

# LICENSEE EVENT REPORT

CONTROL BLOCK

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

LICENSEE CODE 14 15 0 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5  
 LICENSE NUMBER 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

REPORT SOURCE 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
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## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

With Unit 1 at CSD and Unit 2 at 100% power, Boric Acid Transfer Pump 1-CH-P-2 was declared inoperable due to Low Discharge Pressure detected during performance of Periodic Test 18.9. Since Boric Acid Transfer Pumps A and B had been removed from service for maintenance, only one pump remained operable. This is contrary to T.S.3.2.B.2 and reportable as per T.S.6.C.2.b.(2). Since pump 1-CH-P-2C was returned to service within the required time and the BIT was unaffected, the health and safety of the public were not affected.

SYSTEM CODE 9 10 P 11 C 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 CAUSE CODE 11 E 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 COMPONENT CODE 13 P 14 U 15 M 16 P 17 N 18 Y 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 SEQUENTIAL REPORT NO. 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 OCCURRENCE CODE 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
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 ACTION TAKEN 32 E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 FUTURE ACTION 34 Z 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 EFFECT ON PLANT 36 Z 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 SHUTDOWN METHOD 38 Z 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 HOURS 40 0 41 0 42 0 43 0 44 0 45 0 46 0 47 0 48 0 49 0 50 0 51 0 52 0 53 0 54 0 55 0 56 0 57 0 58 0 59 0 60 0 61 0 62 0 63 0 64 0 65 0 66 0 67 0 68 0 69 0 70 0 71 0 72 0 73 0 74 0 75 0 76 0 77 0 78 0 79 0 80 0 81 0 82 0 83 0 84 0 85 0 86 0 87 0 88 0 89 0 90 0 91 0 92 0 93 0 94 0 95 0 96 0 97 0 98 0 99 0 100  
 ATTACHMENT SUBMITTED 41 Y 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 NRC-4 FORM SUB 42 Y 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 PRIME COMP. SUPPLIER 43 A 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 COMPONENT MANUFACTURER 44 G 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

The drop in pump discharge pressure was caused by a change in the clearance between the impeller vanes and the casing wall as a result of normal wear. Pump 1-CH-P-2C was adjusted for discharge pressure and tested operable.

FACILITY STATUS 9 E 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 N POWER 10 1 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0 19 0 20 0 21 0 22 0 23 0 24 0 25 0 26 0 27 0 28 0 29 0 30 0 31 0 32 0 33 0 34 0 35 0 36 0 37 0 38 0 39 0 40 0 41 0 42 0 43 0 44 0 45 0 46 0 47 0 48 0 49 0 50 0 51 0 52 0 53 0 54 0 55 0 56 0 57 0 58 0 59 0 60 0 61 0 62 0 63 0 64 0 65 0 66 0 67 0 68 0 69 0 70 0 71 0 72 0 73 0 74 0 75 0 76 0 77 0 78 0 79 0 80 0 81 0 82 0 83 0 84 0 85 0 86 0 87 0 88 0 89 0 90 0 91 0 92 0 93 0 94 0 95 0 96 0 97 0 98 0 99 0 100  
 OTHER STATUS 30 N/A 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 METHOD OF DISCOVERY 45 A 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 DISCOVERY DESCRIPTION 46 Periodic Testing 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 ACTIVITY CONTENT 9 Z 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 RELEASED OF RELEASE 32 Z 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 AMOUNT OF ACTIVITY 35 N/A 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 LOCATION OF RELEASE 38 N/A 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 PERSONNEL EXPOSURES 37 0 38 0 39 0 40 0 41 0 42 0 43 0 44 0 45 0 46 0 47 0 48 0 49 0 50 0 51 0 52 0 53 0 54 0 55 0 56 0 57 0 58 0 59 0 60 0 61 0 62 0 63 0 64 0 65 0 66 0 67 0 68 0 69 0 70 0 71 0 72 0 73 0 74 0 75 0 76 0 77 0 78 0 79 0 80 0 81 0 82 0 83 0 84 0 85 0 86 0 87 0 88 0 89 0 90 0 91 0 92 0 93 0 94 0 95 0 96 0 97 0 98 0 99 0 100  
 TYPE 37 Z 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 DESCRIPTION 39 N/A 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 PERSONNEL INJURIES 40 0 41 0 42 0 43 0 44 0 45 0 46 0 47 0 48 0 49 0 50 0 51 0 52 0 53 0 54 0 55 0 56 0 57 0 58 0 59 0 60 0 61 0 62 0 63 0 64 0 65 0 66 0 67 0 68 0 69 0 70 0 71 0 72 0 73 0 74 0 75 0 76 0 77 0 78 0 79 0 80 0 81 0 82 0 83 0 84 0 85 0 86 0 87 0 88 0 89 0 90 0 91 0 92 0 93 0 94 0 95 0 96 0 97 0 98 0 99 0 100  
 TYPE 40 Z 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 DESCRIPTION 41 N/A 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 LOSS OF OR DAMAGE TO FACILITY 42 0 43 0 44 0 45 0 46 0 47 0 48 0 49 0 50 0 51 0 52 0 53 0 54 0 55 0 56 0 57 0 58 0 59 0 60 0 61 0 62 0 63 0 64 0 65 0 66 0 67 0 68 0 69 0 70 0 71 0 72 0 73 0 74 0 75 0 76 0 77 0 78 0 79 0 80 0 81 0 82 0 83 0 84 0 85 0 86 0 87 0 88 0 89 0 90 0 91 0 92 0 93 0 94 0 95 0 96 0 97 0 98 0 99 0 100  
 TYPE 42 Z 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 DESCRIPTION 43 N/A 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

