

LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date: June 10, 2019
Hours: 19:00 Hours

Date	Time	Load(MW)
27-Dec-18	18:18hrs	399.35MW

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	THP	Unit- I	139.28	400kV THP - Siliguri Fdr- I	92.61	+	400kV THP - Siliguri Fdr IV Standby, Unit-III,V & VI standby ☐
		Unit- II	137.44	400kV THP - Siliguri Fdr- II	91.11	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	0.00		
		Unit- IV	99.98	400kV THP - Malbase Fdr- III	190.85	+	
		Unit- V	0.00	400kV Malbase - Siliguri	64.17	+	
		Unit- VI	0.00				
		Total	376.70	Error At Station/Auxiliary Consumption/Losses	2.13		
2	CHP	Unit- I	50.05	220kV CHP - Birpara Fdr- I	31.11	+	Unit-III Standby
		Unit- II	69.21	220kV CHP - Birpara Fdr- II	31.37	+	
		Unit- III	0.00	220kV CHP - Malbase Fdr- III	65.08	+	
		Unit- IV	70.42	220kV CHP - Semtokha Fdr- IV	46.01	+	
				220kV Malbase - Birpara Fdr.	0.30	+	
				66kV CHP - Chumdo Fdr.	7.74	+	
				66kV CHP - Gedu Fdr.	5.83	+	
				3x3MVA, 66/11kV TFR	1.09	+	
		Total	189.68	Error At Station/Auxiliary Consumption/Losses	1.45		
3	BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Fdr.	-12.90	-	Upper stage unit I & Lower stage unit-II standby
		Unit- II	5.20	66kV BHP - Lobeysa Fdr.	9.39	+	
		Total	5.20	220kV BHP - Tsirang Fdr.	17.50	+	
	BHP (L/S)	Unit- I	10.10	5MVA, 66/11kV TFR	0.98	+	
		Unit- II	0.00	30MVA ICT, 220/66kV			
		Total	10.10	Error At Station/Auxiliary Consumption/Losses	0.33		
4	DHPC	Unit-I	0.00	220kV DHPC - Tsirang Fdr.	21.08	+	Unit-I Standby
		Unit-II	21.43	220kV DHPC - Jigmeling Fdr.			
				5MVA, 220/33kV TFR			
		Total	21.43	Error At Station/Auxiliary Consumption/Losses	0.35		
5	KHP	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	58.94	+	NOTE:MOTANGA SUBSTATION IS BYPASSED THROUGH ERS TOWER
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	6.84	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	-3.52	-	
				132kV Motanga - Rangia Fdr.	35.51	+	
				220kV Tsirang - Jigmeling	37.10	+	
		Total	66.00	Error At Station/Auxiliary Consumption/Losses	-0.18		

Note: Load summary on June 10, 2019 at 19:00hrs.

Sl. No	Region	Total Generation (MW)	Total Load (Generation - Export, MW)	Total Load (Feeder Summation, MW)	Total Export/Import	Load Balance
1	Western Grid	603.11	255.34	251.08	310.67	4.26
2	Eastern Grid	66.00	71.11	71.29	31.99	-0.18
	Total	669.11	326.45	322.37	342.66	4.08

Note: Load Summary on June 10, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	215.35	226.78	261.96
2	Eastern Grid	52.20	53.38	61.02
	National	267.55	280.16	322.98

NOTE BHP loads are collected from site

1. The Instantaneous load balance is calculated as (Total generation - (Total export-Import) - Total domestic load) do not tend towards zero. This could be due to the following reasons:

- i) Not all the meters are digital and nor are all the meter at all locations can be read at same time (say 9:00hrs) due to many meter to be read manually.
- ii) The clocks of all the locations are not synchronized

2. This report is generated to give an idea of the generation & load flow for the system at a particular instant.

LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date	Time	Load(MW)
27-Dec-18	18:18hrs	399.35MW

Date: June 11, 2019
Hours: 09:00 Hours

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	THP	Unit- I	100.40	400kV THP - Siliguri Fdr- I	81.62	+	400kV THP_Siliguri Fdr- IV Standby. Unit-V & III standby
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	79.27	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	0.00		
		Unit- IV	100.80	400kV THP - Malbase Fdr- III	145.92	+	
		Unit- V	0.00	400kV Malbase - Siliguri	60.62	+	
		Unit- VI	111.10				
		Total	312.30	Error At Station/Auxiliary Consumption/Losses	5.49		
2	CHP	Unit- I	51.17	220kV CHP - Birpara Fdr- I	21.63	+	Unit-III Standby □
		Unit- II	52.20	220kV CHP - Birpara Fdr- II	20.87	+	
		Unit- III	0.00	220kV CHP - Malbase Fdr- III	73.13	+	
		Unit- IV	52.60	220kV CHP - Semtokha Fdr- IV	25.69	+	
				220kV Malbase - Birpara Fdr.	-20.32		
				66kV CHP - Chumdo Fdr.	5.14	+	
				66kV CHP - Gedu Fdr.	6.25	+	
				3x3MVA, 66/11kV TFR	0.71	+	
		Total	155.97	Error At Station/Auxiliary Consumption/Losses	2.55		
3	BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Fdr.	1.38	-	Upper stage unit I & Lower stage unit-II standby
		Unit- II	5.17	66kV BHP - Lobeysa Fdr.	9.09	+	
		Total	5.19	220kV BHP - Tsirang Fdr.	5.20	+	
	BHP (L/S)	Unit- I	10.73	5MVA, 66/11kV TFR	0.40	+	
		Unit- II	0.00	30MVA ICT, 220/66kV			
Total	10.73	Error At Station/Auxiliary Consumption/Losses	-0.15				
4	DHPC	Unit-I	0.00	220kV DHPC - Tsirang Fdr.	19.26	+	Unit-I standby.
		Unit-II	18.73	220kV DHPC - Jigmeling Fdr.			
				5MVA, 220/33kV TFR			
		Total	18.73	Error At Station/Auxiliary Consumption/Losses	-0.53		
5	KHP	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	61.76	+	NOTE:MOTANGA SUBSTATION IS BYPASSED THROUGH ERS TOWER .132kV GEL_SALAKATI under breakdown.
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	3.22	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	0.00	-	
				132kV Motanga - Rangia Fdr.	31.08	+	
				220kV Tsirang - Jigmeling	22.09	+	
		Total	66.00	Error At Station/Auxiliary Consumption/Losses	0.62		

Note: Load summary on June 11, 2019 at 09:00hrs.

Sl. No	Region	Total Generation (MW)	Total Load (Generation - Export, MW)	Total Load (Feeder Summation, MW)	Total Export/Import	Load Balance
1	Western Grid	502.92	237.14	229.78	243.69	7.36
2	Eastern Grid	66.00	57.01	56.39	31.08	0.62
	Total	568.92	294.15	286.17	274.77	7.98

Note: Load Summary on June 11, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	221.13	245.03	261.96
2	Eastern Grid	37.76	51.81	61.02
	National	258.89	296.84	322.98

NOTES:

1. The Instantaneous load balance is calculated as (Total generation - (Total export-Import) - Total domestic load) do not tend towards zero. This could be due to the following reasons:

u

ii) The clocks of all the locations are not synchronized

2. This report is generated to give an idea of the generation & load flow for the system at a particular instant.