LOAD-GENERATION BALANCE REPORT

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

Date:	**October 13, 2019**
Hours:	**19:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	169.45	400kV THP - Siliguri Fdr- I	232.24	+	400kV THP-Mal III and Unit II under shutdown
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	231.97	+	
		Unit- III	140.85	400kV THP - Siliguri Fdr- IV	231.60	+	
		Unit- IV	150.81	400kV THP - Malbase Fdr- III	0.00		
		Unit- V	99.88	400kV Malbase - Siliguri	-49.31	-	
		Unit- VI	140.48	-	-	-	
		Total	**701.47**	**Error at Station/Auxiliary Consumption/Losses**	**5.66**		
2	**720MW MHP**	Unit-I	80.51	400kV MHP - Jigmeling Fdr - I	209.87	+	Unit-III under Shutdown
		Unit-II	163.30	400kV MHP - Jigmeling Fdr - II	208.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	177.90	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		Total	**421.71**	**Error at Station/Auxiliary Consumption/Losses**	**3.84**		
2	**336MW CHP**	Unit- I	0.00	220kV CHP - Birpara Fdr- I	72.85	+	Unit-I under Shutdown
		Unit- II	91.53	220kV CHP - Birpara Fdr- II	73.17	+	
		Unit- III	90.78	220kV CHP - Malbase Fdr- III	124.42	+	
		Unit- IV	92.42	220kV CHP - Semtokha Fdr- IV	-11.54	-	
		-	-	220kV Malbase - Birpara Fdr.	24.81	+	
		-	-	66kV CHP - Chumdo Fdr.	6.74	+	
		-	-	66kV CHP - Gedu Fdr.	7.13	+	
		-	-	3x3MVA, 66/11kV TFR	1.53	+	
		Total	**274.73**	**Error at Station/Auxiliary Consumption/Losses**	**0.43**		
3	**24MW BHP (U/S)**	Unit- I	11.80	220kV BHP - Semtokha Fdr.	49.69	+	
		Unit- II	11.80	66kV BHP - Lobeysa Fdr.	18.40	+	
		Total	**23.60**	220kV BHP - Tsirang Fdr.	-3.87	-	
	40MW BHP (L/S)	Unit- I	20.97	5MVA, 66/11kV TFR	0.69	+	
		Unit- II	20.19	30MVA ICT, 220/66kV			
		Total	**41.16**	**Error at Station/Auxiliary Consumption/Losses**	**0.15**		
4	**126MW DHPC**	Unit-I	30.30	220kV DHPC - Tsirang Fdr.	74.62	+	
		Unit-II	44.74	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**75.04**	**Error at Station/Auxiliary Consumption/Losses**	**0.42**		
5	**60MW KHP**	Unit- I	16.51	132kV KHP - Nangkhor Fdr- I	56.43	+	
		Unit-II	16.66	132kV KHP - Kilikhar Fdr- II	8.68	+	
		Unit- III	16.62	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.31	132kV Gelephu - Salakati Fdr.	32.00	+	
		-	-	132kV Motanga - Rangia Fdr.	44.31	+	
		-	-	220kV Tsirang - Jigmeling	67.45	+	
		Total	**66.10**	**Error at Station/Auxiliary Consumption/Losses**	**0.59**		

Note: Load summary on October 13, 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**	1,116.00	231.22	224.86	817.33	6.36
2	**Eastern Grid**	487.81	61.08	56.65	494.18	4.43
	Total	1,603.81	292.30	281.51	1,311.51	10.79

Note: Load Summary on October 13, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	253.71	253.71	281.60
2	**Eastern Grid**	44.94	48.86	62.24
	National	**298.65**	**302.57**	**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 14, 2019**
Hours:	**09:00 Hours**

Sl. No.	Hydropower Plant	Unit	MW	Name of Feeders	Load (MW)	Sign	Remarks
1	**1020MW THP**	Unit- I	120.00	400kV THP - Siliguri Fdr- I	202.66	+	400kV THP-Mal III and Unit II under shutdown
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	200.76	+	
		Unit- III	100.08	400kV THP - Siliguri Fdr- IV	196.60	+	
		Unit- IV	99.88	400kV THP - Malbase Fdr- III	0.00		
		Unit- V	149.18	400kV Malbase - Siliguri	-6.34	-	
		Unit- VI	140.62	-	-	-	
		Total	**609.76**	**Error at Station/Auxiliary Consumption/Losses**	**9.74**		
2	**720MW MHP**	Unit-I	80.50	400kV MHP - Jigmeling Fdr - I	205.10	+	Unit- III under breakdown.
		Unit-II	164.50	400kV MHP - Jigmeling Fdr - II	207.30	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	167.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		Total	**412.00**	**Error at Station/Auxiliary Consumption/Losses**	**-0.40**		
3	**336MW CHP**	Unit- I	0.00	220kV CHP - Birpara Fdr- I	0.00	+	Unit-I under breakdown AND 220kV CHP_BIR I under breakdown
		Unit- II	70.18	220kV CHP - Birpara Fdr- II	102.36	+	
		Unit- III	91.24	220kV CHP - Malbase Fdr- III	175.55	+	
		Unit- IV	91.19	220kV CHP - Semtokha Fdr- IV	-35.33	-	
		-	-	220kV Malbase - Birpara Fdr.	27.47	+	
		-	-	66kV CHP - Chumdo Fdr.	2.35	+	
		-	-	66kV CHP - Gedu Fdr.	8.27	+	
		-	-	3x3MVA, 66/11kV TFR	0.82	+	
		Total	**252.61**	**Error at Station/Auxiliary Consumption/Losses**	**-1.41**		
4	**24MW BHP (U/S)**	Unit- I	11.78	220kV BHP - Semtokha Fdr.	59.79	+	
		Unit- II	11.78	66kV BHP - Lobeysa Fdr.	16.37	+	
		Total	**23.56**	220kV BHP - Tsirang Fdr.	-11.68	-	
	40MW BHP (L/S)	Unit- I	20.98	5MVA, 66/11kV TFR	0.35	+	
		Unit- II	20.21	30MVA ICT, 220/66kV			
		Total	**41.19**	**Error at Station/Auxiliary Consumption/Losses**	**-0.08**		
5	**126MW DHPC**	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	71.58	+	
		Unit-II	41.71	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		Total	**72.00**	**Error at Station/Auxiliary Consumption/Losses**	**0.42**		
6	**60MW KHP**	Unit- I	16.47	132kV KHP - Nangkhor Fdr- I	60.80	+	
		Unit-II	16.52	132kV KHP - Kilikhar Fdr- II	4.43	+	
		Unit- III	16.55	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.64	132kV Gelephu - Salakati Fdr.	38.51	+	
		-	-	132kV Motanga - Rangia Fdr.	40.66	+	
		-	-	220kV Tsirang - Jigmeling	57.60	+	
		Total	**66.18**	**Error at Station/Auxiliary Consumption/Losses**	**0.45**		

Note: Load summary on October 14, 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**	999.12	218.01	209.34	723.51	8.67
2	**Eastern Grid**	478.18	44.21	44.16	491.57	0.05
	Total	1,477.30	262.22	253.50	1,215.08	8.72

Note: Load Summary on October 14, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	**Western Grid**	225.57	259.64	281.60
2	**Eastern Grid**	30.96	46.86	62.24
	National	**256.53**	**306.50**	**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.

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