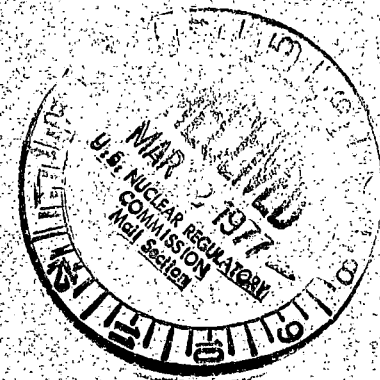
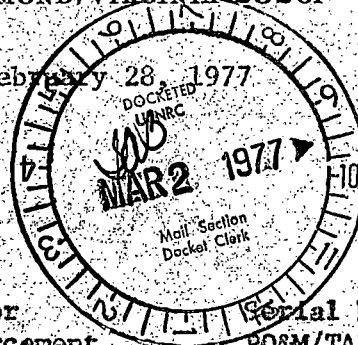


## VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

February 28, 1977



Mr. Norman C. Moseley, Director  
Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Region II - Suite 818  
230 Peachtree Street, Northwest  
Atlanta, Georgia 30303

Serial No. 076  
PO&M/TAP:dgt

Docket No. 50-281  
License No. DPR-32

Dear Mr. Moseley:

Pursuant to Surry Power Station Technical Specification 6.6.2, the Virginia Electric and Power Company hereby submits a copy of Reportable Occurrence No. RO-S2-77-02.

The substance of this report has been reviewed by the Station Nuclear Safety and Operating Committee and will be placed on the agenda for the next meeting of the System Nuclear Safety and Operating Committee.

Very truly yours,

G. M. Stallings  
Vice President-Power Supply  
and Production Operations

Enclosures

40 copies RO-S2-77-02

cc: Mr. Robert W. Reid, Chief ✓  
Operating Reactors Branch 4

2111

# LICENSEE EVENT REPORT

CONTROL BLOCK: 

--	--	--	--	--	--	--	--	--	--

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME: 

01	V	A	S	P	S	2
----	---	---	---	---	---	---

 LICENSE NUMBER: 

0	0	-	0	0	0	0	0	0	-	0	0
---	---	---	---	---	---	---	---	---	---	---	---

 LICENSE TYPE: 

4	1	1	1	0
---	---	---	---	---

 EVENT TYPE: 

0	3
---	---

CON'T: 

01
----

 CATEGORY: 

P	0
---	---

 REPORT TYPE: 

L
---

 REPORT SOURCE: 

L
---

 DOCKET NUMBER: 

0	5	0	-	0	2	8	1
---	---	---	---	---	---	---	---

 EVENT DATE: 

0	1	2	6	7	7
---	---	---	---	---	---

 REPORT DATE: 

0	2	2	8	7	7
---	---	---	---	---	---

### EVENT DESCRIPTION

02 | While using Boric Acid Transfer Pump 1-GH-P-2D to provide recirculation between Boric  
03 | Acid Tank G and the Boron Injection Tank, the operator attempted to make up to the  
04 | Refueling Water Storage Tank and received a no flow indication on the Boric Acid  
05 | Integrator. The operator commenced a ramp down as the no flow indication signified a  
06 | loss of ability to maintain recirculation between the Boric Acid Tank and the (Con't)

SYSTEM CODE: 

P	C
---	---

 CAUSE CODE: 

E
---

 COMPONENT CODE: 

V	A	L	V	E	X
---	---	---	---	---	---

 PRIME COMPONENT SUPPLIER: 

A
---

 COMPONENT MANUFACTURER: 

G	2	5	5
---	---	---	---

 VIOLATION: 

Y
---

### CAUSE DESCRIPTION

08 | The loss of flow apparently resulted from an obstruction in the line from Boric Acid  
09 | Tank G to the Boric Acid Transfer Pumps. The line was back flushed with primary  
10 | grade water and cleared of its obstruction. Boric Acid Tank G was then (Continued)

FACILITY STATUS: 

E
---

 % POWER: 

1	0	0
---	---	---

 OTHER STATUS: 

NA
----

 METHOD OF DISCOVERY: 

A
---

 DISCOVERY DESCRIPTION: 

NA
----

FORM OF ACTIVITY RELEASED: 

Z
---

 CONTENT OF RELEASE: 

Z
---

 AMOUNT OF ACTIVITY: 

NA
----

 LOCATION OF RELEASE: 

NA
----

### PERSONNEL EXPOSURES

13 | NUMBER: 

0	0	0
---	---	---

 TYPE: 

Z
---

 DESCRIPTION: 

NA
----

### PERSONNEL INJURIES

14 | NUMBER: 

0	0	0
---	---	---

 DESCRIPTION: 

NA
----

### OFFSITE CONSEQUENCES

15 | NA

### LOSS OR DAMAGE TO FACILITY

16 | TYPE: 

Z
---

 DESCRIPTION: 

NA
----

### PUBLICITY

17 | NA

### ADDITIONAL FACTORS

18 | The health and safety of the public were not affected by this event because the Safety

19 | Injection System would have been able to provide the requisite shutdown capability.

