

LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

Date:	July 1, 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	138.00	400kV THP - Siliguri Fdr- I	106.56	+	Unit II Standby			
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	105.47	+				
		Unit- III	130.11	400kV THP - Siliguri Fdr- IV	102.81	+				
		Unit- IV	129.87	400kV THP - Malbase Fdr- III	175.09	+				
		Unit- V	0.00	400kV Malbase - Siliguri	85.53	+				
		Unit- VI	100.85	-	-	-				
		Total	498.83	Error at Station/Auxiliary Consumption/Losses		8.90				
2	720MW MHP	Unit-I	180.00	400kV MHP - (via Puna)-Jigmeling Fdr - I	178.16		COD for Unit-I: 12:30PM, 28th June, 2019. The current local load/auxiliary load is met from BPC, externally)			
		Unit-II	0.00	400kV MHP - (via Puna)-Jigmeling Fdr - II	0.00					
		Unit-IV	0.00	400kV MHP - (via Puna)-Jigmeling Fdr - III	0.00					
		Unit-IV	0.00	400kV MHP - (via Puna)-Jigmeling Fdr - IV	0.00					
		-	-	200MVA, 400/132kV ICT	0.00					
		-	-	(Local Load)	0.00					
		Total	180.00	Error at Station/Auxiliary Consumption/Losses		1.84				
2	336MW CHP	Unit- I	77.96	220kV CHP - Birpara Fdr- I	0.00	+	Unit IV Standby			
		Unit- II	80.19	220kV CHP - Birpara Fdr- II	82.94	+				
		Unit- III	81.08	220kV CHP - Malbase Fdr- III	124.14	+				
		Unit- IV	0.00	220kV CHP - Semtokha Fdr- IV	25.43	+				
		-	-	220kV Malbase - Birpara Fdr.	37.03	+				
		-	-	66kV CHP - Chumdo Fdr.	3.37	+				
		-	-	66kV CHP - Gedu Fdr.	7.52	+				
		-	-	3x3MVA, 66/11kV TFR	1.18	+				
		Total	239.23	Error at Station/Auxiliary Consumption/Losses		-5.35				
3	24MW BHP (U/S)	Unit- I	9.00	220kV BHP - Semtokha Fdr.	-10.16	+	BHP(U/S) unit II & (L/S) unit I on standby.			
		Unit- II	0.00	66kV BHP - Lobeysa Fdr.	10.02	+				
		Total	9.00	220kV BHP - Tsirang Fdr.	19.47	+				
	60MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.68	+				
		Unit- II	13.44	30MVA ICT, 220/66kV						
Total	13.44	Error at Station/Auxiliary Consumption/Losses		2.43						
4	126MW DHPC	Unit-I	25.33	220kV DHPC - Tsirang Fdr.	25.11	+	Unit-II standby.			
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.						
		-	-	5MVA, 220/33kV TFR						
		Total	25.33	Error at Station/Auxiliary Consumption/Losses		0.22				
		5	60MW KHP	Unit- I	16.58	132kV KHP - Nangkhor Fdr- I		58.18	+	Note: Motanga Substation is bypassed through ERS tower.
				Unit-II	16.66	132kV KHP - Kilikhar Fdr- II		7.53	+	
				Unit- III	16.70	5MVA, 132/11kV TFR		0.50	+	
Unit- IV	16.63			132kV Gelephu - Salakati Fdr.	13.31	+				
-	-			132kV Motanga - Rangia Fdr.	44.40	+				
-	-			220kV Tsirang - Jigmeling	43.55	+				
Total	66.57			Error at Station/Auxiliary Consumption/Losses		0.36				

Note: Load summary on July 01, 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	785.83	221.94	215.74	520.34	6.20
2	Eastern Grid	246.57	54.25	52.05	235.87	2.20
Total		1,032.40	276.19	267.79	756.21	8.40

