

LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date:	July 22, 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	1020MW THP	Unit- I	186.96	400kV THP - Siliguri Fdr- I	221.87	+	
		Unit- II	184.48	400kV THP - Siliguri Fdr- II	220.59	+	
		Unit- III	100.48	400kV THP - Siliguri Fdr- IV	215.90	+	
		Unit- IV	189.76	400kV THP - Malbase Fdr- III	273.46	+	
		Unit- V	98.03	400kV Malbase - Siliguri	195.83	+	
		Unit- VI	185.33	-	-	-	
		Total	945.04	Error at Station/Auxiliary Consumption/Losses	13.22		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	197.00		MHEP Unit-I under maintenance and 400kV MHP-JLG II tripped and is still open
		Unit-II	197.27	400kV MHP - Jigmeling Fdr - II	0.00		
		Unit-III		400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV		400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		Total	197.27	Error at Station/Auxiliary Consumption/Losses	0.27		
2	336MW CHP	Unit- I	91.76	220kV CHP - Birpara Fdr- I	117.94	+	
		Unit- II	91.33	220kV CHP - Birpara Fdr- II	117.93	+	
		Unit- III	91.78	220kV CHP - Malbase Fdr- III	168.14	+	
		Unit- IV	91.26	220kV CHP - Semtokha Fdr- IV	-44.66	-	
		-	-	220kV Malbase - Birpara Fdr.	65.02	+	
		-	-	66kV CHP - Chumdo Fdr.	3.86	+	
		-	-	66kV CHP - Gedu Fdr.	1.93	+	
		-	-	3x3MVA, 66/11kV TFR	1.08	+	
Total	366.13	Error at Station/Auxiliary Consumption/Losses	-0.09				
3	24MW BHP (U/S)	Unit- I	11.86	220kV BHP - Semtokha Fdr.	70.16	+	
		Unit- II	11.86	66kV BHP - Lobeyasa Fdr.	18.50	+	
		Total	23.72	220kV BHP - Tsirang Fdr.	-23.18	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.69	+	
		Unit- II	20.80	30MVA ICT, 220/66kV			
Total	41.34	Error at Station/Auxiliary Consumption/Losses	1.11				
4	126MW DHPC	Unit-I	63.43	220kV DHPC - Tsirang Fdr.	126.17	+	
		Unit-II	63.30	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	126.73	Error at Station/Auxiliary Consumption/Losses	0.56		
5	60MW KHP	Unit- I	16.50	132kV KHP - Nangkor Fdr- I	57.36	+	Note: Motanga Substation is bypassed through ERS tower
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	7.44	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.60	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	50.19	+	
		-	-	132kV Motanga - Rangia Fdr.	61.21	+	
		-	-	220kV Tsirang - Jigmeling	100.69	+	
		Total	66.00	Error at Station/Auxiliary Consumption/Losses	0.60		

Note: Load summary on July 22, 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	1,502.96	247.19	234.61	1,155.08	12.58
2	Eastern Grid	263.27	55.56	54.69	308.40	0.87
	Total	1,766.23	302.75	289.30	1,463.48	13.45

Note: Load Summary on July 22, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	232.47	236.34	280.97
2	Eastern Grid	40.43	42.54	57.66
	National	272.90	278.88	338.63

NOTES: KHP datas 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:	July 23, 2019
Hours:	09:00 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	1020MW THP	Unit- I	187.27	400kV THP - Siliguri Fdr- I	267.55	+	
		Unit- II	187.78	400kV THP - Siliguri Fdr- II	265.93	+	
		Unit- III	186.13	400kV THP - Siliguri Fdr- IV	260.15	+	
		Unit- IV	186.96	400kV THP - Malbase Fdr- III	308.20	+	
		Unit- V	186.28	400kV Malbase - Siliguri	241.67	+	
		Unit- VI	186.73	-	-	-	
		Total	1,121.15	Error at Station/Auxiliary Consumption/Losses	19.32		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00	+	MHEP Unit-I (Mechanical problem) and 400kV MHP- JLG II under breakdown.
		Unit-II	192.00	400kV MHP - Jigmeling Fdr - II	190.53	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	192.00	Error at Station/Auxiliary Consumption/Losses	1.47		
3	336MW CHP	Unit- I	91.63	220kV CHP - Birpara Fdr- I	113.96	+	
		Unit- II	91.50	220kV CHP - Birpara Fdr- II	114.27	+	
		Unit- III	91.58	220kV CHP - Malbase Fdr- III	174.43	+	
		Unit- IV	91.50	220kV CHP - Semtokha Fdr- IV	-41.98	-	
		-	-	220kV Malbase - Birpara Fdr.	52.94	+	
		-	-	66kV CHP - Chumdo Fdr.	2.12	+	
		-	-	66kV CHP - Gedu Fdr.	1.83	+	
		-	-	3x3MVA, 66/11kV TFR	0.88	+	
		Total	366.21	Error at Station/Auxiliary Consumption/Losses	0.70		
4	24MW BHP (U/S)	Unit- I	11.85	220kV BHP - Semtokha Fdr.	61.51	+	
		Unit- II	11.85	66kV BHP - Lobeyasa Fdr.	15.93	+	
		Total	23.70	220kV BHP - Tsirang Fdr.	-13.13	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.48	+	
		Unit- II	20.78	30MVA ICT, 220/66kV			
		Total	41.32	Error at Station/Auxiliary Consumption/Losses	0.23		
5	126MW DHPC	Unit-I	41.03	220kV DHPC - Tsirang Fdr.	81.78	+	
		Unit-II	41.15	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	82.18	Error at Station/Auxiliary Consumption/Losses	0.40		
6	60MW KHP	Unit- I	16.55	132kV KHP - Nangkor Fdr- I	60.89	+	Note: Motanga Substation is bypassed through ERS tower.
		Unit-II	16.57	132kV KHP - Kilikhar Fdr- II	4.20	+	
		Unit- III	16.39	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.36	132kV Gelephu - Salakati Fdr.	40.60	+	
		-	-	132kV Motanga - Rangia Fdr.	52.37	+	
		-	-	220kV Tsirang - Jigmeling	65.33	+	
		Total	65.87	Error at Station/Auxiliary Consumption/Losses	0.38		

Note: Load summary on July 23, 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	1,634.56	252.76	232.11	1,316.47	20.65
2	Eastern Grid	257.87	39.70	37.85	283.50	1.85
	Total	1,892.43	292.46	269.96	1,599.97	22.50

Note: Load Summary on July 23, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	213.22	244.53	280.97
2	Eastern Grid	30.80	52.15	57.66
	National	244.02	296.68	338.63

NOTES: MHP LOAD COLLECTED FROM SITE

- 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:
 - 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.
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