

LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date:	September 23, 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	187.00	400kV THP - Siliguri Fdr- I	256.47	+	
		Unit- II	185.36	400kV THP - Siliguri Fdr- II	253.35	+	
		Unit- III	187.98	400kV THP - Siliguri Fdr- IV	248.07	+	
		Unit- IV	187.41	400kV THP - Malbase Fdr- III	346.56	+	
		Unit- V	187.07	400kV Malbase - Siliguri	219.69	+	
		Unit- VI	186.39	-	-	-	
		Total	1,121.21	Error at Station/Auxiliary Consumption/Losses	16.76		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	193.45	+	Unit I under break down & Unit-III under maintenance
		Unit-II	193.55	400kV MHP - Jigmeling Fdr - II	193.45	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	194.22	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		Total	387.77	Error at Station/Auxiliary Consumption/Losses	0.87		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	79.71	+	Unit-I under breakdown
		Unit- II	90.92	220kV CHP - Birpara Fdr- II	79.27	+	
		Unit- III	91.30	220kV CHP - Malbase Fdr- III	113.06	+	
		Unit- IV	91.72	220kV CHP - Semtokha Fdr- IV	-13.49	-	
		-	-	220kV Malbase - Birpara Fdr.	43.56	+	
		-	-	66kV CHP - Chumdo Fdr.	5.69	+	
		-	-	66kV CHP - Gedu Fdr.	8.34	+	
		-	-	3x3MVA, 66/11kV TFR	1.27	+	
		Total	273.94	Error at Station/Auxiliary Consumption/Losses	0.09		
3	24MW BHP (U/S)	Unit- I	11.83	220kV BHP - Semtokha Fdr.	49.60	+	
		Unit- II	11.83	66kV BHP - Lobeyasa Fdr.	20.04	+	
		Total	23.66	220kV BHP - Tsirang Fdr.	-5.61	-	
	40MW BHP (L/S)	Unit- I	21.02	5MVA, 66/11kV TFR	0.67	+	
		Unit- II	20.19	30MVA ICT, 220/66kV			
Total	41.21	Error at Station/Auxiliary Consumption/Losses	0.17				
4	126MW DHPC	Unit-I	30.28	220kV DHPC - Tsirang Fdr.	79.92	+	
		Unit-II	50.12	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	80.40	Error at Station/Auxiliary Consumption/Losses	0.48		
5	60MW KHP	Unit- I	16.42	132kV KHP - Nangkhor Fdr- I	56.00	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.59	132kV KHP - Kilikhar Fdr- II	9.87	+	
		Unit- III	16.58	5MVA, 132/11kV TFR	0.55	+	
		Unit- IV	16.45	132kV Gelephu - Salakati Fdr.	26.82	+	
		-	-	132kV Motanga - Rangia Fdr.	47.20	+	
		-	-	220kV Tsirang - Jigmeling	71.36	+	
		Total	66.04	Error at Station/Auxiliary Consumption/Losses	-0.38		

Note: Load summary on September 23, 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	1,540.42	288.94	271.44	1,180.12	17.50
2	Eastern Grid	453.81	64.25	63.76	460.92	0.49
	Total	1,994.23	353.19	335.20	1,641.04	17.99

Note: Load Summary on September 23, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	243.84	268.59	256.15
2	Eastern Grid	51.02	51.02	57.74
	National	294.86	319.61	313.89

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:	September 24, 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	187.00	400kV THP - Siliguri Fdr- I	270.00	+	
		Unit- II	187.00	400kV THP - Siliguri Fdr- II	267.00	+	
		Unit- III	187.00	400kV THP - Siliguri Fdr- IV	260.00	+	
		Unit- IV	187.00	400kV THP - Malbase Fdr- III	308.00	+	
		Unit- V	187.00	400kV Malbase - Siliguri	241.00	+	
		Unit- VI	187.00	-	-	-	
		Total	1,122.00	Error at Station/Auxiliary Consumption/Losses	17.00		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	279.27	+	Unit-I under breakdown.
		Unit-II	194.00	400kV MHP - Jigmeling Fdr - II	279.67	+	
		Unit-III	172.90	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	193.80	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	560.70	Error at Station/Auxiliary Consumption/Losses	1.76		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	85.20	+	Unit-I under breakdown.
		Unit- II	92.00	220kV CHP - Birpara Fdr- II	85.20	+	
		Unit- III	92.00	220kV CHP - Malbase Fdr- III	148.30	+	
		Unit- IV	92.00	220kV CHP - Semtokha Fdr- IV	-56.10	-	
		-	-	220kV Malbase - Birpara Fdr.	24.00	+	
		-	-	66kV CHP - Chumdo Fdr.	2.70	+	
		-	-	66kV CHP - Gedu Fdr.	7.50	+	
		Total	276.00	Error at Station/Auxiliary Consumption/Losses	2.35		
4	24MW BHP (U/S)	Unit- I	12.30	220kV BHP - Semtokha Fdr.	90.49	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	19.63	+	
		Total	24.50	220kV BHP - Tsirang Fdr.	-43.31	-	
	40MW BHP (L/S)	Unit- I	20.60	5MVA, 66/11kV TFR	0.98	+	
		Unit- II	21.00	30MVA ICT, 220/66kV			
Total	41.60	Error at Station/Auxiliary Consumption/Losses	-1.69				
5	126MW DHPC	Unit-I	45.50	220kV DHPC - Tsirang Fdr.	104.90	+	
		Unit-II	60.10	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	105.60	Error at Station/Auxiliary Consumption/Losses	0.70		
6	60MW KHP	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	58.68	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.57	132kV KHP - Kilikhar Fdr- II	6.82	+	
		Unit- III	16.48	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	16.54	132kV Gelephu - Salakati Fdr.	34.95	+	
		-	-	132kV Motanga - Rangia Fdr.	36.16	+	
		-	-	220kV Tsirang - Jigmeling	60.29	+	
		Total	66.09	Error at Station/Auxiliary Consumption/Losses	0.29		

Note: Load summary on September 24, 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	1,569.70	277.01	258.65	1,232.40	18.36
2	Eastern Grid	626.79	57.03	54.98	630.05	2.05
	Total	2,196.49	334.04	313.63	1,862.45	20.41

Note: Load Summary on September 24, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	208.56	256.15	256.15
2	Eastern Grid	32.43	49.56	57.74
	National	240.99	305.71	313.89

NOTES: All generations and loads are collected from sites.

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.
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