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 (1.91 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.)
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 NSICCW system is operating
2.2.3 Verify Seal Injection 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 well outside of this pressure range. However,
Backstop oil pump should be, however,
operated, if possible. The pumps
may be started without the backstop
oil pumps.

2.2.6 Start RC pump 2A

2.2.7 After Pump starts: Verify the following.