Note: Load Summary on July 01, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	228.27	232.84	261.96
2	Eastern Grid	40.43	44.70	61.02
National		268.70	277.54	322.98

NOTES:

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 2, 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	110.63	400kV THP - Siliguri Fdr- I	122.76	+	Unit-II standby.
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	121.66	+	
		Unit- III	101.10	400kV THP - Siliguri Fdr- IV	117.36	+	
		Unit- IV	101.18	400kV THP - Malbase Fdr- III	171.60	+	
		Unit- V	79.59	400kV Malbase - Siliguri	104.46	+	
		Unit- VI	149.70	-	-	-	
		Total	542.20	Error at Station/Auxiliary Consumption/Losses	8.82		
2	720MW MHP	Unit-I	181.00	400kV MHP - (via Puna)-Jigmeling Fdr - I	178.20		COD for Unit-I: 12:30PM, 28th June, 2019. The current local load/auxiliary load is met from BPC, externally)
		Unit-II	0.00	400kV MHP - (via Puna)-Jigmeling Fdr - II	0.00		
		Unit-IV	0.00	400kV MHP - (via Puna)-Jigmeling Fdr - III			
		Unit-IV	0.00	400kV MHP - (via Puna)-Jigmeling Fdr - IV	5.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	181.00	Error at Station/Auxiliary Consumption/Losses	-2.20		
3	336MW CHP	Unit- I	83.51	220kV CHP - Birpara Fdr- I	0.00	+	220kV CHP_BIR I under shutdown.
		Unit- II	86.60	220kV CHP - Birpara Fdr- II	82.94	+	
		Unit- III	74.64	220kV CHP - Malbase Fdr- III	124.14	+	
		Unit- IV	0.00	220kV CHP - Semtokha Fdr- IV	25.43	+	
		-	-	220kV Malbase - Birpara Fdr.	37.03	+	
		-	-	66kV CHP - Chumdo Fdr.	3.37	+	
		-	-	66kV CHP - Gedu Fdr.	7.52	+	
		-	-	3x3MVA, 66/11kV TFR	0.90	+	
		Total	244.75	Error at Station/Auxiliary Consumption/Losses	0.45		
4	24MW BHP (U/S)	Unit- I	9.00	220kV BHP - Semtokha Fdr.	-2.21	-	BHP(U/S) unit II & (L/S) unit I on standby.
		Unit- II	0.00	66kV BHP - Lobeysa Fdr.	8.58	+	
		Total	9.00	220kV BHP - Tsirang Fdr.	13.01	+	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.22	+	
		Unit- II	13.35	30MVA ICT, 220/66kV			
Total	13.35	Error at Station/Auxiliary Consumption/Losses	2.75				
5	126MW DHPC	Unit-I	25.32	220kV DHPC - Tsirang Fdr.	25.12	+	Unit-II standby.
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	25.32	Error at Station/Auxiliary Consumption/Losses	0.20		
6	60MW KHP	Unit- I	16.51	132kV KHP - Nangkhor Fdr- I	61.23	+	Note: Motanga Substation is bypassed through ERS tower.
		Unit-II	16.65	132kV KHP - Kilikhar Fdr- II	3.95	+	
		Unit- III	16.61	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.41	132kV Gelephu - Salakati Fdr.	16.11	+	
		-	-	132kV Motanga - Rangia Fdr.	43.50	+	
		-	-	220kV Tsirang - Jigmeling	38.06	+	
		Total	66.18	Error at Station/Auxiliary Consumption/Losses	0.50		

Note: Load summary on July 02, 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	834.62	210.35	198.13	586.21	12.22
2	Eastern Grid	247.18	42.43	44.13	242.81	-1.70
	Total	1,081.80	252.78	242.26	829.02	10.52

Note: Load Summary on July 02, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	221.47	247.16	261.96
2	Eastern Grid	36.20	41.66	61.02
	National	257.67	288.82	322.98

NOTES: Western 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.
 - 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.