

LICENSEE EVENT REPORT

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

80

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

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AC80C

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ATTACHMENT 1
SURRY POWER STATION, UNIT 2
DOCKET NO: 50-281
REPORT NO: 81-051/03L-0
EVENT DATE: 08-04-81

TITLE OF THE EVENT: SERVICE WATER PUMP, SW-P-10A, & B, LOSS OF SUCTION

1. DESCRIPTION OF EVENT:

With the unit at 100% power the service water pump, 2-SW-P-10A, started in automatic. The discharge pressure was normal, however, the pump continued to run when placed in auto. Shortly thereafter both pumps lost suction and were secured. One control room chiller, 1-VS-E-4A, was secured to increase the available service water and the "A" pump restarted.

This event is contrary to T.S.-3.3.A.8.b and is reportable in accordance with T.S.-6.6.2.b.(2).

2. PROBABLE CONSEQUENCES AND STATUS OF REDUNDANT EQUIPMENT:

The charging pump service water pumps supply cooling water to the charging pump intermediate seal oil coolers and the charging pump lubricating oil coolers. During the short period when these pumps were inoperable (8 minutes) the charging pump temperature did not increase appreciably. Since the pumps were restored to service within the time limit of T.S.-3.0.1, the health and safety of the public were not affected.

3. CAUSE:

The service water piping for the charging pump service water pumps also supplies the Control Room/Relay Room air conditioner chiller units 1-VS-E-4A, B, and C. During the summer months the increased use of service water by the chillers can cause a loss of suction pressure to the charging pump service water pumps. Recent modifications (DC 80-42) attempted to resolve the NPSH problems for the service water system. Installation and Testing, completed in early spring, indicated satisfactory performance; however, an intermittent problem is now indicated.

4. IMMEDIATE CORRECTIVE ACTION:

The service water to the chillers was throttled to increase the flow to the charging pump service water pumps.

5. SUBSEQUENT CORRECTIVE ACTION:

None taken.

6. ACTION TAKEN TO PREVENT RECURRENCE:

Further evaluation will be conducted to determine if additional modifications are required to resolve the marginal NPSH Conditions.

7. GENERIC IMPLICATIONS:

This is generic to both units. A related occurrence is reported on LER 80-037 for unit 1.