

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / During a review of Chemistry Logs on September 17, 1982, it was discovered that /
 /0/3/ / the specific activity of the primary coolant exceeded 1.0 micro ci/gram Dose /
 /0/4/ / Equivalent I-131 on 1-23-82. The sample frequency of item 4a of T.S. Table /
 /0/5/ / 4.4.-4 was met but the special reporting requirement was overlooked. The health /
 /0/6/ / and safety of the public were not affected. This event is reportable pursuant to/
 /0/7/ / T.S. 6.9.2.f. /
 /0/8/ /

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

/0/9/ /R/C/ (11) /X/ (12) /Z/ (13) /Z/Z/Z/Z/Z/Z/ (14) /Z/ (15) /Z/ (16)
 LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION
 (17) REPORT NUMBER /8/2/ /-/ /0/6/1/ / / /0/3/ /X/ /-/ /1/
 NUMBER

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/ / The specific activity increase was due to Iodine 131 migration through pinhole /
 /1/1/ / leaks in fuel cladding during a unit ramp down to Mode 2 and subsequent reactor /
 /1/2/ / trip during the return to power. The failure to report this event within 30 days/
 /1/3/ / was an oversight. Station personnel have been made aware of this event and pro- /
 /1/4/ / cedure changes have been made that will ensure the proper review. /

FACILITY METHOD OF STATUS %POWER OTHER STATUS DISCOVERY DISCOVERY DESCRIPTION (32)
 /1/5/ /H/ (28) /0/0/0/ (29) / NA / (30) /B/ (31) / Chemistry Analysis /

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

NAME OF PREPARER W. R. CARTWRIGHT PHONE (703) 894-5151

UPDATED REPORT - Previous Report Dated 10-12-82

Virginia Electric and Power Company
North Anna Power Station, Unit No. 1
Docket No. 50-338
Attachment to LER 82-061/03X-1

Attachment: Page 1 of 3

Description of Event

On September 17, 1982, during a review of Chemistry Logs by an NRC inspector, it was discovered that on January 23, 1982, the specific activity of the primary coolant exceeded the limit of T.S. 3.4.8.a. The Dose Equivalent I-131 exceeded 1.0 $\mu\text{Ci/gm}$ following a controlled unit shutdown to Mode 2 to repair a feedwater heater. During the subsequent turbine restart, the reactor tripped due to an impulse pressure spike which reset the turbine trip/reactor trip permissive.

The duration of the spike as well as the information required by T.S. 3.4.8 is included under Supplemental Information. During a review of Chemistry Logs, this event was discovered. It was also determined that the Special Report required by T.S. 3.4.8 was not submitted. Therefore, this report is being submitted as required by T.S. 3.4.8 pursuant to T.S. 6.9.2.

Probable Consequences of Occurrence

The Unit 1 Cycle 3 Core Performance Report (VEP-FRD-50) identified the existence of pinhole leakage as the probable cause of iodine spiking following a large core transient. In addition the average Dose Equivalent I-131 concentration of $8.2 \times 10^{-2} \mu\text{Ci/gm}$ for the cycle 3 core was less than 9% of the Technical Specification limit. Therefore, the health and safety of the public were not affected.

Cause of Event

This event was caused by an increase in the Iodine 131 concentration in the RCS following a unit shutdown. The spike was probably caused by pinhole leakage in the fuel elements which becomes aggravated during a transient.

The reporting of this event was not performed within 30 days as required by T.S. 3.4.8 due to an oversight by station personnel.

Immediate Corrective Action

The primary coolant was sampled and analyzed at the frequency required by T.S. Table 4.4-4 and it was verified that the specific activity returned to acceptable limits.

Appropriate station personnel have been reinstructed on the reporting requirements related to this event.

The chemistry periodic test for DQI determination has been revised for each unit to require the submittal of a Deviation Report to the Shift Supervisor if the T.S. 3.4.8 limit is exceeded.

Scheduled Corrective Action

All other chemistry periodic tests that involve the surveillance of Technical Specification chemistry limits will be reviewed to determine if a procedure change to prevent a similar event is necessary.

Action Taken To Prevent Recurrence

No further action required.

Generic Implications

Very slight fuel defect leakage has been experienced with fuel elements of this type, and is not considered abnormal. Therefore, there are no generic implications from this event.

Similar Events That Have Been Reported For The Unit 1 Cycle 3 Core

<u>EVENT DATE</u>	<u>LER NUMBER</u>
July 10, 1981	81-053/03L-0
August 4, 1981	81-065/03L-0
January 23, 1982	82-061/03L-0
February 23, 1982	82-010/03L-0
April 1, 1982	82-013/03L-0
April 16, 1982	82-024/03L-0

UPDATED REPORT - Previous Report Dated 10-12-82

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Supplemental Information

<u>DATE</u>	<u>TIME</u>	<u>D.E. I-131 ($\mu\text{Ci/gm}$)</u>	<u>REMARKS</u>
Jan. 23, 1982	0105	7×10^{-2}	Commenced ramp down from 100% RTP
	0305	1×10^{-1}	Mode 2
	0334	3.4×10^{-1}	
	0338		Reactor Trip
	0443	5.36×10^{-1}	
	1202	1.44	Limit exceeded
	1538	1.76	Limit exceeded
	1917	1.80	Limit exceeded
	2315	1.25	Limit exceeded
Jan 24, 1982	0302	7.37×10^{-1}	
	0552	6.57×10^{-1}	Sample frequency returned to normal

- The power history 48 hours prior to initiating rampdown was about 99.3%.
- Fuel Burnup by region as of Jan. 23, 1982.

1A3	22,716 MWD/MTU
3A2	27,787 MWD/MTU
4	20,470 MWD/MTU
5	10,936 MWD/MTU
Total as of Jan. 23, 1982 - 9,856 MWD/MTU	
- For the 48 hours prior to the spike, the normal mixed bed demineralizer flow existed; Average 87 gpm.
- No degassing operations were performed.
- The duration of the D.E. I-131 levels above the T.S. 3.4.8 limit ($1.0 \mu\text{Ci/gm}$) was about 15 hours.