

LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date:	July 19, 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	266.00	+	
		Unit- II	187.00	400kV THP - Siliguri Fdr- II	264.00	+	
		Unit- III	187.00	400kV THP - Siliguri Fdr- IV	316.00	+	
		Unit- IV	187.00	400kV THP - Malbase Fdr- III	285.00	+	
		Unit- V	187.00	400kV Malbase - Siliguri	225.00	+	
		Unit- VI	187.00	-	-	-	
		Total	1,122.00	Error at Station/Auxiliary Consumption/Losses	-9.00		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00		MHEP Unit I & II tripped on 19th July, 2019 at 09:20 Hrs BST.
		Unit-II	0.00	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	0.00	Error at Station/Auxiliary Consumption/Losses	0.00		
2	336MW CHP	Unit- I	92.00	220kV CHP - Birpara Fdr- I	106.50	+	
		Unit- II	92.00	220kV CHP - Birpara Fdr- II	106.30	+	
		Unit- III	92.00	220kV CHP - Malbase Fdr- III	141.60	+	
		Unit- IV	92.00	220kV CHP - Semtokha Fdr- IV	-1.40	-	
		-	-	220kV Malbase - Birpara Fdr.	62.00	+	
		-	-	66kV CHP - Chumdo Fdr.	2.70	+	
		-	-	66kV CHP - Gedu Fdr.	8.20	+	
		-	-	3x3MVA, 66/11kV TFR	0.90	+	
		Total	368.00	Error at Station/Auxiliary Consumption/Losses	3.20		
3	24MW BHP (U/S)	Unit- I	12.30	220kV BHP - Semtokha Fdr.	52.00	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	17.26	+	
		Total	24.50	220kV BHP - Tsirang Fdr.	-7.00	-	
	40MW BHP (L/S)	Unit- I	20.70	5MVA, 66/11kV TFR	0.89	+	
		Unit- II	21.00	30MVA ICT, 220/66kV			
Total	41.70	Error at Station/Auxiliary Consumption/Losses	3.05				
4	126MW DHPC	Unit-I	63.21	220kV DHPC - Tsirang Fdr.	63.18	+	Unit-II under shut down
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	63.21	Error at Station/Auxiliary Consumption/Losses	0.03		
5	60MW KHP	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	57.72	+	Note: Motanga Substation is bypassed through ERS tower
		Unit-II	16.48	132kV KHP - Kilikhar Fdr- II	7.48	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	28.20	+	
		-	-	132kV Motanga - Rangia Fdr.	60.73	+	
		-	-	220kV Tsirang - Jigmeling	69.40	+	
		Total	65.98	Error at Station/Auxiliary Consumption/Losses	0.38		

Note: Load summary on July 19, 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	1,619.41	204.21	206.93	1,345.80	-2.72
2	Eastern Grid	65.98	46.45	46.07	88.93	0.38
	Total	1,685.39	250.66	253.00	1,434.73	-2.34

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

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	239.16	250.82	280.97
2	Eastern Grid	46.49	50.84	57.66
	National	285.65	301.66	338.63

NOTES: Western generation and feeder load fetched from sites.

- 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.
 - The clocks of all the locations are not synchronized.
- 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 20, 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	265.00	+	
		Unit- II	187.00	400kV THP - Siliguri Fdr- II	265.00	+	
		Unit- III	187.00	400kV THP - Siliguri Fdr- IV	257.00	+	
		Unit- IV	187.00	400kV THP - Malbase Fdr- III	313.00	+	
		Unit- V	187.00	400kV Malbase - Siliguri	235.00	+	
		Unit- VI	187.00	-	-	-	
		Total	1,122.00	Error at Station/Auxiliary Consumption/Losses	22.00		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00	+	MHEP Unit I & II tripped on 19th July, 2019 at 09:20 Hrs BST.
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	0.00	+	
		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	0.00	Error at Station/Auxiliary Consumption/Losses	0.00		
3	336MW CHP	Unit- I	92.00	220kV CHP - Birpara Fdr- I	115.00	+	
		Unit- II	92.00	220kV CHP - Birpara Fdr- II	114.00	+	
		Unit- III	92.00	220kV CHP - Malbase Fdr- III	169.00	+	
		Unit- IV	92.00	220kV CHP - Semtokha Fdr- IV	-43.00	-	
		-	-	220kV Malbase - Birpara Fdr.	59.00	+	
		-	-	66kV CHP - Chumdo Fdr.	0.50	+	
		-	-	66kV CHP - Gedu Fdr.	8.20	+	
		-	-	3x3MVA, 66/11kV TFR	0.65	+	
		Total	368.00	Error at Station/Auxiliary Consumption/Losses	3.65		
4	24MW BHP (U/S)	Unit- I	12.40	220kV BHP - Semtokha Fdr.	65.42	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	16.42	+	
		Total	24.60	220kV BHP - Tsirang Fdr.	-17.21	-	
	40MW BHP (L/S)	Unit- I	20.70	5MVA, 66/11kV TFR	0.98	+	
		Unit- II	21.00	30MVA ICT, 220/66kV	0.00		
		Total	41.70	Error at Station/Auxiliary Consumption/Losses	0.69		
5	126MW DHPC	Unit-I	46.09	220kV DHPC - Tsirang Fdr.	91.00	+	
		Unit-II	44.99	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	91.08	Error at Station/Auxiliary Consumption/Losses	0.08		
6	60MW KHP	Unit- I	16.50	132kV KHP - Nangkor Fdr- I	60.69	+	Note: Motanga Substation is bypassed through ERS tower.
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	3.77	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	45.72	+	
		-	-	132kV Motanga - Rangia Fdr.	55.52	+	
		-	-	220kV Tsirang - Jigmeling	74.79	+	
		Total	66.00	Error at Station/Auxiliary Consumption/Losses	1.14		

Note: Load summary on July 20, 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	1,647.38	262.59	236.17	1,310.00	26.42
2	Eastern Grid	66.00	39.55	38.41	101.24	1.14
	Total	1,713.38	302.14	274.58	1,411.24	27.56

Note: Load Summary on July 20, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	206.93	226.91	280.97
2	Eastern Grid	35.69	43.64	57.66
	National	242.62	270.55	338.63

NOTES: WLDC 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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