PUBLICITY 45 0 46 0 47 0 48 0 49 0 50 0 51 0 52 0 53 0 54 0 55 0 56 0 57 0 58 0 59 0 60 0 61 0 62 0 63 0 64 0 65 0 66 0 67 0 68 0 69 0 70 0 71 0 72 0 73 0 74 0 75 0 76 0 77 0 78 0 79 0 80 0 81 0 82 0 83 0 84 0 85 0 86 0 87 0 88 0 89 0 90 0 91 0 92 0 93 0 94 0 95 0 96 0 97 0 98 0 99 0 100  
 DESCRIPTION 45 N/A 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 NRC USE ONLY 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100  
 8303240536 830314  
 PDR ADOCK 05000281  
 S PDR  
 (804) 357-3184

ATTACHMENT 1

SURRY POWER STATION, UNIT NO. 2

DOCKET NO: 50-281

REPORT NO: 83-008/03L-0

EVENT DATE: 02-17-83

TITLE OF THE EVENT: INOPERABLE BORIC ACID TRANSFER PUMP

1. Description of the Event

With Unit 1 at CSD and Unit 2 at 100% power, Boric Acid Transfer Pump 1-CH-P-2C was declared inoperable due to low discharge pressure detected during performance of Periodic Test 18.9. Since Boric Acid Transfer Pumps A and B had been removed from service for maintenance, only one pump remained operable. This is contrary to T.S.3.2.B.2 which requires two boric acid transfer pumps for one unit operation. This event is reportable per T.S. 6.6.2.b.(2).

2. Probable Consequences and Status of Redundant Equipment

The Boric Acid Transfer pumps supply normal makeup to the RCS, and maintain recirculation flow between the BIT and Boric Acid Storage Tanks to assure that the BIT remains full of concentrated boric acid. Two of the 4 transfer pumps are required for single unit operation. "C" transfer pump was returned to service within the required time limit and recirculation flow was maintained for the BIT. Therefore, the health and safety of the public were not affected.

3. Cause

The drop in pump discharge pressure was caused by a change in the clearance between the impeller vanes and the casing wall, as a result of normal wear.

4. Immediate Corrective Action

The pump discharge pressure was raised by adjusting the impeller clearance and the pump was verified operational via PT-18.9.

5. Subsequent Corrective Action

None.

6. Action Taken to Prevent Recurrence

None.

7. Generic Implications

None.