PURPOSE:To define Procedure for Coordinated Master Control (CMC) Operation for Ramp up/down to meet ABT schedule

SCOPE: This SOP is applicable atNTPL

RESPONSIBILITY: Board Engineer/ Shift Engineers

Reference :CMC Modification Write-up by C&I dated 18.10.2018and 22.07.2020

ACTIVITIES:

The Following procedure to be followed for CMC operation during continuous Ramp Up/Down and Schedule reversal to reduce the Schedule Generation- Actual Generation deviation

1. <u>Continuous Ramp Up/ Down</u>

1. Revised ABT schedule for next block shall be entered in ABT Set point screen at 6th minute from the beginning of the Current block considering the present ramp rate of 15 MW/min.

2. Unit ramp rate shall be maintained between 15 MW/min depending upon scheduled ramp rate and quality of coal used.

3. To avoid any over injection in the current block during ramp-up, **FIRST BLOCK**will be switched on in zeroth block only.

4. MS Sliding pressure SP lag shall work as per auto logics.

5. **During Continuous ramp up**: If schedule is raising to full load, 6th mill feeder may be started in the beginning of the first block.

   During continuous ramp down: 6Th mill shall be stopped after ensuring continuous technical minimum schedule.

6. **For Ramp up to Full Load:**Load Set point bias or CMC Coal biasmay be given for the block approaching full load to avoid MS pressure overshoot and MS temperature drop. This bias shall be withdrawn once all parameters are normalized.

   For ramp Down to Technical Minimum: For the last block reaching to technical minimum schedule, schedule bias of +10 MW shall be given to avoid under injection.

2. Schedule Reversal

1. If the next block schedule reversal is there,following schedule bias depending upon direction and magnitude of schedule reversal, shall be given immediately after getting the schedule from SRLDC and shall be withdrawn after entering next block schedule in ABT screen with first block ON manually for zeroth block.

    - **Schedule reversal at Full load**: schedule bias of -15 or +15 MW considering overshoot at full load.
    - **Schedule reversal at Tech Min.** schedule bias of +15 or -15 MW considering Feed Pump suction flow disturbance.

2. Reversal Schedule set point for next block shall be entered at 6thmin of the current block depending upon the current block SG-AG deviation.

3. Unit ramp rate shall be maintained between 15 MW/min depending upon scheduled ramp rate and quality of coal used.

4. For last 2- 3 min., First block ON may be kept off according to SG-AG deviation.

    - In case load is not responsive to CMC demand, CMC coal bias (4-10 tons) may be given until load reversal schedule is entered.
    - Sliding MS pressure set point may be adjusted in last 1-2 minutes to reduce deviation if required.

Note:

1. For prolonged technical minimum schedule, MS pressure sliding set point may be taken into manual and reduced to 115 KSC for better Efficiency

2. During Full load operation, if HPCV is opening full due to more heat rate issue, MS sliding pressure may be taken into manual and raised slowly from 170 KSC, providing First stage blading pressure **should not cross 169 KSC.**