

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

1. Base Cases considered :

- a. WBSEDCL own system : 7590 MW.
 - b. CESC system : 1930 MW. (Synchronized at Kasba)
 - c. IPCL Drawal : 155 MW
 - d. West Bengal total demand : 9675 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) 3700 +450
(KTPP :700, BKTPP :950, SGTPP : 1360, STPS :460, BTPS :230,DPL:450)
- ii. PPSP (3 units) : 675
- iv. HEL (2unit) : 540
- v. WBSEDCL Hydel : 100
- vi. TLDP III +TLDP IV : 280
- vii. CESC : 830
- viii. HIREL : 130
- viii. IPP/PPP(TPH+CPL+BEL+PCBL) : 165

ix. Total Available Generation (S/O) in W.B= **6870 MW**

3. Requirement from outside for W.B. = (9675-6870) MW = 2805 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 **3086 MW** (including loss).

At above Load-Gen scenario :

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

5793 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 Rajarhat-Barasat d/c= 208 MW (596 Amps)**
- 2. 220KV Kasba-Barasat d/c = 204.7 MW (585 Amps)**
- 3. At Subhasgram(PG) S/S: Bus Voltage 377.68 KV**

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= (5793-450) MW = : **5343 MW**

Banajy 11/5/22

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