

COPY

REV. 1

COI

EMERGENCY PROCEDURE EP-1

COI

LOSS OF RC PUMP 1A

APPROVALS:

PORC (VICE-CHAIRMAN)

John A. Br...

DATE 4/3/79

UNIT SUPT.

J. H. Colledge

DATE 4/3/79

W. M. ...

DATE 4/3/79

NRC

W. M. ...

DATE 4/2/79

ALARA *Peter Waly*

DATE 4/2/79

NRC

153 089

EMERGENCY PROCEDURE EP-1

Loss of RC Pump 1A

1.0 SYMPTOMS

- 1.1 Loop A operating RC Pump Amps decreasing or erratic
- 1.2 Loop A RC Flow decreasing or erratic
- 1.3 RC Pressure change
- 1.4 RC Outlet Temperature Increasing (Long term)

2.0 IMMEDIATE ACTIONS

2.1 Automatic Actions
NONE

2.2 Manual Actions

- 2.2.1 Start RCP2A Ac 0.1 lift pump and AC Backstop 0.1 pump ✓
- 2.2.2 Verify ICCW system is Operating
- 2.2.3 Verify NSCCW system is Operating
- 2.2.4 Verify Seal Injection Flow
- 2.2.5 Verify RC Pump Seal Staging by observing seal cavity pressure
- 2.2.6 Verify RC Pump Seal Return Flow (1.9l gpm)
- 2.2.7 120 seconds after starting oil pumps (Lift and Backstop)
Start RC Pump 2A
- 2.2.8 AFTER PUMP STARTS: Verify the following:
 - a.) Oil Lift and Backstop Oil Pumps stop when pump reaches full speed (Observe pump indicating lights)
 - b.) Correct pump CURRENT (=600 Amps)
 - c.) Stable and Positive RC Flow Indication
 - d.) Running pump parameters are normal (Vibration, AP, Seal staging, etc.)

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2.0 IMMEDIATE ACTIONS

2.1 Automatic Actions

NONE

2.2 Manual Actions

- 2.2.1 Verify ICCW system is operating
- 2.2.2 Verify NSCCW system is operating
- 2.2.3 Verify Seal Ejection Flow
- 2.2.4 Verify R.C. Pump Seal Staging by observing seal cavity pressure
- 2.2.5 Verify RC Pump Seal Return Flow (<1.91 gpm)

Note: The high pressure lift system is not required for a system pressure in the range of 800-1200 psi. Pump start may be attempted with system pressure ~~with pressure~~ outside of this pressure range. ~~However,~~ Backstop oil pump should be operated, if possible. ^{However,} The pumps may be started without the back stop oil pumps.

2.2.6 Start RC pump 2A

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2.2.7 After Pump Starts: Verify the following.