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Title: Turbine Startup		

1.0 SUBSEQUENT OPERATOR ACTIONS

NOTE: The following steps assume that reactor power is at LEAST 5% and pressure is being held at least 950 psig.

NOTE: The preferred way of tripping the turbine is depressing "UNIT EMERGENCY TRIP" on P800 first, then depressing "TRIP" on the EHC.

CAUTION

A turbine startup should not be attempted if the "RPS A STOP & CONT V CLOSURE BYPASSED"(B) annunciator on P603 is not in. If this annunciator is not in, lower reactor power until the annunciator comes in.

- 1.1 IF Turbine is ready for runup,
THEN **ROLL the Turbine,**
 1. **SET** the "PRESSURE CONTROLLER" setpoint to approximately 950 psig.
 2. **DEPRESS** "1800" on the "SPEED SELECTOR"
 3. "SPEED INCREASING" Illuminates.
- 1.2 WHEN The turbine reaches 1800 RPM,
THEN **CLOSE** The exciter field breaker.
- 1.3 **VERIFY** Red light lit and green light extinguished for the exciter field breaker.
- 1.4 **VERIFY** Excitation manual-auto select in AUTO and red light lit.
- 1.5 **INCREASE** Generator AC voltage regulator until Main Generator Voltage is approximately 25 kV.
- 1.6 **INCREASE** Generator DC voltage regulator until EXCITER AC/DC BALANCE is 0 kV
- 1.7 **PLACE** CB-LBS1 Sync Selector to **ON**.

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- 1.8 WHEN the synchroscope is at 11 o'clock, and rotating in the FAST direction,
THEN **CLOSE** CB-LBS1.
- 1.9 **VERIFY** CB-LBS1 Red light lit and green light extinguished.
- 1.10 **PLACE** CB-LBS1 Sync Selector to **OFF**.
- 1.11 **PLACE** CB-LBS2 Sync Selector to **ON**.
- 1.12 **CLOSE** CB-LBS2.
- 1.13 **PLACE** CB-LBS2 Sync Selector to **OFF**.

NOTE: Main Generator MVAR exceeding approximately 400 MVAR will result in AC voltage regulator trip to DC

CAUTION

Main Generator MVAR exceeding approximately 600 MVAR will result in a Main Generator Lockout after 5 seconds.

- 1.14 **CHANGE** Main Generator AC voltage regulator as needed to maintain 150 MVAR.
- 1.15 **CHANGE** Main Generator DC voltage regulator as needed to maintain EXCITER AC/DC BALANCE at 0 kV
- 1.16 **TRANSFER** Busses to the NORMAL transformer, in accordance with SOP-BUS-TRANSFER