. The level returned to less than the limit within 12 hours;/  
/0/7/ / therefore, the public health and safety were not affected. This event is report-/  
/0/8/ / able pursuant to T.S. 6.9.1.9.b and T.S. 6.9.2. /

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
/0/9/ /R/C/ (11)	/X/ (12)	/Z/ (13)	/Z/Z/Z/Z/Z/Z/ (14)	/Z/ (15)	/Z/ (16)
LER/RO REPORT NUMBER	EVENT YEAR	SEQUENTIAL REPORT NO.	OCCURRENCE CODE	REPORT TYPE	REVISION NO.

(17) /8/3/ /-/ /0/3/5/ / / /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  
/X/ (18) /Z/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /N/ (24) /N/ (25) /W/1/2/0/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / This event was caused by a fuel element defect, though not specifically identi- /  
/1/1/ / fied, in the reactor core. Post rampdown conditions in the core enhanced the /  
/1/2/ / release of fission fragments to the Reactor Coolant System which caused the /  
/1/3/ / iodine spike. The accelerated sampling frequency of T.S. 3.4.8 was implemented /  
/1/4/ / until RCS specific activity returned to less than the limit of T.S. 3.4.8.a. /

FACILITY STATUS	%POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
/1/5/ /G/ (28)	/0/0/0/ (29)	/ NA / (30)	/C/ (31)	/ Chemistry Sample /

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)	NRC USE ONLY
/2/0/ /N/ (44)	/ NA /	/ / / / / / / / / / / / / / /

NAME OF PREPARER E. Wayne Harrell

PHONE (703) 894-5151

Virginia Electric and Power Company  
North Anna Power Station, Unit No. 1  
Docket No. 50-338  
Report No. LER 83-035/03L-0

Attachment: Page 1 of 2

#### Description of Event

On May 28, 1983, following rapid rampdown from 100% to 0% power, the specific activity of the reactor coolant exceeded 1.0 microcurie/gram. The first primary coolant sample to exceed the limit was taken approximately 2 hours after the rampdown was completed and indicated a level of 1.66 microcurie/gram. A sample taken shortly before the rampdown began, indicated a level of .104 microcuries/gram. Subsequent samples were taken at least every four hours in accordance with Item 4a of T.S. Table 4.4-4.

#### Probable Causes of Occurrence

Since the Dose Equivalent I-131 limit was exceeded for a short period of time, (<12 hours), and the I-131 level was monitored by sampling at least every 4 hours until the I-131 level returned to less than the T.S. 3.4.8 limit, the public health and safety were not affected.

#### Cause of Event

The iodine spike was caused by increased fuel outgassing from a fuel defect, though not specifically identified, after a rapid rampdown from 100% to 0% power.

#### Immediate Corrective Action

The primary coolant was sampled and analyzed at the frequency required by item 4a of Technical Specifications Table 4.4-4. The specific activity was verified to be less than 1.0 microcurie/gram within 12 hours.

#### Scheduled Corrective Action

No further action is required.

#### Actions Taken to Prevent Recurrence

No further action is required.

#### Generic Implications

There are no generic actions associated with this event.

Supplemental Information

This event is reportable as a "Thirty-Day Written Report" pursuant to T.S. 6.9.1.9.b. In addition the supplemental information required by T.S. 6.9.2 "Special Report" and by T.S. 3.4.8 is included as follows:

1. Reactor Power History 48 hours prior to the Dose Equivalent I-131 limit being exceeded.

May 28, 1983 - 0000 to 0124 hours at 92% RTP  
0124 to 0229 unit ramped off line

May 27, 1983 - 0000 to 2200 hours at 100% RTP  
2200 to 2400 hours - rampdown from 100% to 92% RTP for turbine valve freedom test

May 26, 1983 - 24 hours at 100% RTP

2. Fuel Burnup by Core Region - As of May 28, 1983:

Fuel Batch 4a - 27,763.9 MWD/MTU

5a - 17,596.5 MWD/MTU

6a - 2,911.2 MWD/MTU

Cycle 4 Burnup - 2,675.7 MWD/MTU

3. Normal mixed bed demineralization operation 48 hours prior to and after the event. Average flowrate of 120 gpm.
4. No de-gassing operations were performed.
5. Duration of I-131 spike

<u>DATE</u>	<u>TIME</u>	<u>DOSE EQUIVALENT I-131 (Microcurie/gr)</u>
May 28, 1983	0121	.104
May 28, 1983	0437	1.66
May 28, 1983	0630	1.97
May 28, 1983	0833	1.89
May 28, 1983	1233	1.27
May 28, 1983	1630	.98
May 28, 1983	1935	.88

# Vepco

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

June 21, 1983

83 JUN 24 9:36

USNRC REGION I  
ATLANTA, GEORGIA

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, Suite 2900  
Atlanta, Georgia 30303

Serial No. N-83-082  
NO/WFS: dus  
Docket No. 50-338  
License No. NPF-4

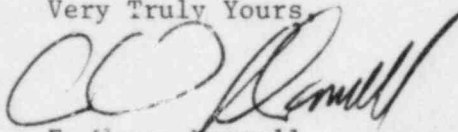
Dear Mr. O'Reilly:

Pursuant to North Anna Power Station Technical Specifications, the Virginia Electric and Power Company hereby submits the following License Event Report applicable to North Anna Unit No. 1.

Report No.	Applicable Technical Specifications
LER 83-035/03L-0	T.S. 6.9.1.9.b and T.S. 6.9.2

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  
Station Manager

Enclosures (3 copies)

cc: Document Control Desk (1 copy)  
016 Phillips Bldg.  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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