

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) /0/4/1/6/8/2/ (8) /0/5/1/2/8/2/ (9)
SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On April 16, 1982, following a reactor trip from 100% on Unit No. 1, the I-131 /
/0/3/ / Dose Equivalent exceeded 1.0 Micro Ci/gram. The first sample to exceed the limit /
/0/4/ / was taken four hours after the reactor trip. Samples were taken every four hours /
/0/5/ / in accordance with item 4a of Technical Specification Table 4.4.-4. The level /
/0/6/ / returned to less than the limit within 12 hours; therefore, the health and safety /
/0/7/ / of the general public were not affected. This is reportable pursuant to T.S. /
/0/8/ / 6.9.2.F. /

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

LER/RO REPORT NUMBER	EVENT YEAR	SEQUENTIAL REPORT NO.	OCCURRENCE CODE	REPORT TYPE	REVISION NO.			
/0/9/	/R/C/ (11)	/X/ (12)	/Z/ (13)	/Z/Z/Z/Z/Z/Z/ (14)	/Z/ (15)	/Z/ (16)		
(17)	/8/2/	/-/	/0/2/4/	/ /	/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
-----------------	------------------	--------------------	--------------------	-------	-------------------------	---------------------	-------------------------	---------------------------

/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 known fuel element defect in the reactor core. Post /
/1/1/ / trip conditions in the core enhanced the release of fission fragments to the /
/1/2/ / reactor coolant system which caused the iodine spike. The accelerated sampling /
/1/3/ / frequency of T.S. 3.4.8 was implemented until the RCS specific activity returned /
/1/4/ / 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/	/C/ (28)	/0/0/0/ (29)	/ NA / (30)	/C/ (31)	/Post Trip 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)
---------------------------------------	------------------

PUBLICITY ISSUED	DESCRIPTION (45)	
/1/9/	/Z/ (42)	/ NA /

ISSUED	DESCRIPTION (45)	NRC USE ONLY
/2/0/	/N/ (44)	/ NA /

NAME OF PREPARER W. R. CARTWRIGHT

PHONE (703) 894-5151

Virginia Electric and Power Company
North Anna Power Station, Unit No. 1
Docket No. 50-338
Report No. LER 82-024/03L-0

Attachment: Page 1 of 2

Description of Event

On April 16, 1982, following a reactor trip from 100%, on Unit No. 1, the I-131 dose equivalent exceeded 1.0 micro Ci/gram. The first primary coolant sample to exceed the limit was approximately four hours after the reactor trip. Samples were taken every four hours in accordance with item 4a of T.S. Table 4.4-4.

Probable Consequences of Occurrence

The I-131 dose equivalent specific activity never exceeded 1.5 micro Ci/gram and returned to less than 1.0 micro Ci/gram in less than 12 hours; therefore, the health and safety of the general public were not affected.

Cause of Event

The iodine spike was caused by increased fuel outgassing following the reactor trip.

Immediate Corrective Action

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

Scheduled Corrective Action

No further corrective action is required.

Actions Taken to Prevent Recurrence

No further action required.

Generic Implications

There are no generic actions associated with this event.

SUPPLEMENTAL INFORMATION

The dose equivalent I-131 limit of 1.0 micro Ci/gram was exceeded on April 16 and 17, 1982 as follows:

<u>DATE</u>	<u>TIME</u>	<u>DOSE EQUIVALENT I-131 (micro Ci/gr)</u>
April 16, 1982	0119	Less than limit
April 16, 1982	1884	1.45
April 16, 1982	2200	1.30
April 17, 1982	0225	1.15
April 17, 1982	0615	Less than limit

The following is the information required by T.S. 3.4.8.

1. April 14, 1982 - the power history for the day was 100% for 24 hours.
 April 15, 1982 - 100% for 24 hours
 April 16, 1982 - 100% until the reactor trip at 1455
2. Fuel burnup: Region 1 (Batch 1A3) - 31,400 MWD/MTU
 Region 2 (Batch 3A2) - 26,700 MWD/MTU
 Region 3 (Batch 4) - 24,400 MWD/MTU
 Region 4 (Batch 5) - 14,000 MWD/MTU
3. Normal mixed bed demineralizer line-up, 48 hours prior to exceeding the unit.
4. No degassing operations were performed.
5. The duration of activity exceeding 1.0 Micro Ci/gram dose Equivalent of I-131 is approximately 12 hours.