

LICENSEE EVENT REPORT

CONTROL BLOCK: (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 0 3 4 1 1 1 1 4 5
8 9 14 15 25 26 57 CAT 58

CON'T
0 1 REPORT SOURCE L 6 0 5 0 0 0 2 8 1 7 1 0 0 4 8 3 8 1 1 0 3 8 3 9
60 61 68 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 With Unit #2 at 100% power, MOV-RS-255A became inoperable when the valve operator
0 3 support broke loose from its floor mounting during an attempt to cycle the valve.
0 4 The valve could not be closed from the control room. This is contrary to
0 5 T.S.-3.8.2 and is reportable per T.S.-6.6.2.b.(2). The valve is required to be
0 6 closed in the vent of a OSRS system pipe break with a lock. Since this is
0 7 extremely unlikely, the health and safety of the public were not affected.

0 8
7 8 9
SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
0 9 S B 11 B 12 A 13 V A L V O P 14 A 15 Z 16
7 8 9 10 11 12 13 14 15 16 17 18 19 20
17 LER/RO REPORT NUMBER 8 3 21 22
EVENT YEAR
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER
0 18 X 19 Z 20 Z 21 0 0 0 0 22 Y 23 Y 24 A 25 Z Z Z Z 26
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The 1/4" bolts used to attach the stand to the floor were not of sufficient strength
1 1 to withstand the shear forces encountered when operating the valve. The Design
1 2 Change which installed the stands did not specify the required anchor for the
1 3 operator. Proper size anchors have been installed. Improved review procedures and
1 4 design change work, since 1976, will preclude events of this nature in the future.

1 5 FACILITY STATUS E 28 1 0 0 29 OTHER STATUS N/A 30 METHOD OF DISCOVERY B 31 Routine Testing 32
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 6 ACTIVITY RELEASED Z 33 Z 34 AMOUNT OF ACTIVITY N/A 35 LOCATION OF RELEASE 36
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 7 PERSONNEL EXPOSURES NUMBER 0 0 0 37 TYPE Z 38 DESCRIPTION N/A 39
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 8 PERSONNEL INJURIES NUMBER 0 0 0 40 DESCRIPTION N/A 41
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 9 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION N/A 43
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
2 0 PUBLICITY ISSUED N 44 DESCRIPTION N/A 45
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

NAME OF PREPARED J. L. Wilson

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ATTACHMENT 1

SURRY POWER STATION, UNIT NO. 2

DOCKET NO: 50-281

REPORT NO: 83-046/03L-0

EVENT DATE: 10-04-83

TITLE OF THE EVENT: MOV-RS-255A OPERATOR MOUNTING BOLTS SHEARED

1. Description of the Event

With Unit 2 at 100% power during the performance of PT 17.3 (Outside Recirc. Spray Pump Test), it was noted that the limits for MOV-RS-255A ('A' OSRS suction valve) were not properly adjusted. While the valve was being cycled, in order to set the proper limits, the valve operator support stand bolts sheared and the valve operator support broke loose from its floor mounting. This rendered the valve inoperable and is contrary to Technical Specification 3.8, Table 3.8.2 and is reportable per T.S.6.6.2.b.(2).

2. Probable Consequences and Status of Redundant Equipment

The OSRS suction and discharge valves remain open during power operations in order to insure the reliability of the OSRS system. However, they must be capable of remote manual closure in the event of a break in the OSRS system during a LOCA. Since the length of piping in the OSRS system is short and extremely well protected in the valve pit, it is highly unlikely that an OSRS system pipe break would occur simultaneously with a LOCA. Therefore, the health and safety of the public were not affected.

3. Cause

The valve motor operator support stand is constructed of a 10" pipe flanged at the bottom with six 9/16 inch concentric bolt holes in the flange in order to bolt the stand to the floor.

The valve operator support broke loose because the 1/4" bolts used in the base were not of sufficient strength to support the shear forces encountered when operating the valve. The 1/4" bolts were installed when the initial installation of DC75-44 (Replacement of OSRS Valves) was installed in 1976. The Design Change package did not provide sufficient detail in specifying the required anchors for the valve operator.

4. Immediate Corrective Action

The valve was manually closed and the redundant ORS system was verified operable.

5. Subsequent Corrective Action

Six 1/2" dia. by 7" long 'Hilti' concrete anchors were used to attach the stand to the concrete floor. The valve was verified operable and the 'A' ORS system was returned to service. Also, an engineering evaluation verified that these bolts would be more than adequate to resist all applied forces.

6. Action Taken to Prevent Recurrence

Since the installation of the support stands in 1976, many changes have taken place in the design change program and maintenance procedures. These efforts along with increased review procedures and improved support requirements for design work will preclude events of this nature in the future.

7. Generic Implications

An inspection of MOV-RS-255B revealed that three 1/2" bolts were supporting the stand. These bolts have been removed and replaced with six 1/2" diameter by 7" long 'Hilti' bolts. The unit 1 valves, MOV-RS-155A and 155B were inspected and each valve uses five 1/2" bolts to secure the stand to the floor. These have been determined to be adequate, however, they will be replaced with six 1/2" 'Hilti' bolts each during the next outage of sufficient duration.