

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	November 18, 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	100.67	400kV THP - Siliguri Fdr- I	100.30	+	Unit-IV & V under shutdown. Unit-III at standby. 400kV THP_SILI II under Maintenance.
		Unit- II	99.40	400kV THP - Siliguri Fdr- II	0.00		
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	95.92	+	
		Unit- IV	0.00	400kV THP - Malbase Fdr- III	157.32	+	
		Unit- V	0.00	400kV Malbase - Siliguri	80.84	+	
		Unit- VI	160.09	-	-	-	
		<b>Total</b>	<b>360.16</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>6.62</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	92.00	+	Unit I at standby. Unit-II under shutdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	92.00	+	
		Unit-III	90.89	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	90.12	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>181.01</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-2.99</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	22.10	+	Unit-I & II under shutdown
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	22.39	+	
		Unit- III	85.74	220kV CHP - Malbase Fdr- III	82.58	+	
		Unit- IV	87.69	220kV CHP - Sementokha Fdr- IV	25.54	+	
		-	-	220kV Malbase - Birpara Fdr.	-26.54	-	
		-	-	66kV CHP - Chumdo Fdr.	12.71	+	
		-	-	66kV CHP - Gedu Fdr.	5.46	+	
		-	-	3x3MVA, 66/11kV TFR	1.57	+	
		<b>Total</b>	<b>173.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.08</b>		
3	24MW BHP (U/S)	Unit- I	5.74	220kV BHP - Sementokha Fdr.	25.94	+	
		Unit- II	5.74	66kV BHP - Lobeysa Fdr.	16.68	+	
		<b>Total</b>	<b>11.48</b>	220kV BHP - Tsirang Fdr.	-8.61	-	
	40MW BHP (L/S)	Unit- I	11.94	5MVA, 66/11kV TFR	0.71	+	
		Unit- II	11.45	30MVA ICT, 220/66kV			
<b>Total</b>	<b>23.39</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.15</b>				
4	126MW DHPC	Unit-I	0.00	220kV DHPC - Tsirang Fdr.	35.91	+	Unit I at Standby
		Unit-II	36.16	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>36.16</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.25</b>		
5	60MW KHP	Unit- I	12.34	132kV KHP - Nangkhor Fdr- I	27.12	+	Unit-II shutdown
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	6.66	+	
		Unit- III	11.32	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	11.23	132kV Gelephu - Salakati Fdr.	-8.80	-	
		-	-	132kV Motanga - Rangia Fdr.	4.07	+	
		-	-	220kV Tsirang - Jigmeling	24.70	+	
		<b>Total</b>	<b>34.89</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.71</b>		

Note: Load summary on November 18, 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	604.62	284.91	276.81	295.01	8.10
2	Eastern Grid	215.90	61.33	63.61	179.27	-2.28
	<b>Total</b>	<b>820.52</b>	<b>346.24</b>	<b>340.42</b>	<b>474.28</b>	<b>5.82</b>

Note: Load Summary on November 18, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	272.97	274.28	281.60
2	Eastern Grid	52.59	52.59	62.24
	<b>National</b>	<b>325.56</b>	<b>326.87</b>	<b>343.84</b>

**NOTES:**

- 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.

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	November 19, 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	100.38	400kV THP - Siliguri Fdr- I	89.42	+	Unit-IV & V under shutdown. Unit-III at standby. 400kV THP_SILI-II under Maintenance.
		Unit- II	97.79	400kV THP - Siliguri Fdr- II	0.00		
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	85.01	+	
		Unit- IV	0.00	400kV THP - Malbase Fdr- III	130.70	+	
		Unit- V	0.00	400kV Malbase - Siliguri	74.44	+	
		Unit- VI	110.07	-	-	-	
		<b>Total</b>	<b>308.24</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.11</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	89.40	+	Unit-I at standby. Unit-II under shutdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	89.89	+	
		Unit-III	120.80	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	63.17	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)			
		<b>Total</b>	<b>183.97</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>4.68</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	18.24	+	Unit-I & II under shutdownn.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	18.24	+	
		Unit- III	71.51	220kV CHP - Malbase Fdr- III	88.03	+	
		Unit- IV	69.47	220kV CHP - Sementokha Fdr- IV	0.40	-	
		-	-	220kV Malbase - Birpara Fdr.	-37.75	-	
		-	-	66kV CHP - Chumdo Fdr.	8.70	+	
		-	-	66kV CHP - Gedu Fdr.	5.66	+	
		-	-	3x3MVA, 66/11kV TFR	1.23	+	
		<b>Total</b>	<b>140.98</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.48</b>		
4	24MW BHP (U/S)	Unit- I	5.74	220kV BHP - Sementokha Fdr.	40.90	+	
		Unit- II	5.74	66kV BHP - Lobeysa Fdr.	14.98	+	
		<b>Total</b>	<b>11.48</b>	220kV BHP - Tsirang Fdr.	-21.75	-	
	40MW BHP (L/S)	Unit- I	11.75	5MVA, 66/11kV TFR	0.75	+	
		Unit- II	11.75	30MVA ICT, 220/66kV			
<b>Total</b>	<b>23.50</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.10</b>				
5	126MW DHPC	Unit-I	0.00	220kV DHPC - Tsirang Fdr.	34.97	+	Unit-I Standby
		Unit-II	35.47	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>35.47</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.50</b>		
6	60MW KHP	Unit- I	12.26	132kV KHP - Nangkhor Fdr- I	30.21	+	Unit-II under shutdown
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	3.71	+	
		Unit- III	11.27	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	11.16	132kV Gelephu - Salakati Fdr.	-7.84	-	
		-	-	132kV Motanga - Rangia Fdr.	4.40	+	
		-	-	220kV Tsirang - Jigmeling	10.50	+	
		<b>Total</b>	<b>34.69</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.47</b>		

Note: Load summary on November 19, 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	519.67	261.57	257.38	247.60	4.19
2	Eastern Grid	218.66	53.31	48.16	175.85	5.15
	<b>Total</b>	<b>738.33</b>	<b>314.88</b>	<b>305.54</b>	<b>423.45</b>	<b>9.34</b>

Note: Load Summary on November 19, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	249.18	266.61	293.93
2	Eastern Grid	33.40	50.84	62.30
	<b>National</b>	<b>282.58</b>	<b>317.45</b>	<b>356.23</b>

**NOTES:**

- 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.
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