EVENT DESCRIPTION (CONTINUED)

Boron Injection Tank. After recirculation flow was reestablished by placing Boric Acid Tank B into service, the unit rampdown was reversed. This event is contrary to Technical Specification 3.2.C.6 and is reportable in accordance with Technical Specification 6.6.2.b(2). (RO-S2-77-02).

CAUSE DESCRIPTION (CONTINUED)

sampled to verify its boron concentration and returned to service.

To determine the cause of the obstruction, Boric Acid Tank C was drained, opened and inspected. Nothing of substance was found in the tank. However, the suction valve (I-CH-130) to the boric acid transfer pumps had a ripped diaphragm.

This type valve failure has been addressed in RO-S1-77-05 and the programs initiated therein will alleviate this problem.

The maximum time that the recirculation to the Boron Injection Tank was lost is estimated to be 1 3/4 hours as the system has performed satisfactorily during a previous evolution at 1700 and this event occurred at 1845. This did not hinder the Safety Injection capacity of the Boron Injection Tank as recirculation flow was immediately achieved upon lineup to the "B" Boric Acid Tank.

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

February 28, 1977

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Operating Reactors Branch 4

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LICENSEE NAME: 

01	V	A	S	P	S	2
----	---	---	---	---	---	---

 LICENSE NUMBER: 

0	0	-	0	0	0	0	0	-	0	0
---	---	---	---	---	---	---	---	---	---	---

 LICENSE TYPE: 

4	1	1	1	0
---	---	---	---	---

 EVENT TYPE: 

0	3
---	---

CATEGORY: 

01	CONT
----	------

 REPORT TYPE: 

L
---

 REPORT SOURCE: 

L
---

 DOCKET NUMBER: 

0	5	0	-	0	2	8	1
---	---	---	---	---	---	---	---

 EVENT DATE: 

0	1	2	6	7	7
---	---	---	---	---	---

 REPORT DATE: 

0	2	2	8	7	7
---	---	---	---	---	---

## EVENT DESCRIPTION

02
----

 While using Boric Acid Transfer Pump 1-GH-P-2D to provide recirculation between Boric Acid Tank C and the Boron Injection Tank, the operator attempted to make up to the Refueling Water Storage Tank and received a no flow indication on the Boric Acid Integrator. The operator commenced a ramp down as the no flow indication signified a loss of ability to maintain recirculation between the Boric Acid Tank and the (Con't)

SYSTEM CODE: 

P	C
---	---

 CAUSE CODE: 

E
---

 COMPONENT CODE: 

V	A	L	V	E	X
---	---	---	---	---	---

 PRIME COMPONENT SUPPLIER: 

A
---

 COMPONENT MANUFACTURER: 

G	2	5	5
---	---	---	---

 VIOLATION: 

Y
---

## CAUSE DESCRIPTION

08
----

 The loss of flow apparently resulted from an obstruction in the line from Boric Acid Tank C to the Boric Acid Transfer Pumps. The line was back flushed with primary grade water and cleared of its obstruction. Boric Acid Tank C was then (Continued)

FACILITY STATUS: 

E
---

 % POWER: 

1	0	0
---	---	---

 OTHER STATUS: 

NA
----

 METHOD OF DISCOVERY: 

A
---

 DISCOVERY DESCRIPTION: 

NA
----

FORM OF ACTIVITY RELEASED: 

Z
---

 CONTENT OF RELEASE: 

Z
---

 AMOUNT OF ACTIVITY: 

NA
----

 LOCATION OF RELEASE: 

NA
----

## PERSONNEL EXPOSURES

NUMBER: 

0	0	0
---	---	---

 TYPE: 

Z
---

 DESCRIPTION: 

NA
----

## PERSONNEL INJURIES

NUMBER: 

0	0	0
---	---	---

 DESCRIPTION: 

NA
----

## OFFSITE CONSEQUENCES

15
----

 NA

## LOSS OR DAMAGE TO FACILITY

TYPE: 

Z
---

 DESCRIPTION: 

NA
----

## PUBLICITY

17
----

 NA

## ADDITIONAL FACTORS

18
----

 The health and safety of the public were not affected by this event because the Safety Injection System would have been able to provide the requisite shutdown capability.

19
----

 Injection System would have been able to provide the requisite shutdown capability.

NAME: T. L. Baucom PHONE: 357-3184

EVENT DESCRIPTION (CONTINUED)

Boron Injection Tank. After recirculation flow was reestablished by placing Boric Acid Tank B into service, the unit rampdown was reversed. This event is contrary to Technical Specification 3.2.C.6 and is reportable in accordance with Technical Specification 6.6.2.b(2). (RO-S2-77-02).

CAUSE DESCRIPTION (CONTINUED)

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U.S. AEC  
REGULATORY OPERATIONS  
REGION II  
ATLANTA, GA.

MAR 29 34 AM '77