

# LICENSEE EVENT REPORT

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

V A S P S 1 0 0 - 0 0 0 0 0 0 - 0 0 4 1 1 1 1 4 5  
 LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

REPORT SOURCE L 0 5 0 0 0 2 8 0 7 0 9 2 9 8 2 8 1 0 2 9 8 2 9  
 DOCKET NUMBER EVENT DATE REPORT DATE

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

With the unit at full power, performance of PT-24.2A revealed that the High Pressure Cardox system for the Fuel Oil Pump houses was inoperable. This event is contrary to Tech. Spec. 3.21.D.2 (b) and is reportable per Tech. Spec. 6.6.2.b.(2). Since a fire watch and backup fire suppression equipment were immediately established and maintained until the system was returned to service, the health and safety of the public were not affected.

SYSTEM CODE AB CAUSE CODE E CAUSE SUBCODE B COMPONENT CODE V A L V E X COMP. SUBCODE X VALVE SUBCODE Z  
 LER/RO REPORT NUMBER 8 2 EVENT YEAR 8 2 SEQUENTIAL REPORT NO. 1 0 4 OCCURRENCE CODE 0 3 REPORT TYPE L REVISION NO. 0  
 ACTION TAKEN B FUTURE ACTION F EFFECT ON PLANT Z SHUTDOWN METHOD Z HOURS 0 0 0 0 ATTACHMENT SUBMITTED Y NPD-4 FORM SUB. N PRIME COMP. SUPPLIER L COMPONENT MANUFACTURER C 2 8 5

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

Scale and corrosion products caused a zone discharge solenoid valve to stick open. The valve was cleaned and replaced, and the system was returned to service. The Cardox Header and solenoid valve piping will be evaluated with respect to corrosion.

FACILITY STATUS E % POWER 1 0 0 OTHER STATUS N/A METHOD OF DISCOVERY B DISCOVERY DESCRIPTION Periodic Test  
 ACTIVITY CONTENT RELEASED OF RELEASE Z AMOUNT OF ACTIVITY N/A LOCATION OF RELEASE N/A  
 PERSONNEL EXPOSURES NUMBER 0 0 0 TYPE Z DESCRIPTION N/A  
 PERSONNEL INJURIES NUMBER 0 0 0 DESCRIPTION N/A  
 LOSS OF OR DAMAGE TO FACILITY TYPE Z DESCRIPTION N/A  
 PUBLICITY ISSUED N DESCRIPTION N/A

NRC USE ONLY

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ATTACHMENT 1  
SURRY POWER STATION, UNIT NO. 1  
DOCKET NO: 50-280  
REPORT NO: 82-104/03L-0  
EVENT DATE: 09-29-82

TITLE OF THE EVENT: INOPERABLE HIGH PRESSURE CARDOX SYSTEM

1. DESCRIPTION OF THE EVENT:

With the unit at full power, performance of Periodic Test 24.2A (High Pressure CO<sub>2</sub> system at the Fuel Oil Pump Houses) revealed that CO<sub>2</sub> gas was released to both hazardous areas during a dump test designed to test only one area. The Cardox system was declared inoperable and removed from service. This event is contrary to Technical Specification 3.21.D.2(b) and is reportable in accordance with Tech. Spec. 6.6.2.b.(2).

2. PROBABLE CONSEQUENCES and STATUS of REDUNDANT EQUIPMENT:

Operability of the High Pressure Cardox System ensures that adequate warning and fire suppression capability is available for the prompt detection and suppression of fires in order to reduce the potential for damage to safety related equipment.

With identified failure, some CO<sub>2</sub> would have been discharged to the area experiencing a fire. When the system was declared inoperable, a fire watch and back up fire suppression equipment were immediately established and maintained until the system was returned to service. Therefore, the health and safety of the public would not have been affected.

3. CAUSE:

The Cardox gas dumped into the wrong zone because of a failed zone solenoid valve. An accumulation of scale and corrosion products that form inside the Cardox header caused the solenoid valve to stick open.

4. IMMEDIATE CORRECTIVE ACTION:

When the system was declared inoperable, a fire watch and back up fire suppression equipment were immediately established as required by T.S.3.21.A.2.9.

5. SUBSEQUENT CORRECTIVE ACTION:

The failed solenoid valve was inspected, repaired and replaced. The Cardox system was tested as per PT 24.2A and returned to service within the time span specified in Tech. Spec. section 3.21.A.2.b.

6. ACTION TAKEN TO PREVENT RECURRENCE:

The operability of the high pressure Cardox System will be evaluated with respect to corrosion.

7. GENERIC IMPLICATIONS:

None.