LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date		
Date	**Time**	**Load(MW)**
27-Dec-18	18:18hrs	399.35MW

Date:	**July 11, 2019**
Hours:	**19:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	188.23	400kV THP - Siliguri Fdr- I	263.88	+	
		Unit- II	185.79	400kV THP - Siliguri Fdr- II	262.73	+	
		Unit- III	187.57	400kV THP - Siliguri Fdr- IV	255.35	+	
		Unit- IV	186.84	400kV THP - Malbase Fdr- III	322.62	+	
		Unit- V	186.63	400kV Malbase - Siliguri	233.53	+	
		Unit- VI	185.63	-	-	-	
		Total	**1,120.69**	**Error at Station/Auxiliary Consumption/Losses**	**16.11**		
2	**720MW MHP**	Unit-I	182.60	400kV MHP - Jigmeling Fdr - I	183.04		COD for Unit-I: 12:30PM, 28th June, 2019. The current local load/auxiliary load is met from BPC, externally)
		Unit-II	181.60	400kV MHP - Jigmeling Fdr - II	181.34		
		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	**364.20**	**Error at Station/Auxiliary Consumption/Losses**	**-0.18**		
2	**336MW CHP**	Unit- I	91.76	220kV CHP - Birpara Fdr- I	119.70	+	
		Unit- II	91.85	220kV CHP - Birpara Fdr- II	119.35	+	
		Unit- III	91.51	220kV CHP - Malbase Fdr- III	167.64	+	
		Unit- IV	91.73	220kV CHP - Semtokha Fdr- IV	-53.17	-	
		-	-	220kV Malbase - Birpara Fdr.	66.98	+	
		-	-	66kV CHP - Chumdo Fdr.	1.58	+	
		-	-	66kV CHP - Gedu Fdr.	9.21	+	
		-	-	3x3MVA, 66/11kV TFR	1.11	+	
		Total	**366.85**	**Error at Station/Auxiliary Consumption/Losses**	**1.43**		
3	**24MW BHP (U/S)**	Unit- I	11.86	220kV BHP - Semtokha Fdr.	78.68	+	
		Unit- II	11.86	66kV BHP - Lobeysa Fdr.	18.50	+	
		Total	**23.72**	220kV BHP - Tsirang Fdr.	-32.46	-	
	60MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	1.11	+	
		Unit- II	20.79	30MVA ICT, 220/66kV			
		Total	**41.33**	**Error at Station/Auxiliary Consumption/Losses**	**0.78**		
4	**126MW DHPC**	Unit-I	63.54	220kV DHPC - Tsirang Fdr.	126.11	+	
		Unit-II	63.20	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**126.74**	**Error at Station/Auxiliary Consumption/Losses**	**0.63**		
5	**60MW KHP**	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	67.95	+	Note: Motanga Substation is bypassed through ERS tower
		Unit-II	16.22	132kV KHP - Kilikhar Fdr- II	6.99	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	53.80	+	
		-	-	132kV Motanga - Rangia Fdr.	44.46	+	
		-	-	220kV Tsirang - Jigmeling	89.60	+	
		Total	**65.72**	**Error at Station/Auxiliary Consumption/Losses**	**-9.72**		

Note: Load summary on July 11, 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**	1,679.33	268.21	250.82	1,321.52	17.39
2	**Eastern Grid**	429.92	56.88	66.78	462.64	-9.90
	Total	2,109.25	325.09	317.60	1,784.16	7.49

Note: Load Summary on July 11, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	216.47	219.41	280.97
2	**Eastern Grid**	36.42	39.02	57.66
	National	**252.89**	**258.43**	**338.63**

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	**Time**	**Load(MW)**
27-Dec-18	18:18hrs	399.35MW

Date:	**July 12, 2019**
Hours:	**09:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	187.80	400kV THP - Siliguri Fdr- I	269.00	+	
		Unit- II	184.93	400kV THP - Siliguri Fdr- II	268.00	+	
		Unit- III	186.58	400kV THP - Siliguri Fdr- IV	259.92	+	
		Unit- IV	187.22	400kV THP - Malbase Fdr- III	308.63	+	
		Unit- V	187.01	400kV Malbase - Siliguri	240.94	+	
		Unit- VI	186.28	-	-	-	
		Total	**1,119.82**	**Error at Station/Auxiliary Consumption/Losses**	**14.27**		
2	**720MW MHP**	Unit-I	179.20	400kV MHP - Jigmeling Fdr - I	179.00		Unit-II trip at 05:55hrs on 12/07/2019
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	0.00		
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III			
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	**179.20**	**Error at Station/Auxiliary Consumption/Losses**	**0.20**		
3	**336MW CHP**	Unit- I	91.56	220kV CHP - Birpara Fdr- I	125.04	+	
		Unit- II	91.61	220kV CHP - Birpara Fdr- II	124.57	+	
		Unit- III	91.50	220kV CHP - Malbase Fdr- III	176.30	+	
		Unit- IV	91.30	220kV CHP - Semtokha Fdr- IV	-69.92	-	
		-	-	220kV Malbase - Birpara Fdr.	68.65	+	
		-	-	66kV CHP - Chumdo Fdr.	-0.47	-	
		-	-	66kV CHP - Gedu Fdr.	9.20	+	
		-	-	3x3MVA, 66/11kV TFR	0.85	+	
		Total	**365.97**	**Error at Station/Auxiliary Consumption/Losses**	**0.40**		
4	**24MW BHP (U/S)**	Unit- I	11.84	220kV BHP - Semtokha Fdr.	90.44	+	
		Unit- II	11.84	66kV BHP - Lobeysa Fdr.	17.07	+	
		Total	**23.68**	220kV BHP - Tsirang Fdr.	-41.82	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.44	+	
		Unit- II	20.78	30MVA ICT, 220/66kV			
		Total	**41.32**	**Error at Station/Auxiliary Consumption/Losses**	**-1.13**		
5	**126MW DHPC**	Unit-I	60.30	220kV DHPC - Tsirang Fdr.	119.85	+	
		Unit-II	60.10	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**120.40**	**Error at Station/Auxiliary Consumption/Losses**	**0.55**		
6	**60MW KHP**	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	44.95	+	Note: Motanga Substation is bypassed through ERS tower. Unit-II under shutdown.
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	4.82	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	48.00	+	
		-	-	132kV Motanga - Rangia Fdr.	32.20	+	
		-	-	220kV Tsirang - Jigmeling	75.03	+	
		Total	**49.50**	**Error at Station/Auxiliary Consumption/Losses**	**-0.67**		

Note: Load summary on July 12, 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**	1,671.19	240.04	225.95	1,356.12	14.09
2	**Eastern Grid**	228.70	44.53	45.00	259.20	-0.47
	Total	1,899.89	284.57	270.95	1,615.32	13.62

Note: Load Summary on July 12, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	217.76	227.03	280.97
2	**Eastern Grid**	28.48	35.57	57.66
	National	**246.24**	**262.60**	**338.63**

NOTES: KHP & MHP LOADS 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.