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 | V A S P S 2 (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

CON'T 0 1 | REPORT SOURCE L (6) | DOCKET NUMBER 0 5 0 0 0 2 8 1 (7) | EVENT DATE 0 6 2 3 8 1 (8) | REPORT DATE 0 7 2 3 8 1 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 With Unit 2 at 100% power, Periodic Test 18.1 disclosed chloride concentration
0 3 greater than .15 ppm. Subsequent investigation showed the RWST chloride concentrat-
0 4 ions to exceed .15 ppm. Since the RWST is the water source for containment spray
0 5 and LHSI flushing, the basis for TS-4.1F could not be met, and is reportable per
0 6 T.S-6.6.2.b(2). Communications with Westinghouse indicated with the given RWST
0 7 conditions, intergranular attack was not likely to occur; therefore, the health and
0 8 safety of the public were not affected.

0 9 | SYSTEM CODE S F (11) | CAUSE CODE E (12) | CAUSE SUBCODE B (13) | COMPONENT CODE V A L V E X (14) | COMP. SUBCODE E (15) | VALVE SUBCODE D (16)

(17) LER/RO REPORT NUMBER | EVENT YEAR 8 1 | — | SEQUENTIAL REPORT NO. 0 3 9 | / | OCCURRENCE CODE 0 3 | REPORT TYPE L | — | REVISION NO. 0

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The source of chloride contamination was leakage through MOV-CS-202A and B from the
1 1 chemical addition tank. Leakage was reduced by isolating MOV-CS-202B. A procedure
1 2 was developed to return the RWST chemistry to allowable limits. Sensitized piping
1 3 flushes are being performed. The MOV's will be repaired at the next outage of suffi-
1 4 cient duration.

1 5 | FACILITY STATUS E (28) | % POWER 1 0 0 (29) | OTHER STATUS (30) N/A | METHOD OF DISCOVERY B (31) | DISCOVERY DESCRIPTION (32) Periodic Test

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

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

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

LOSS OF OR DAMAGE TO FACILITY (43)
1 9 | TYPE Z (42) | DESCRIPTION N/A

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PDR ADOCK 05000281
S PDR

PUBLICITY
2 0 | ISSUED N (44) | DESCRIPTION (45) N/A | NRC USE ONLY

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

ATTACHMENT 1
SURRY POWER STATION, UNIT 2
DOCKET NO: 50-281
REPORT NO: 81-039/03L-0
EVENT DATE: 06-23-81

HIGH RWST CHLORIDE CONCENTRATION

1. DESCRIPTION OF THE EVENT:

With Unit 2 operating at 100% steady state power, Period Test 18.1 disclosed chloride concentrations greater than 0.15 ppm. Subsequent investigation of these results showed the RWST to contain chloride concentrations in excess of .15 ppm. Since the RWST is the water source for the containment spray system and the low head safety injection system flushes, the basis for Technical Specification 4.1.F (flushing of sensitized piping) could not be met. This is reportable per T.S.-6.6.2.b(2).

2. PROBABLE CONSEQUENCES:

Chloride concentrations of less than 0.15 ppm are maintained to preclude the possibility of intergranular attack on stainless steel piping. Communications with Westinghouse indicated that, given the conditions in the RWST, intragranular attack was not likely to occur. Flushing to prevent stagnation was continued on a regular basis. Therefore, the integrity of the affected systems was not compromised, and the health and safety of the public were not affected.

3. CAUSE:

The source of chloride contamination of the RWST has been determined to be leakage through MOV-CS-202A and B from the Chemical Addition Tank.

4. IMMEDIATE CORRECTIVE ACTIONS:

After determining the source of the contamination, leakage was reduced by isolating MOV-CS-202B.

5. SUBSEQUENT CORRECTIVE ACTIONS:

Consultations with corporate chemistry, Westinghouse, and ion exchange resin manufacturers culminated in a procedure which has been used to return the RWST chemistry to within allowable limits. Sensitized piping flushes presently are being completed with satisfactory results as RWST temperature constraints permit.

6. ACTION TAKEN TO PREVENT RECURRENCE:

Maintenance Reports to repair the leaking MOV's have been written. The valves are scheduled to be repaired during the snubber inspection outage scheduled for September, or at a prior outage of sufficient duration.

7. GENERIC IMPLICATIONS:

None.