VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

January 9, 1978

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region II - Suite 818
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

Serial No. 623
PO&M/DLB:das
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Dear Mr. O'Reilly:

Pursuant to Surry Power Station Technical Specification 6.6.2.b.(2), the Virginia Electric and Power Company hereby submits the following Licensee Event Reports for Surry Unit No. 1.

LER-77-021/03L-0
LER-77-022/03L-0

The substance of these reports 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,

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

Enclosures (3 copies)

cc: Dr. Ernst Volgenau, Director 40 copies
Office of Inspection and Enforcement

Mr. William G. McDonald, Director 3 copies
Office of Management Information
and Program Control

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	V A S P S 1 (2)	0 0 - 0 0 0 0 0 - 0 0 (3)	4 1 1 1 1 (4)	(5)
8 9	LICENSEE CODE 14	15 LICENSE NUMBER 25	26 LICENSE TYPE 30	57 CAT 58

CON'T

0 1	REPORT SOURCE L (6)	0 5 0 0 0 2 8 0 (7)	1 2 1 6 7 7 (8)	0 1 0 3 7 8 (9)
8	60	61 DOCKET NUMBER 68	69 EVENT DATE 74	75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During normal operation, a routine test of "A" Steam Generator Level Protection

0 3 Channel II, disclosed that comparator (LC-1-475B) failed to trip. The health and

0 4 safety of the general public was not affected. This event is reported as per

0 5 T.S. 6.6.2.b (2).

0 6

0 7

0 8

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	I A (11)	E (12)	E (13)	I N S T R U (14)	X (15)	Z (16)
8	9 10	11	12	13 18	19	20

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 7	—	0 2 2	/	0 3	L	—	0
	21 22	23	24 26	27	28 29	30	31	32

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
B (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	Y (24)	N (25)	W 1 2 0 (26)
33	34	35	36	37 40	41	42	43	44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The failure was caused by two open capacitors in the comparator power supply

1 1 model 3111256E. The corrective action implemented was to replace the computer

1 2 grade capacitors with premium grade capacitors.

1 3

1 4

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	E (28)	1 0 0 (29)	N/A	(31)	Routine Test
8	9	10 12	13 44	45	46 80

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	N/A	N/A
8	9	10	11 44	45 80

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	N/A
8	9 11	12	13 80

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	N/A
8	9 11	12 80

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	N/A
8	9	10 80

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	N/A	
8	9	10 68	69 80

NAME OF PREPARER T. L. Baucom PHONE: (804) 357-3184

GPO 917-926

LER 77-022/03-L-0

Virginia Electric & Power Station
Surry Power Station, Unit 1
Docket No. 50-280
Event Date: 12-16-77

During normal operations, a routine test of "A" Steam Generator Level Protection Channel II, disclosed that comparator LC-1-474B would not trip. The health and safety of the public were not affected because two level channels remained operative as required by Technical Specification 3.7. This is reported as required by Technical Specification 6.6.2.b.(2).

The failure was caused by two capacitors which failed to open in the Westinghouse Hagan Comparator Power Supply Model 3111256E. Since these capacitors have an expected life of 10 to 20 years, and these failed capacitors have been in use approximately six years, the most probable cause of failure was due to aging. As indicated in a Westinghouse Technical Bulletin (NSD-TB-75-14) dated October 21, 1975, these capacitors have no specific problem of a generic nature. However, Westinghouse does recommend that these capacitors be replaced with a premium grade or tantalum capacitor, presently available, on an as-failed basis, instead of a general capacitor replacement program. This criteria is presently observed at Surry.

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

(2) LICENSEE CODE: VASPS1 | (3) LICENSE NUMBER: 00-00000-00 | (4) LICENSE TYPE: 4111 | (5) CAT: | CON'T

REPORT SOURCE: L (6) | DOCKET NUMBER: 050002 80 (7) | EVENT DATE: 12 09 77 (8) | REPORT DATE: 01 05 77 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

With the unit operation at rated power, routine sampling of BAST "A" revealed that the tank was at a concentration of 11.5%. A sluicing operation was initiated to raise tank concentration. While sluice was in progress, a back-up sample of 11.4% was reported. The sluice operation was continued to completion and the resulting mix was 11.7%. This event is reported per T.S. 6.6.2.b (2). The health and safety of the public were not affected.

SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
PC	X	Z	ZZZZZZ	Z	Z

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	77	—	1	/	03	L	—	0

ACTION TAKEN (18)	FUTURE ACTION (19)	EFFECT ON PLANT (20)	SHUTDOWN METHOD (21)	HOURS (22)	ATTACHMENT SUBMITTED (23)	NPRD-4 FORM SUB. (24)	PRIME COMP. SUPPLIER (25)	COMPONENT MANUFACTURER (26)
X	X	Z	Z	0000	Y	N	Z	Z999

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

The lowered concentration is believed to have resulted from uncertainties in the procedure used to determine boric acid concentration.

FACILITY STATUS: E (28) | % POWER: 100 (29) | OTHER STATUS (30): N/A | METHOD OF DISCOVERY: R (31) | DISCOVERY DESCRIPTION (32): N/A

ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): N/A | LOCATION OF RELEASE (36): N/A

PERSONNEL EXPOSURES — NUMBER: 000 (37) | TYPE: Z (38) | DESCRIPTION (39): N/A

PERSONNEL INJURIES — NUMBER: 000 (40) | DESCRIPTION (41): N/A

LOSS OF OR DAMAGE TO FACILITY — TYPE: Z (42) | DESCRIPTION: N/A

PUBLICITY — ISSUED: Z (44) | DESCRIPTION (45): N/A | NRC USE ONLY

NAME OF PREPARER: T. L. Baucom PHONE: (804) 357-3184

LER 77 - 0 2 1 / 03-L-0

Virginia Electric & Power Company
Surry Power Station
Docket No. 50-280
Event Date: 12-9-77

With the unit in operation at rated power, routine sampling of "A" Boric Acid Storage Tank (BAST A) revealed that the tank was at a concentration of 11.5%. This is within the band permitted by Technical Specification 3.2.B. To enrich the boron concentration, it was decided to sluice part of BAST A contents to the batch tank for addition of dry boric acid. The resultant mix would then be added to the recirculation path at the boric acid pump suction. While the sluice was in progress a back-up sample was reported as 11.4% concentration. Upon completion of the sluicing operation BAST A was sampled and found to be 11.7%. A subsequent sample was analyzed at 11.8%. The event is reported as required by Technical Specification 6.6.2.b (2).

The lowered concentration in "A" BAST was believed to be attributable to uncertainties in the analytical measurement procedure in that $\pm$ 1% is the expected accuracy. Subsequent samples documented a steady concentration with no apparent dilution source.

The health and safety of the general public were not affected by this event.