

Import TTC/ATC of WBSETCL at STU (W.B)-CTU boundary for, March'2022 (peak)

1. Base Cases considered :

- a. WBSEDCL own system : 7460 MW.
- b. CESC system : 1750 MW. (Synchronized at Kasba)
- c. IPCL Drawal : 130 MW
- d. West Bengal total demand : 9340 MW [=a+b+c]
(Load P.f : 0.95)

2. Total Available Generation (S/O) in West Bengal (in MW) :

- i. WBPDCCL own Generation (in Avg. MW) 3885 + 500
(KTPP : 700, BKTPP : 975, SGTPP : 1500, STPS : 460, BTPS : 250, DPL : 500)
- ii. PPSP (3 units) : 675
- iv. HEL (2unit) : 540
- v. WBSEDCL Hydel : 40
- vi. TLDP III + TLDP IV : 140
- vii. CESC : 770
- viii. HIREL : 260
- viii. IPP/ CPP (TPH + CPL + BEL + PCBL) : 165

ix. Total Available Generation (S/O) in W.B = **6975 MW**

3. **Requirement from outside for W.B.** = (9340 - 6975) MW = **2365 MW** (Excluding loss).

4. Now, working out with the above Load-Generation scenario,

Under normal condition with availability of all circuits and availability of load & generation as above (under 1. & 2.), Net drawal i.e. summation of all W.B tie flows (at STU-CTU boundary) comes as **2828 MW** (including loss).

At above Load-Gen scenario :

Import TTC of WBSETCL at STU & CTU boundary (CTU to STU):

5634 MW

Constraints or violation arrived under (n-1) condition: Tripping of 400 KV Jeerat-Subhasgramckt (400 KV tie-lines have been considered for (N-1) condition)

1. **220KV Jeerat-Barasat d/c = 210.7 MW (601Amps)**

TRM (Transfer Reliability Margin) (Considering average S/O of the largest Gen Unit) : 450 MW.

ATC of WBSETCL at STU & CTU boundary (CTU to STU) : TTC - TRM = (5634 - 450) MW = **5184 MW**

A. Aldar
11/01/2022
Chief Engineer
STATE LOAD DESPATCH CENTRE
WBSETCL