

LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date:	September 25, 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	187.53	400kV THP - Siliguri Fdr- I	258.32	+	
		Unit- II	186.27	400kV THP - Siliguri Fdr- II	256.22	+	
		Unit- III	186.52	400kV THP - Siliguri Fdr- IV	258.76	+	
		Unit- IV	187.56	400kV THP - Malbase Fdr- III	340.81	+	
		Unit- V	186.45	400kV Malbase - Siliguri	223.30	+	
		Unit- VI	186.67	-	-	-	
		Total	1,121.00	Error at Station/Auxiliary Consumption/Losses	6.89		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	288.80	+	Unit I under break down
		Unit-II	191.60	400kV MHP - Jigmeling Fdr - II	286.30	+	
		Unit-III	192.70	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	194.70	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		Total	579.00	Error at Station/Auxiliary Consumption/Losses	3.90		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	90.57	+	Unit-I under breakdown
		Unit- II	91.06	220kV CHP - Birpara Fdr- II	90.54	+	
		Unit- III	91.66	220kV CHP - Malbase Fdr- III	125.86	+	
		Unit- IV	91.52	220kV CHP - Semtokha Fdr- IV	-47.38	-	
		-	-	220kV Malbase - Birpara Fdr.	51.95	+	
		-	-	66kV CHP - Chumdo Fdr.	4.67	+	
		-	-	66kV CHP - Gedu Fdr.	8.14	+	
		-	-	3x3MVA, 66/11kV TFR	1.27	+	
		Total	274.24	Error at Station/Auxiliary Consumption/Losses	0.57		
3	24MW BHP (U/S)	Unit- I	11.81	220kV BHP - Semtokha Fdr.	84.88	+	
		Unit- II	11.81	66kV BHP - Lobeyasa Fdr.	21.47	+	
		Total	23.62	220kV BHP - Tsirang Fdr.	-41.16	-	
	40MW BHP (L/S)	Unit- I	21.02	5MVA, 66/11kV TFR	0.64	+	
		Unit- II	20.20	30MVA ICT, 220/66kV			
Total	41.22	Error at Station/Auxiliary Consumption/Losses	0.99				
4	126MW DHPC	Unit-I	63.59	220kV DHPC - Tsirang Fdr.	126.18	+	
		Unit-II	63.19	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	126.78	Error at Station/Auxiliary Consumption/Losses	0.60		
5	60MW KHP	Unit- I	16.60	132kV KHP - Nangkhor Fdr- I	57.09	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.84	132kV KHP - Kilikhar Fdr- II	9.00	+	
		Unit- III	16.63	5MVA, 132/11kV TFR	0.60	+	
		Unit- IV	16.59	132kV Gelephu - Salakati Fdr.	39.76	+	
		-	-	132kV Motanga - Rangia Fdr.	49.55	+	
		-	-	220kV Tsirang - Jigmeling	80.53	+	
		Total	66.66	Error at Station/Auxiliary Consumption/Losses	-0.03		

Note: Load summary on September 25, 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	1,586.86	276.67	269.60	1,229.66	7.07
2	Eastern Grid	645.66	61.78	57.91	664.41	3.87
	Total	2,232.52	338.45	327.51	1,894.07	10.94

Note: Load Summary on September 25, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	240.25	240.25	256.15
2	Eastern Grid	51.64	51.64	57.74
	National	291.89	291.89	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 26, 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	187.49	400kV THP - Siliguri Fdr- I	268.30	+	
		Unit- II	187.74	400kV THP - Siliguri Fdr- II	268.07	+	
		Unit- III	186.93	400kV THP - Siliguri Fdr- IV	269.74	+	
		Unit- IV	186.47	400kV THP - Malbase Fdr- III	305.44	+	
		Unit- V	187.42	400kV Malbase - Siliguri	244.16	+	
		Unit- VI	185.91	-	-	-	
		Total	1,121.96	Error at Station/Auxiliary Consumption/Losses	10.41		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	291.00	+	Unit-I under breakdown.
		Unit-II	194.00	400kV MHP - Jigmeling Fdr - II	291.00	+	
		Unit-III	194.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	194.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	582.00	Error at Station/Auxiliary Consumption/Losses	0.00		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	102.71	+	Unit-I under breakdown.
		Unit- II	91.61	220kV CHP - Birpara Fdr- II	102.71	+	
		Unit- III	91.57	220kV CHP - Malbase Fdr- III	162.07	+	
		Unit- IV	91.55	220kV CHP - Semtokha Fdr- IV	-100.67	-	
		-	-	220kV Malbase - Birpara Fdr.	44.22	+	
		-	-	66kV CHP - Chumdo Fdr.	-1.27	-	
		-	-	66kV CHP - Gedu Fdr.	9.05	+	
		-	-	3x3MVA, 66/11kV TFR	0.75	+	
Total	274.73	Error at Station/Auxiliary Consumption/Losses	-0.62				
4	24MW BHP (U/S)	Unit- I	11.82	220kV BHP - Semtokha Fdr.	124.51	+	
		Unit- II	11.82	66kV BHP - Lobeyasa Fdr.	18.88	+	
		Total	23.64	220kV BHP - Tsirang Fdr.	-77.68	-	
	40MW BHP (L/S)	Unit- I	21.03	5MVA, 66/11kV TFR	0.48	+	
		Unit- II	20.16	30MVA ICT, 220/66kV			
		Total	41.19	Error at Station/Auxiliary Consumption/Losses	-1.36		
5	126MW DHPC	Unit-I	58.33	220kV DHPC - Tsirang Fdr.	119.94	+	
		Unit-II	62.14	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	120.47	Error at Station/Auxiliary Consumption/Losses	0.53		
6	60MW KHP	Unit- I	15.56	132kV KHP - Nangkor Fdr- I	60.28	+	To transfer 132kV line from ERS arrangement back to Motanga station
		Unit-II	16.61	132kV KHP - Kilikhar Fdr- II	4.61	+	
		Unit- III	16.65	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	17.04	132kV Gelephu - Salakati Fdr.	67.40	+	
		-	-	132kV Motanga - Rangia Fdr.	0.00		
		-	-	220kV Tsirang - Jigmeling	39.29	+	
		Total	65.86	Error at Station/Auxiliary Consumption/Losses	0.57		

Note: Load summary on September 26, 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	1,581.99	242.79	233.83	1,299.91	8.96
2	Eastern Grid	647.86	37.75	37.18	649.40	0.57
	Total	2,229.85	280.54	271.01	1,949.31	9.53

Note: Load Summary on September 26, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	229.88	255.28	256.15
2	Eastern Grid	35.13	48.58	57.74
	National	265.01	303.86	313.89

NOTES:

- 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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