VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

August 8, 1975

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

Serial No. 632
PO&M/JTB:clw

Docket No. 50-281
License No. DPR-37

Dear Mr. Moseley:

Pursuant to Surry Power Station Technical Specification 6.6.B.1, the Virginia Electric and Power Company hereby submits forty (40) copies of Abnormal Occurrence Report No. AO-S2-75-14.

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,

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

Enclosures
40 copies of AO-S2-75-14

cc: Mr. K. R. Goller

8513

LICENSEE EVENT REPORT

AO-S2-75-14

CONTROL BLOCK: [ ] (1–6)

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME	LICENSE NUMBER	LICENSE TYPE	EVENT TYPE
01 VASPS2 (7–8, 9–14)	00–00000–00 (15–25)	4110 (26–30)	01 (31–32)

CON'T	CATEGORY	REPORT TYPE	REPORT SOURCE	DOCKET NUMBER	EVENT DATE	REPORT DATE
01 (7–8)	P0 (57–58)	T (59)	L (60)	050–0281 (61–68)	072975 (69–74)	080575 (75–80)

EVENT DESCRIPTION

02 During normal operation of Unit No. 2 at 100 per cent power, regularly scheduled
03 sampling of the No. 2 boron injection tank revealed the boron concentration to be
04 11.4 per cent by weight in violation of Technical Specification 3.3.A.3. A reduction
05 in power of 150 MWe per hour was initiated at 1515 hours and the recirculation rate
06 of the No. 2 boron injection tank with the "C" boric acid storage tank was (con't)

	SYSTEM CODE	CAUSE CODE	COMPONENT CODE	PRIME COMPONENT SUPPLIER	COMPONENT MANUFACTURER	VIOLATION
07	SF (10)	E (11)	VALVES (12–17)	A (43)	V085 (44–47)	Y (48)

CAUSE DESCRIPTION

08 The dilution of the No. 2 boron injection tank was apparently caused by leakage through
09 one or both of the inlet valves MOV 2867A and B. These valves are normally closed
10 and isolate the boron injection tank from charging pump discharge. In-leakage (con't)

	FACILITY STATUS	% POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION
11	E (9)	100 (10–12)	N/A (13–44)	B (45)	N/A (46–80)

	FORM OF ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY	LOCATION OF RELEASE
12	Z (9)	Z (10)	N/A (11–44)	N/A (45–80)

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION
13	000 (9–11)	Z (12)	N/A (13–80)

PERSONNEL INJURIES

	NUMBER	DESCRIPTION
14	000 (9–11)	N/A (12–80)

OFFSITE CONSEQUENCES

15 N/A

LOSS OR DAMAGE TO FACILITY

	TYPE	DESCRIPTION
16	Z (9)	N/A (10–80)

PUBLICITY

17 N/A

ADDITIONAL FACTORS

18 N/A

19

NAME: E. M. Sweeney, Jr. PHONE: (804) 357-3184

GPO 861-667

EVENT DESCRIPTION (con't)

increased. At 1550 hours the No. 2 boron injection tank showed a concentration of 11.5 per cent and the ramp-down in power was terminated. At 0045 hours on July 30, 1975 a new batch of boric acid solution was added to "C" boric acid storage tank increasing the boric acid concentration in No. 2 boron injection tank to 12.3 per cent.

The effect of this boric acid dilution would not have affected shutdown capability at this point in core life. A safety injection would have placed the station in the cold shutdown condition even with the reduced boron concentration in the injection tank.

This is a similar occurrence of an event reported on June 19, 1974.

The leaking valves (MOV 2867A and B) will be reworked as soon as practicable. An increased surveillance program has been instituted which will prevent undetected dilution below the Technical Specification limit.

CAUSE DESCRIPTION (con't)

is primary coolant with a lower concentration of boric acid. The valves will be inspected for seat-tightness and proper motor operator performance during the next refueling outage.