

LICENSEE EVENT REPORT

CORRECTED COPY-SEQUENTIAL #033 6-26-81 CHANGED

CONTROL BLOCK

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

TO #036

011 V A S P S 2 0 0 - 0 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 37 CAT 58

012 REPORT SOURCE L 6 0 5 0 0 0 2 8 1 7 0 5 1 2 8 8 1 8 0 7 1 0 3 8 1 9
50 51 DOCKET NUMBER 56 59 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

013 A routine sample of the EDG fuel oil storage tanks revealed water in tank 1-EE-TK-2A.
014 The fuel oil transfer pumps were placed under administrative control and the water was
015 drained. This event is contrary to T.S. 3.16.A.5 and is reportable in accordance with
016 T.S. 6.6.2.b.(2). The redundant fuel oil pumps remained operable; therefore, the health
017 and safety of the public were not affected.

018
019 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP SUBCODE VALVE SUBCODE
E E 11 D 12 Z 13 Z Z Z Z Z Z 14 Z 15 Z 16
17 LER/RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.
8 1 0 3 6 0 3 L 0
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRO-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER
X 18 G 19 Z 20 Z 21 0 0 0 0 Y 22 N 24 Z 25 Z 9 9 9 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

110 The cause of this event has been determined to be inadequate procedures for removing
111 water from the above ground storage tank and preventing its entry into the underground
112 tanks. The water was drained via the transfer pump suction strainer drains.
113 Subsequently, all tanks were sampled and the water content was within allowable limits.

114
115 FACILITY STATUS % POWER OTHER STATUS (30) METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)
E 28 1 0 0 29 NA A 31 Operator observation
116 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)
Z 33 Z 34 NA
117 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)
0 0 0 37 Z 38 NA
118 PERSONNEL INJURIES NUMBER DESCRIPTION (41)
0 0 0 40 NA
119 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION (43)
Z 42 NA

120 PUBLICATION DESCRIPTION (45) 8107310458 810703
ISSUED N 44 PDR ADOCK 05000280
S PDR

NAME OF PREPARED J. L. Wilson

PHONE (804) 357-3184

NRC USE ONLY

ATTACHMENT 1 (PAGE 1 OF 2)
SURRY POWER STATION, UNIT 2
DOCKET NO: 50-281
REPORT NO: 81-03 6/03L-0
EVENT DATE: 05-28-81

TITLE OF THE EVENT: WATER IN TANK 1-EE-TK-2A

1. DESCRIPTION OF THE EVENT:

On May 10, 1981, fire water was used to leak test the reactor lower internals shield tank prior to installation. An open valve from the fire main to the fire protection foam system allowed water to enter the above ground fuel oil storage tank, 1-HS-TK-1. The tank was isolated and an estimated 4000 gallons of water drained. Samples were taken from the instrument connection, for 1-HS-TK-1, and found to be free of water. The outlet to the underground tanks were verified closed and as a precaution, the valves were tagged closed.

The samples that were taken from the instrument connection on 1-HS-TK-1 were not representative. Although the instrument connection on this tank appears to be the lowest connection, both outlets are, in fact, lower. The outlet to the underground tank being 2 inches lower and the outlet to the hose connection 4" lower. During the week (May 10-15), the above ground tank was sampled for water, from the instrument connection, each day before verifying that the underground tanks were full. During this time, water apparently entered the 'A' underground tank.

A week later, while filling a vehicle from the hose connection, water was again discovered. The tank was then drained from the hose connection until all the water was removed.

At 0530 hrs. on May 28, 1981, a routine sample of the underground fuel oil tanks revealed water in tank 1-EE-TK-2A. The fuel oil transfer pumps, associated with tank 2A, were placed under administrative control and samples taken from the suction strainers showed that water had not reached the pumps. However, additional draining from this point and the underground tank's manometer connection did produce water at both of these locations.

The wall tanks, located in each EDG room, were sampled and no water was found. The wall tanks were partially drained and then refilled, from the underground tank 2A, several times. A small quantity of water was subsequently drained from the wall tanks.

At 1525 hrs., samples of the wall tanks, the underground tank make up line, and the transfer pump suctions were all free of water. The transfer pumps were returned to automatic and the 2A underground tank refilled.

After the underground tank was filled, additional water was drained from the manometer connection. To verify that the water level was below the transfer pump suction, 45 gallons of fuel oil was drained from 'A' pump and 10 gallons from 'B' & 'C' pumps. Samples taken from each pump were free of water. However, for the next three shifts, water was drained from the manometer connection.

This event is contrary to Tech. Spec. 3.16.A.5 and is reportable per Tech. Spec. 6.6.2.b.(2).

ATTACHMENT 1 (PAGE 2 OF 2)
SURRY POWER STATION, UNIT 2
DOCKET NO: 50-281
REPORT NO: 81-036/03L-0
EVENT DATE: 05-28-81

2. PROBABLE CONSEQUENCES AND STATUS OF REDUNDANT EQUIPMENT

The emergency diesel generators provide power to vital equipment in the event of a loss of normal power. The outlets of the fuel oil tanks are designed to allow for some accumulation of water. Between 5-10-81 and 5-28-81, the EDG's were operated intermittently for about 8 hrs. total without any problems. The redundant flow path from 2B underground tank was operable and free of water. Therefore, the health and safety of the public were not affected.

3. CAUSE:

The cause of this event has been determined to be inadequate procedures. Specifically, the lack of guidance for the sampling of fuel oil tanks.

4. IMMEDIATE CORRECTIVE ACTION:

The fuel oil transfer pumps in the affected train were placed under administrative control and the other train was verified free of water.

5. SUBSEQUENT CORRECTIVE ACTION:

The water was drained from the transfer pump suctions, the wall tank drains and the manometer connection for '2A' underground tank.

6. ACTION TAKEN TO PREVENT RECURRENCE:

A sampling procedure will be developed and a sampling frequency established for the above ground tank.

7. GENERIC IMPLICATIONS:

None.