LOAD-GENERATION BALANCE REPORT

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

Date:	**July 31, 2019**
Hours:	**19:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	187.12	400kV THP - Siliguri Fdr- I	264.30	+	
		Unit- II	186.45	400kV THP - Siliguri Fdr- II	261.40	+	
		Unit- III	187.16	400kV THP - Siliguri Fdr- IV	250.78	+	
		Unit- IV	187.66	400kV THP - Malbase Fdr- III	336.47	+	
		Unit- V	186.52	400kV Malbase - Siliguri	225.92	+	
		Unit- VI	186.15	-	-	-	
		Total	**1,121.06**	**Error at Station/Auxiliary Consumption/Losses**	**8.11**		
2	**720MW MHP**	Unit-I	187.10	400kV MHP - Jigmeling Fdr - I	188.19	+	
		Unit-II	185.90	400kV MHP - Jigmeling Fdr - II	184.27	+	
		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	**373.00**	**Error at Station/Auxiliary Consumption/Losses**	**0.54**		
2	**336MW CHP**	Unit- I	91.30	220kV CHP - Birpara Fdr- I	109.36	+	
		Unit- II	91.80	220kV CHP - Birpara Fdr- II	109.22	+	
		Unit- III	91.77	220kV CHP - Malbase Fdr- III	145.20	+	
		Unit- IV	91.99	220kV CHP - Semtokha Fdr- IV	-11.78	-	
		-	-	220kV Malbase - Birpara Fdr.	67.84	+	
		-	-	66kV CHP - Chumdo Fdr.	4.11	+	
		-	-	66kV CHP - Gedu Fdr.	7.93	+	
		-	-	3x3MVA, 66/11kV TFR	1.25	+	
		Total	**366.86**	**Error at Station/Auxiliary Consumption/Losses**	**1.57**		
3	**24MW BHP (U/S)**	Unit- I	11.84	220kV BHP - Semtokha Fdr.	41.40	+	
		Unit- II	11.84	66kV BHP - Lobeysa Fdr.	18.03	+	
		Total	**23.68**	220kV BHP - Tsirang Fdr.	4.40	+	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.71	+	
		Unit- II	20.39	30MVA ICT, 220/66kV			
		Total	**40.93**	**Error at Station/Auxiliary Consumption/Losses**	**0.07**		
4	**126MW DHPC**	Unit-I	63.54	220kV DHPC - Tsirang Fdr.	81.19	+	
		Unit-II	18.14	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**81.68**	**Error at Station/Auxiliary Consumption/Losses**	**0.49**		
5	**60MW KHP**	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	57.09	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	7.92	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	39.02	+	
		-	-	132kV Motanga - Rangia Fdr.	45.66	+	
		-	-	220kV Tsirang - Jigmeling	85.02	+	
		Total	**66.00**	**Error at Station/Auxiliary Consumption/Losses**	**0.49**		

Note: Load summary on July 31, 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**	1,634.21	260.37	250.13	1,288.82	10.24
2	**Eastern Grid**	439.00	66.88	65.85	457.14	1.03
	Total	2,073.21	327.25	315.98	1,745.96	11.27

Note: Load Summary on July 31, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	231.02	239.75	280.97
2	**Eastern Grid**	49.96	49.96	57.66
	National	**280.98**	**289.71**	**338.63**

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

Date:	**August 1, 2019**
Hours:	**09:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	186.38	400kV THP - Siliguri Fdr- I	270.30	+	
		Unit- II	185.78	400kV THP - Siliguri Fdr- II	268.40	+	
		Unit- III	187.13	400kV THP - Siliguri Fdr- IV	259.27	+	
		Unit- IV	185.87	400kV THP - Malbase Fdr- III	310.70	+	
		Unit- V	187.10	400kV Malbase - Siliguri	241.82	+	
		Unit- VI	185.66	-	-	-	
		Total	**1,117.92**	**Error at Station/Auxiliary Consumption/Losses**	**9.25**		
2	**720MW MHP**	Unit-I	187.20	400kV MHP - Jigmeling Fdr - I	187.31	+	
		Unit-II	185.30	400kV MHP - Jigmeling Fdr - II	183.60	+	
		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	**372.50**	**Error at Station/Auxiliary Consumption/Losses**	**1.59**		
3	**336MW CHP**	Unit- I	91.20	220kV CHP - Birpara Fdr- I	119.97	+	
		Unit- II	91.10	220kV CHP - Birpara Fdr- II	119.96	+	
		Unit- III	91.80	220kV CHP - Malbase Fdr- III	168.12	+	
		Unit- IV	91.70	220kV CHP - Semtokha Fdr- IV	-52.09	-	
		-	-	220kV Malbase - Birpara Fdr.	67.77	+	
		-	-	66kV CHP - Chumdo Fdr.	0.03	+	
		-	-	66kV CHP - Gedu Fdr.	8.55	+	
		-	-	3x3MVA, 66/11kV TFR	0.72	+	
		Total	**365.80**	**Error at Station/Auxiliary Consumption/Losses**	**0.54**		
4	**24MW BHP (U/S)**	Unit- I	11.85	220kV BHP - Semtokha Fdr.	71.22	+	
		Unit- II	11.85	66kV BHP - Lobeysa Fdr.	16.56	+	
		Total	**23.70**	220kV BHP - Tsirang Fdr.	-23.46	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.45	+	
		Unit- II	20.53	30MVA ICT, 220/66kV			
		Total	**41.07**	**Error at Station/Auxiliary Consumption/Losses**	**0.00**		
5	**126MW DHPC**	Unit-I	63.34	220kV DHPC - Tsirang Fdr.	97.07	+	
		Unit-II	34.18	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**97.52**	**Error at Station/Auxiliary Consumption/Losses**	**0.45**		
6	**60MW KHP**	Unit- I	16.50	132kV KHP - Nangkhor Fdr- I	61.19	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	4.28	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	16.50	132kV Gelephu - Salakati Fdr.	47.49	+	
		-	-	132kV Motanga - Rangia Fdr.	46.61	+	
		-	-	220kV Tsirang - Jigmeling	71.02	+	
		Total	**66.00**	**Error at Station/Auxiliary Consumption/Losses**	**0.23**		

Note: Load summary on August 01, 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**	1,646.01	227.50	217.26	1,347.49	10.24
2	**Eastern Grid**	438.50	44.51	42.69	465.01	1.82
	Total	2,084.51	272.01	259.95	1,812.50	12.06

Note: Load Summary on August 01, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	218.84	253.15	280.97
2	**Eastern Grid**	42.14	49.04	57.66
	National	**260.98**	**302.19**	**338.63**

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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