LOAD-GENERATION BALANCE REPORT

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

Date:	**October 6, 2019**
Hours:	**19:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	159.27	400kV THP - Siliguri Fdr- I	281.70	+	400kV THP-SIL IV under breakdown
		Unit- II	149.74	400kV THP - Siliguri Fdr- II	281.24	+	
		Unit- III	99.72	400kV THP - Siliguri Fdr- IV	275.47		
		Unit- IV	149.52	400kV THP - Malbase Fdr- III	0.00	+	
		Unit- V	131.32	400kV Malbase - Siliguri	0.00	-	
		Unit- VI	159.65	-	-	-	
		Total	**849.22**	**Error at Station/Auxiliary Consumption/Losses**	**10.81**		
2	**720MW MHP**	Unit-I	82.50	400kV MHP - Jigmeling Fdr - I	136.50	+	Unit IV trip at 16:49Hrs & Unit-III under Shutdown
		Unit-II	193.25	400kV MHP - Jigmeling Fdr - II	135.50	+	
		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	0.00		
		-	-	(Local Load)	0.00		
		Total	**275.75**	**Error at Station/Auxiliary Consumption/Losses**	**3.75**		
2	**336MW CHP**	Unit- I	0.00	220kV CHP - Birpara Fdr- I	68.75	+	Unit-I under Shutdown
		Unit- II	91.94	220kV CHP - Birpara Fdr- II	68.48	+	
		Unit- III	91.95	220kV CHP - Malbase Fdr- III	153.52	+	
		Unit- IV	91.63	220kV CHP - Semtokha Fdr- IV	-30.21	-	
		-	-	220kV Malbase - Birpara Fdr.	-6.21	-	
		-	-	66kV CHP - Chumdo Fdr.	5.25	+	
		-	-	66kV CHP - Gedu Fdr.	8.11	+	
		-	-	3x3MVA, 66/11kV TFR	1.50	+	
		Total	**275.52**	**Error at Station/Auxiliary Consumption/Losses**	**0.12**		
3	**24MW BHP (U/S)**	Unit- I	11.78	220kV BHP - Semtokha Fdr.	66.07	+	
		Unit- II	11.78	66kV BHP - Lobeysa Fdr.	19.29	+	
		Total	**23.56**	220kV BHP - Tsirang Fdr.	-21.01	-	
	40MW BHP (L/S)	Unit- I	20.95	5MVA, 66/11kV TFR	0.61	+	
		Unit- II	20.18	30MVA ICT, 220/66kV			
		Total	**41.13**	**Error at Station/Auxiliary Consumption/Losses**	**0.27**		
4	**126MW DHPC**	Unit-I	40.41	220kV DHPC - Tsirang Fdr.	85.71	+	
		Unit-II	45.74	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**86.15**	**Error at Station/Auxiliary Consumption/Losses**	**0.44**		
5	**60MW KHP**	Unit- I	16.47	132kV KHP - Nangkhor Fdr- I	59.55	+	
		Unit-II	16.58	132kV KHP - Kilikhar Fdr- II	6.12	+	
		Unit- III	16.68	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.74	132kV Gelephu - Salakati Fdr.	26.05	+	
		-	-	132kV Motanga - Rangia Fdr.	46.10	+	
		-	-	220kV Tsirang - Jigmeling	71.49	+	
		Total	**66.47**	**Error at Station/Auxiliary Consumption/Losses**	**0.30**		

Note: Load summary on October 06, 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**	1,275.58	234.66	223.56	969.43	11.10
2	**Eastern Grid**	342.22	69.56	65.51	344.15	4.05
	Total	1,617.80	304.22	289.07	1,313.58	15.15

Note: Load Summary on October 06, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	243.21	243.21	281.60
2	**Eastern Grid**	58.76	58.76	62.24
	National	**301.97**	**301.97**	**343.84**

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:	**October 7, 2019**
Hours:	**09:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	159.28	400kV THP - Siliguri Fdr- I	282.40	+	400kV THP-Malbase under shutdown.
		Unit- II	148.44	400kV THP - Siliguri Fdr- II	280.21	+	
		Unit- III	100.93	400kV THP - Siliguri Fdr- IV	272.18	+	
		Unit- IV	149.82	400kV THP - Malbase Fdr- III	0.00	+	
		Unit- V	131.32	400kV Malbase - Siliguri	14.10	+	
		Unit- VI	159.53	-	-	-	
		Total	**849.32**	**Error at Station/Auxiliary Consumption/Losses**	**14.53**		
2	**720MW MHP**	Unit-I	82.34	400kV MHP - Jigmeling Fdr - I	138.90	+	Unit- III under breakdown.
		Unit-II	195.59	400kV MHP - Jigmeling Fdr - II	138.54	+	
		Unit-III		400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV		400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	**277.93**	**Error at Station/Auxiliary Consumption/Losses**	**0.49**		
3	**336MW CHP**	Unit- I	0.00	220kV CHP - Birpara Fdr- I	78.82	+	Unit-I under breakdown.
		Unit- II	91.87	220kV CHP - Birpara Fdr- II	78.84	+	
		Unit- III	91.59	220kV CHP - Malbase Fdr- III	167.78	+	
		Unit- IV	91.76	220kV CHP - Semtokha Fdr- IV	-61.89	-	
		-	-	220kV Malbase - Birpara Fdr.	0.81	+	
		-	-	66kV CHP - Chumdo Fdr.	1.05	-	
		-	-	66kV CHP - Gedu Fdr.	8.26	+	
		-	-	3x3MVA, 66/11kV TFR	0.75	+	
		Total	**275.22**	**Error at Station/Auxiliary Consumption/Losses**	**1.61**		
4	**24MW BHP (U/S)**	Unit- I	11.79	220kV BHP - Semtokha Fdr.	85.71	+	
		Unit- II	11.79	66kV BHP - Lobeysa Fdr.	17.17	+	
		Total	**23.58**	220kV BHP - Tsirang Fdr.	-37.22	-	
	40MW BHP (L/S)	Unit- I	20.94	5MVA, 66/11kV TFR	0.35	+	
		Unit- II	20.17	30MVA ICT, 220/66kV			
		Total	**41.11**	**Error at Station/Auxiliary Consumption/Losses**	**-1.32**		
5	**126MW DHPC**	Unit-I	48.40	220kV DHPC - Tsirang Fdr.	96.21	+	
		Unit-II	48.22	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**96.62**	**Error at Station/Auxiliary Consumption/Losses**	**0.41**		
6	**60MW KHP**	Unit- I	16.29	132kV KHP - Nangkhor Fdr- I	60.38	+	
		Unit-II	16.70	132kV KHP - Kilikhar Fdr- II	8.65	+	
		Unit- III	16.59	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.57	132kV Gelephu - Salakati Fdr.	36.56	+	
		-	-	132kV Motanga - Rangia Fdr.	40.60	+	
		-	-	220kV Tsirang - Jigmeling	55.74	+	
		Total	**66.15**	**Error at Station/Auxiliary Consumption/Losses**	**-3.28**		

Note: Load summary on October 07, 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**	1,285.85	222.75	207.52	1,007.36	15.23
2	**Eastern Grid**	344.08	45.22	48.01	354.60	-2.79
	Total	1,629.93	267.97	255.53	1,361.96	12.44

Note: Load Summary on October 07, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	214.06	240.68	281.60
2	**Eastern Grid**	43.70	53.03	62.24
	National	**257.76**	**293.71**	**343.84**

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.