

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

**Date:** September 1, 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	187.00	400kV THP - Siliguri Fdr- I	189.99	+	
		Unit- II	78.27	400kV THP - Siliguri Fdr- II	189.56	+	
		Unit- III	186.77	400kV THP - Siliguri Fdr- IV	189.04	+	
		Unit- IV	140.41	400kV THP - Malbase Fdr- III	283.72	+	
		Unit- V	79.77	400kV Malbase - Siliguri	157.53	+	
		Unit- VI	186.38	-	-	-	
		<b>Total</b>	<b>858.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>6.29</b>		
2	720MW MHP	Unit-I	190.16	400kV MHP - Jigmeling Fdr - I	279.80	+	Unit-III under shutdown
		Unit-II	179.73	400kV MHP - Jigmeling Fdr - II	277.90	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	192.60	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>562.49</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>4.79</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	77.57	+	CHP Unit-I under breakdown..
		Unit- II	91.20	220kV CHP - Birpara Fdr- II	77.72	+	
		Unit- III	91.40	220kV CHP - Malbase Fdr- III	99.18	+	
		Unit- IV	91.45	220kV CHP - Semtokha Fdr- IV	4.88	+	
		-	-	220kV Malbase - Birpara Fdr.	51.78	+	
		-	-	66kV CHP - Chumdo Fdr.	6.33	+	
		-	-	66kV CHP - Gedu Fdr.	6.54	+	
		-	-	3x3MVA, 66/11kV TFR	1.37	+	
<b>Total</b>	<b>274.05</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.46</b>				
3	24MW BHP (U/S)	Unit- I	9.94	220kV BHP - Semtokha Fdr.	29.33	+	
		Unit- II	9.94	66kV BHP - Lobeyasa Fdr.	17.53	+	
		<b>Total</b>	<b>19.88</b>	220kV BHP - Tsirang Fdr.	9.51	+	
	40MW BHP (L/S)	Unit- I	18.91	5MVA, 66/11kV TFR	0.63	+	
		Unit- II	18.24	30MVA ICT, 220/66kV			
<b>Total</b>	<b>37.15</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.03</b>				
4	126MW DHPC	Unit-I	31.31	220kV DHPC - Tsirang Fdr.	71.07	+	
		Unit-II	40.18	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>71.49</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.42</b>		
5	60MW KHP	Unit- I	16.46	132kV KHP - Nangkor Fdr- I	55.62	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.51	132kV KHP - Kilikhar Fdr- II	9.54	+	
		Unit- III	16.50	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.43	132kV Gelephu - Salakati Fdr.	31.25	+	
		-	-	132kV Motanga - Rangia Fdr.	45.86	+	
		-	-	220kV Tsirang - Jigmeling	75.82	+	
		<b>Total</b>	<b>65.90</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.24</b>		

**Note: Load summary on September 01, 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	1,261.17	252.16	244.96	933.19	7.20
2	Eastern Grid	628.39	69.40	64.37	634.81	5.03
	<b>Total</b>	1,889.56	321.56	309.33	1,568.00	12.23

**Note: Load Summary on September 01, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	231.10	236.35	259.44
2	Eastern Grid	39.96	39.96	55.98
	<b>National</b>	<b>271.06</b>	<b>276.31</b>	<b>315.42</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

<b>Date:</b>	<b>September 2, 2019</b>
<b>Hours:</b>	<b>09:00 Hours</b>

<b>Date</b>	<b>Time</b>	<b>Load(MW)</b>
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	185.26	400kV THP - Siliguri Fdr- I	220.85	+	
		Unit- II	103.71	400kV THP - Siliguri Fdr- II	219.42	+	
		Unit- III	187.45	400kV THP - Siliguri Fdr- IV	218.65	+	
		Unit- IV	187.00	400kV THP - Malbase Fdr- III	285.85	+	
		Unit- V	98.69	400kV Malbase - Siliguri	190.92	+	
		Unit- VI	187.19	-	-	-	
		<b>Total</b>	<b>949.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>4.53</b>		
2	720MW MHP	Unit-I	190.53	400kV MHP - Jigmeling Fdr - I	280.30	+	Unit- III under shutdown
		Unit-II	179.20	400kV MHP - Jigmeling Fdr - II	280.50	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	192.70	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>562.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.63</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	77.91	+	CHP Unit-I under breakdown.
		Unit- II	91.54	220kV CHP - Birpara Fdr- II	77.89	+	
		Unit- III	91.53	220kV CHP - Malbase Fdr- III	119.22	+	
		Unit- IV	91.33	220kV CHP - Semtokha Fdr- IV	-10.36	-	
		-	-	220kV Malbase - Birpara Fdr.	35.45	+	
		-	-	66kV CHP - Chumdo Fdr.	2.31	+	
		-	-	66kV CHP - Gedu Fdr.	6.29	+	
		<b>Total</b>	<b>274.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.44</b>		
4	24MW BHP (U/S)	Unit- I	8.96	220kV BHP - Semtokha Fdr.	29.53	+	
		Unit- II	8.96	66kV BHP - Lobeyasa Fdr.	13.21	+	
		<b>Total</b>	<b>17.92</b>	220kV BHP - Tsirang Fdr.	8.52	-	
	40MW BHP (L/S)	Unit- I	17.27	5MVA, 66/11kV TFR	0.38	+	
		Unit- II	16.60	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>33.87</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.15</b>		
5	126MW DHPC	Unit-I	29.31	220kV DHPC - Tsirang Fdr.	67.01	+	
		Unit-II	38.09	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>67.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.39</b>		
6	60MW KHP	Unit- I	16.56	132kV KHP - Nangkhor Fdr- I	62.04	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.48	132kV KHP - Kilikhar Fdr- II	3.19	+	
		Unit- III	16.49	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.46	132kV Gelephu - Salakati Fdr.	39.41	+	
		-	-	132kV Motanga - Rangia Fdr.	51.25	+	
		-	-	220kV Tsirang - Jigmeling	74.55	+	
		<b>Total</b>	<b>65.99</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.26</b>		

**Note: Load summary on September 02, 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	1,342.89	227.25	221.74	1,041.09	5.51
2	Eastern Grid	628.42	51.51	49.62	651.46	1.89
	<b>Total</b>	<b>1,971.31</b>	<b>278.76</b>	<b>271.36</b>	<b>1,692.55</b>	<b>7.40</b>

**Note: Load Summary on September 02, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	202.74	247.40	259.44
2	Eastern Grid	27.65	41.13	55.98
	<b>National</b>	<b>230.39</b>	<b>288.53</b>	<b>315.42</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.