

LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date:	August 4, 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	188.20	400kV THP - Siliguri Fdr- I	255.78	+	
		Unit- II	184.50	400kV THP - Siliguri Fdr- II	256.56	+	
		Unit- III	186.24	400kV THP - Siliguri Fdr- IV	256.46	+	
		Unit- IV	186.74	400kV THP - Malbase Fdr- III	345.38	+	
		Unit- V	187.10	400kV Malbase - Siliguri	219.71	+	
		Unit- VI	186.08	-	-	-	
		Total	1,118.86	Error at Station/Auxiliary Consumption/Losses	4.68		
2	720MW MHP	Unit-I	185.30	400kV MHP - Jigmeling Fdr - I	183.07	+	
		Unit-II	185.00	400kV MHP - Jigmeling Fdr - II	185.35	+	
		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	0.00		
		-	-	(Local Load)	0.00		
		Total	370.30	Error at Station/Auxiliary Consumption/Losses	1.88		
2	336MW CHP	Unit- I	91.67	220kV CHP - Birpara Fdr- I	87.35	+	Unit IV under shutdown
		Unit- II	91.50	220kV CHP - Birpara Fdr- II	87.38	+	
		Unit- III	91.46	220kV CHP - Malbase Fdr- III	113.46	+	
		Unit- IV	0.00	220kV CHP - Semtokha Fdr- IV	-26.91	-	
		-	-	220kV Malbase - Birpara Fdr.	55.51	+	
		-	-	66kV CHP - Chumdo Fdr.	3.62	+	
		-	-	66kV CHP - Gedu Fdr.	7.21	+	
		-	-	3x3MVA, 66/11kV TFR	1.29	+	
Total	274.63	Error at Station/Auxiliary Consumption/Losses	1.23				
3	24MW BHP (U/S)	Unit- I	12.30	220kV BHP - Semtokha Fdr.	60.17	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	16.96	+	
		Total	24.50	220kV BHP - Tsirang Fdr.	-13.12	-	
	40MW BHP (L/S)	Unit- I	20.70	5MVA, 66/11kV TFR	0.98	+	
		Unit- II	21.00	30MVA ICT, 220/66kV			
Total	41.70	Error at Station/Auxiliary Consumption/Losses	1.21				
4	126MW DHPC	Unit-I	45.13	220kV DHPC - Tsirang Fdr.	89.69	+	
		Unit-II	44.99	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	90.12	Error at Station/Auxiliary Consumption/Losses	0.43		
5	60MW KHP	Unit- I	16.50	132kV KHP - Nangkor Fdr- I	57.70	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	7.66	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	37.58	+	
		-	-	132kV Motanga - Rangia Fdr.	58.94	+	
		-	-	220kV Tsirang - Jigmeling	79.26	+	
		Total	66.00	Error at Station/Auxiliary Consumption/Losses	0.34		

Note: Load summary on August 04, 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	1,549.81	251.80	244.25	1,218.75	7.55
2	Eastern Grid	436.30	50.62	48.40	464.94	2.22
	Total	1,986.11	302.42	292.65	1,683.69	9.77

Note: Load Summary on August 04, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	232.96	247.06	259.44
2	Eastern Grid	46.93	46.93	55.98
	National	279.89	293.99	315.42

NOTES: Eastern load 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:	August 5, 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	187.10	400kV THP - Siliguri Fdr- I	263.78	+	
		Unit- II	188.06	400kV THP - Siliguri Fdr- II	261.80	+	
		Unit- III	186.24	400kV THP - Siliguri Fdr- IV	253.81	+	
		Unit- IV	187.27	400kV THP - Malbase Fdr- III	325.51	+	
		Unit- V	187.25	400kV Malbase - Siliguri	232.95	+	
		Unit- VI	186.02	-	-	-	
		Total	1,121.94	Error at Station/Auxiliary Consumption/Losses	17.04		
2	720MW MHP	Unit-I	182.80	400kV MHP - Jigmeling Fdr - I	185.50	+	
		Unit-II	185.00	400kV MHP - Jigmeling Fdr - II	181.00	+	
		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	367.80	Error at Station/Auxiliary Consumption/Losses	1.30		
3	336MW CHP	Unit- I	91.21	220kV CHP - Birpara Fdr- I	93.41	+	Unit IV under shutdown
		Unit- II	91.12	220kV CHP - Birpara Fdr- II	93.61	+	
		Unit- III	91.20	220kV CHP - Malbase Fdr- III	145.51	+	
		Unit- IV	0.00	220kV CHP - Semtokha Fdr- IV	-67.84	-	
		-	-	220kV Malbase - Birpara Fdr.	41.97	+	
		-	-	66kV CHP - Chumdo Fdr.	-0.70	-	
		-	-	66kV CHP - Gedu Fdr.	8.61	+	
		-	-	3x3MVA, 66/11kV TFR	0.73	+	
Total	273.53	Error at Station/Auxiliary Consumption/Losses	0.20				
4	24MW BHP (U/S)	Unit- I	12.30	220kV BHP - Semtokha Fdr.	83.60	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	15.30	+	
		Total	24.50	220kV BHP - Tsirang Fdr.	-34.13	-	
	40MW BHP (L/S)	Unit- I	20.70	5MVA, 66/11kV TFR	0.98	+	
		Unit- II	21.00	30MVA ICT, 220/66kV			
		Total	41.70	Error at Station/Auxiliary Consumption/Losses	0.45		
5	126MW DHPC	Unit-I	60.39	220kV DHPC - Tsirang Fdr.	118.12	+	
		Unit-II	58.23	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	118.62	Error at Station/Auxiliary Consumption/Losses	0.50		
6	60MW KHP	Unit- I	16.21	132kV KHP - Nangkhor Fdr- I	58.75	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	15.52	132kV KHP - Kilikhar Fdr- II	2.77	+	
		Unit- III	15.55	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	15.65	132kV Gelephu - Salakati Fdr.	43.17	+	
		-	-	132kV Motanga - Rangia Fdr.	59.66	+	
		-	-	220kV Tsirang - Jigmeling	66.54	+	
		Total	62.93	Error at Station/Auxiliary Consumption/Losses	1.11		

Note: Load summary on August 05, 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	1,580.29	272.42	254.23	1,241.33	18.19
2	Eastern Grid	430.73	27.94	25.53	469.33	2.41
	Total	2,011.02	300.36	279.76	1,710.66	20.60

Note: Load Summary on August 05, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	229.39	249.50	259.44
2	Eastern Grid	38.49	52.03	55.98
	National	267.88	301.53	315.42

NOTES: Eastern load 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.
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