

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	December 12, 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	70.66	400kV THP - Siliguri Fdr- I	43.68	+	Unit-III at standby. Unit- V & VI under shutdown. 400kV THP_SILI-IV shutdown
		Unit- II	70.28	400kV THP - Siliguri Fdr- II	42.74	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	0.00		
		Unit- IV	70.93	400kV THP - Malbase Fdr- III	119.24	+	
		Unit- V	0.00	400kV Malbase - Siliguri	25.18	+	
		Unit- VI	0.00	-	-	-	
		<b>Total</b>	<b>211.87</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>6.21</b>		
2	720MW MHP	Unit-I	169.7	400kV MHP - Jigmeling Fdr - I	0.00		Unit-II, III IV under maintenance. MHP-JLG I under breakdown.
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	168.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III			
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV			
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>169.70</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.70</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	7.09	+	Unit-I & II under shutdown.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	6.93	+	
		Unit- III	60.78	220kV CHP - Malbase Fdr- III	47.71	+	
		Unit- IV	75.59	220kV CHP - Sementokha Fdr- IV	52.03	+	
		-	-	220kV Malbase - Birpara Fdr.	-25.27	-	
		-	-	66kV CHP - Chumdo Fdr.	15.53	+	
		-	-	66kV CHP - Gedu Fdr.	3.82	+	
		-	-	3x3MVA, 66/11kV TFR	1.83	+	
		<b>Total</b>	<b>136.37</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.43</b>		
3	24MW BHP (U/S)	Unit- I	8.68	220kV BHP - Sementokha Fdr.	13.69	+	U/S Unit-II under maintenance. L/S Unit-I at standby.
		Unit- II	0.00	66kV BHP - Lobeysa Fdr.	18.30	+	
		<b>Total</b>	<b>8.68</b>	220kV BHP - Tsirang Fdr.	-6.58	-	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.85	+	
		Unit- II	17.60	30MVA ICT, 220/66kV			
<b>Total</b>	<b>17.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.02</b>				
4	126MW DHPC	Unit-I	26.74	220kV DHPC - Tsirang Fdr.	26.51	+	Unit II at Standby.
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>26.74</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>		
5	60MW KHP	Unit- I	12.89	132kV KHP - Nangkhor Fdr- I	15.40	+	Unit-III at standby. Unit-II under shutdown.
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	10.14	+	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	13.70	132kV Gelephu - Salakati Fdr.	-13.62	-	
		-	-	132kV Motanga - Rangia Fdr.	-9.14	-	
		-	-	220kV Tsirang - Jigmeling	17.13	+	
		<b>Total</b>	<b>26.59</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.75</b>		

Note: Load summary on December 12, 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	401.26	283.78	275.89	100.35	7.89
2	Eastern Grid	196.29	68.18	65.73	145.24	2.45
	<b>Total</b>	<b>597.55</b>	<b>351.96</b>	<b>341.62</b>	<b>245.59</b>	<b>10.34</b>

Note: Load Summary on December 12, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	280.03	280.03	319.28
2	Eastern Grid	59.60	62.57	71.32
	<b>National</b>	<b>339.63</b>	<b>342.60</b>	<b>390.60</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:	December 13, 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	70.51	400kV THP - Siliguri Fdr- I	48.50	+	Unit- III under standby Unit- V & VI under shutdown. 400kV THP_SILI-IV shutdown.
		Unit- II	69.56	400kV THP - Siliguri Fdr- II	46.06	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	0.00		
		Unit- IV	70.83	400kV THP - Malbase Fdr- III	109.36	+	
		Unit- V	0.00	400kV Malbase - Siliguri	31.74	+	
		Unit- VI	0.00	-	-	-	
		<b>Total</b>	<b>210.90</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>6.98</b>		
2	720MW MHP	Unit-I	140.00	400kV MHP - Jigmeling Fdr- I			Unit-III & IV under maintenance. Unit II standby 400kV MHP-JLG I under breakdown.
		Unit-II	0.00	400kV MHP - Jigmeling Fdr- II	140.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr- III			
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr- IV			
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>140.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.00</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	1.51	+	Unit-I & II under shutdownn.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	1.27	+	
		Unit- III	48.77	220kV CHP - Malbase Fdr- III	47.47	+	
		Unit- IV	54.10	220kV CHP - Sementokha Fdr- IV	32.32	+	
		-	-	220kV Malbase - Birpara Fdr.	-33.67	-	
		-	-	66kV CHP - Chumdo Fdr.	12.89	+	
		-	-	66kV CHP - Gedu Fdr.	4.64	+	
		-	-	3x3MVA, 66/11kV TFR	1.41	+	
<b>Total</b>	<b>102.87</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.36</b>				
4	24MW BHP (U/S)	Unit- I	8.55	220kV BHP - Sementokha Fdr.	23.41	+	Upper stage Unit-II shutdown. Lower Stage Unit-I standby.
		Unit- II	0.00	66kV BHP - Lobeyasa Fdr.	16.17	+	
		<b>Total</b>	<b>8.55</b>	220kV BHP - Tsirang Fdr.	-14.08	-	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.54	+	
		Unit- II	17.16	30MVA ICT, 220/66kV			
<b>Total</b>	<b>17.16</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.33</b>				
5	126MW DHPC	Unit-I	26.26	220kV DHPC - Tsirang Fdr.	26.07	+	Unit-II at Standby
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>26.26</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.19</b>		
6	60MW KHP	Unit- I	12.90	132kV KHP - Nangkhon Fdr- I	16.35	+	Unit-II under shutdown. Unit-III Standby.
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	7.67	+	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	12.37	132kV Gelephu - Salakati Fdr.	-13.40	-	
		-	-	132kV Motanga - Rangia Fdr.	-7.68	-	
		-	-	220kV Tsirang - Jigmeling	8.00	+	
		<b>Total</b>	<b>25.27</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.95</b>		

**Note: Load summary on December 13, 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	365.74	262.33	254.13	95.41	8.20
2	Eastern Grid	165.27	54.35	53.40	118.92	0.95
	<b>Total</b>	<b>531.01</b>	<b>316.68</b>	<b>307.53</b>	<b>214.33</b>	<b>9.15</b>

**Note: Load Summary on December 13, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	274.78	296.95	319.28
2	Eastern Grid	53.12	67.31	71.32
	<b>National</b>	<b>327.90</b>	<b>364.26</b>	<b>390.60</b>

**NOTES:ALL EASTERN LOADS COLLECTED FROM SITE**

- 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.