

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

### 1. Base Cases considered :

- a. WBSEDCL own system : 5560 MW.
- b. CESC system : 1350MW. (Synchronized at Kasba)
- c. IPCL Drawal : 125 MW
- d. West Bengal total demand : 7035MW[=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, SGTTP : 1420, STPS :460, BTPS :230,DPL:250)
- ii. PPSP (3units) : 675
- iv. HEL (2unit) : 270
- 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=**6190MW**

3. **Requirement from outside for W.B. = (7035-6190) MW = 845 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 **976 MW** (including loss).

At above Load-Gen scenario :

After increasing the state load to 10310 MW and decreasing the state generation to 4053 MW

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

**6522MW**

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 = 917 MW (1320 Amps)**
2. **Gokarna 400KV SS: 315 MVA ICT = 315.5 MVA (458 Amps(HV side))**

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= (6522-450) MW = **:6072 MW**

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