

Import TTC/ATC of WBSETCL at STU (W.B)-CTU boundary for, FEBRUARY'2023 (peak)

1. Base Cases considered :

- a. WBSEDCL own system : 5560 MW.
- b. CESC system : 1550 MW. (Synchronized at Kasba)
- c. IPCL Drawal : 125 MW
- d. West Bengal total demand : 7235 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) 3600 +450
(KTPP :540, BKTPP :950, SGTPP : 1420, STPS :460, BTPS :230,DPL:250)
- ii. PPSP (3 units) : 675
- iv. HEL (2unit) : 540
- v. WBSEDCL Hydel : 60
- vi. TLDP III +TLDP IV : 140
- vii. CESC : 700
- viii. HIREL : 130
- viii. IPP/PPP(TPH+CPL+BEL+PCBL) : 165

ix. Total Available Generation (S/O) in W.B= **6460 MW**

3. **Requirement from outside for W.B.** = (7235-6460) MW = **775 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 **919.6 MW** (including loss).

At above Load-Gen scenario :

After increasing the state load to 10378 MW and decreasing the state generation to 4323 MW

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

6319 MW

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

1. **400KV DURGAPUR-PARULIA#2 = 906 MW (1315 Amps)**

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) : $TTC-TRM = (6319-450) MW = : 5869 MW$

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