1.0 <u>FEED SYSTEM STATUS DETERMINATION</u>

1.1 **START** RFT-P-MOPA(B)

1.2 **VERIFY** RFT Control and Trip oil at 100-130 psig

1.3 **VERIFY** RFT Lubricating oil at 15-20 psig

1.4 **START** RFT-P-AOPA(B)

1.5 **STOP** RFT-P-MOPA(B) <u>and</u> **REPEAT** steps 1.2, 1.3

1.6 **VERIFY** no unexplained annunciators in for each RFT

1.7 <u>IF</u> RPV Pressure is less than 300 psig <u>OR</u> any previous step failed,
     <u>THEN</u> **ENTER** 4.0 of this procedure

1.8 <u>IF</u> RPV Pressure is GE 300 psig,
     <u>THEN</u> **ENTER** 2.0 of this procedure

2.0   RFT A STARTUP

2.1   **START** RFT-P-MOPA

2.2   **STOP** RFT-P-AOPA

2.3   **VERIFY** Control and Trip oil at 100-130 psig

2.4   **VERIFY** Lubricating oil at 15-20 psig

2.5   **RESET** RFW-DT-1A Turbine Trip

2.6   **OPEN** MS-V-105A "HP STEAM SUPPLY"

2.7   WHEN RPV Pressure is GT 400 psig,
   1. **OPEN** RFW-V-102A "PUMP A DISCHARGE"
   2. **CLOSE** COND-V-149 "COND PUMP STARTUP BYPASS"

2.8   WHEN RPV Pressure is GT 500 psig,
       THEN **ENTER** 3.0 of this procedure.

3.0   <u>RFT B STARTUP</u>

2.1   **START** RFT-P-MOPB

2.2   **STOP** RFT-P-AOPB

2.3   **VERIFY** Control and Trip oil at 100-130 psig

2.4   **VERIFY** Lubricating oil at 15-20 psig

2.5   **RESET** RFW-DT-1B Turbine Trip

2.6   **OPEN** MS-V-105B "HP STEAM SUPPLY"

2.7   **OPEN** RFW-V-102B "PUMP A DISCHARGE"

2.8   <u>IF</u> all RFTs are started,
        <u>THEN</u> **ENTER** 5.0 of this procedure.

4.0 INJECTION WITH CONDENSATE PUMPS

CAUTION

At very low flows, the startup level controller may oscillate due to the feedback signals being very weak. The startup level controller may **NOT** properly maintain level in the AUTO mode until approximately 5% demand signal.

4.1 **START** the Condensate Booster Pumps, (P820)
- COND-P-2A
- COND-P-2B
- COND-P-2C

4.2 **INJECT** feedwater from the condensate booster pumps. (P840)
1. **OPEN** COND-V-149 "COND PUMP START UP BYPASS"
2. **OPEN** RFW-V-117A/B "FEEDWATER CLEANUP/ STARTUP VALVE"
3. **OPEN** RFW-V-118 "FEEDWATER STARTUP ISOLATION"
4. **OPEN** RFW-V-65A/B "REACTOR FEEDWATER LOOP VALVE A(B)"
5. **PLACE** the startup level controller in AUTO

4.3 WAIT for reactor pressure to become GE 300 psig,
THEN **ENTER** section 2.0 of this procedure.

5.0   <u>TRANSFER FEED SYSTEM TO MASTER CONTROLLER</u>

> **CAUTION**   Due to reduced reactor pressure and RFP NPSH limits uncontrolled RPV injection could occur if feedwater block valves RFW-V-65A(B) are not closed after a scram.

5.1   **PLACE** the startup level controller in MANUAL

5.2   **PLACE** the master level controller in AUTO

5.3   **OPEN** the startup control valve (startup level controller) <u>FULLY</u>

5.4   **OPEN** RFW-V-112A "RFW-HX-6A DISCHARGE TO REACTOR"

5.5   **MONITOR** RPV level to ensure RPV level is maintained.

5.6   **OPEN** RFW-V-112B "RFW-HX-6B DISCHARGE TO REACTOR"

5.7   **REPEAT** step 5.5

5.8   **CLOSE** RFW-V-118 "FEEDWATER STARTUP ISOLATION"

5.9   **REPEAT** step 5.5

5.10   **CLOSE** the startup control valve (startup level controller) <u>FULLY</u>