NRC FORM 366 (7-77)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1 LICENSEE CODE	V A S P S 2 (2)
LICENSE NUMBER	0 0 - 0 0 0 0 0 - 0 0 (3)
LICENSE TYPE	4 1 1 1 1 (4)
CAT	(5)

CON'T 0 1 REPORT SOURCE	L (6)
DOCKET NUMBER	0 5 0 0 0 2 8 1 (7)
EVENT DATE	0 6 2 5 8 2 (8)
REPORT DATE	0 7 2 0 8 2 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 With the unit at full power, performance of P.T. 6.0 disclosed that control rods
0 3 from Power Cabinet 2AC would not respond to demand signal. Since the problem was
0 4 in the power cabinet, the provisions of T.S.3.12.C.3 were applicable. This event
0 5 is reportable per T.S. 6.6.2.b(2). Since reactor control was maintained at all
0 6 times and the control rods were returned to service within the time span allowed
0 7 by T.S.3.0.1, the health and safety of the public were not affected.
0 8

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
R B (11)	E (12)	G (13)	I N S T R U (14)	X (15)	Z (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 2	—	0 3 4	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
A (18)	Z (19)	Z (20)	Z (21)	0 0 0 0 0	Y (23)	N (24)	N (25)	W 1 2 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The rod failure was caused by a blown fuse and a failed phase control card in
1 1 the power cabinet. The failed components were replaced and all rods were
1 2 tested to verify proper operation.
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	B (31)	Periodic Test 6.0

ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6 Z (33)	Z (34)	N/A	N/A

PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION (39)
1 7 0 0 0 (37)	Z (38)	N/A

PERSONNEL INJURIES

NUMBER	DESCRIPTION (41)
1 8 0 0 0 (40)	N/A

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
1 9 Z (42)	N/A

PUBLICITY

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

Dupe

NAME OF PREPARER J. L. Wilson PHONE: (804) 357-3184

ATTACHMENT 1
SURRY POWER STATION, UNIT NO. 2
DOCKET NO: 50-281
REPORT NO: 82-034/03L-0
EVENT DATE: 06-25-82

TITLE OF THE EVENT: Rod Control Urgent Failure

1. DESCRIPTION OF THE EVENT:

With the Unit at full power, it was discovered through performance of PT-6.0 (Control Rod Assembly Partial Movement), that the rods powered by power cabinet 2AC (Group 2 of shutdown bank A, Control Banks A and C) would not respond to demand signal. It was determined that the problem was in the power cabinet, which is external to the control rod drive mechanisms. Therefore, the provisions of Technical Specification 3.12.C.3 were applicable. This event is reportable in accordance with Technical Specification 6.6.2.b(2).

2. PROBABLE CONSEQUENCES and STATUS of REDUNDANT EQUIPMENT:

The control rods must be capable of being inserted to fullfill part of the shutdown margin requirement necessary to shut down the reactor. At all times during this event, all control rods were capable of being tripped. The controlling bank, D Control Bank, remained operable throughout this event. Boron is used in addition to control rods for reactivity control of the reactor. There were numerous ways in which boron could have been injected into the core if needed, including the charging pumps, Boron Injection Tank, RWST, and the accumulators. The Control Rods were returned to service in 2 hours, 50 min., which is within the limits prescribed by Technical Specification 3.0.1.

3. CAUSE:

Failure of the control rods to respond to the demand signals was caused by a blown fuse and a failed phase control circuit card in the 2AC power cabinet.

4. IMMEDIATE CORRECTIVE ACTION:

The immediate corrective action was to initiate A.P 1-1.1 (Rod Control System Malfunction) and to begin repairs to the power cabinet.

5. SUBSEQUENT CORRECTIVE ACTION:

The failed fuse and card were identified and replaced. The Control Rods were then returned to service in accordance with PT 6.0.

6. ACTION TAKEN TO PREVENT RECURRENCE:

The failure of the fuse and card are considered random failures. Therefore, no further action is required.

7. GENERIC IMPLICATIONS:

None.