

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date: August 25, 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	186.87	400kV THP - Siliguri Fdr- I	256.38	+	
		Unit- II	188.59	400kV THP - Siliguri Fdr- II	254.53	+	
		Unit- III	187.44	400kV THP - Siliguri Fdr- IV	256.00	+	
		Unit- IV	187.64	400kV THP - Malbase Fdr- III	347.00	+	
		Unit- V	186.79	400kV Malbase - Siliguri	220.03	+	
		Unit- VI	185.72	-	-	-	
		<b>Total</b>	<b>1,123.05</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>9.14</b>		
2	720MW MHP	Unit-I	186.51	400kV MHP - Jigmeling Fdr - I	187.92	+	Unit- II & III under shutdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	184.84	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	187.92	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>374.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.67</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	79.52	+	Unit-I tripped since 23/08/2019.
		Unit- II	90.60	220kV CHP - Birpara Fdr- II	79.15	+	
		Unit- III	91.98	220kV CHP - Malbase Fdr- III	104.16	+	
		Unit- IV	91.27	220kV CHP - Semtokha Fdr- IV	-4.22	-	
		-	-	220kV Malbase - Birpara Fdr.	50.15	+	
		-	-	66kV CHP - Chumdo Fdr.	5.41	+	
		-	-	66kV CHP - Gedu Fdr.	6.84	+	
		-	-	3x3MVA, 66/11kV TFR	1.30	+	
<b>Total</b>	<b>273.85</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.69</b>				
3	24MW BHP (U/S)	Unit- I	8.87	220kV BHP - Semtokha Fdr.	36.25	+	
		Unit- II	8.87	66kV BHP - Lobeyasa Fdr.	15.63	+	
		<b>Total</b>	<b>17.74</b>	220kV BHP - Tsirang Fdr.	-2.27	-	
	40MW BHP (L/S)	Unit- I	16.68	5MVA, 66/11kV TFR	0.69	+	
		Unit- II	16.02	30MVA ICT, 220/66kV			
<b>Total</b>	<b>32.70</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.14</b>				
4	126MW DHPC	Unit-I	30.30	220kV DHPC - Tsirang Fdr.	78.10	+	
		Unit-II	48.20	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>78.50</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.40</b>		
5	60MW KHP	Unit- I	0.00	132kV KHP - Nangkor Fdr- I	-7.77	-	Partial Eastern blackout at 18:34hrs to 18:38hrs Motanga Substation is bypassed through ERS tower
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	7.27	+	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	0.00	132kV Gelephu - Salakati Fdr.	36.55	+	
		-	-	132kV Motanga - Rangia Fdr.	-5.80	-	
		-	-	220kV Tsirang - Jigmeling	72.27	+	
		<b>Total</b>	<b>0.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.00</b>		

**Note: Load summary on August 25, 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	1,525.84	257.81	246.44	1,195.76	11.37
2	Eastern Grid	374.43	43.19	41.52	403.51	1.67
	<b>Total</b>	<b>1,900.27</b>	<b>301.00</b>	<b>287.96</b>	<b>1,599.27</b>	<b>13.04</b>

**Note: Load Summary on August 25, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	251.20	251.20	259.44
2	Eastern Grid	46.60	48.66	55.98
	<b>National</b>	<b>297.80</b>	<b>299.86</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

Date: August 26, 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	186.70	400kV THP - Siliguri Fdr- I	268.94	+	
		Unit- II	187.96	400kV THP - Siliguri Fdr- II	265.46	+	
		Unit- III	187.97	400kV THP - Siliguri Fdr- IV	258.36	+	
		Unit- IV	187.24	400kV THP - Malbase Fdr- III	320.60	+	
		Unit- V	187.25	400kV Malbase - Siliguri	236.06	+	
		Unit- VI	186.21	-	-	-	
		<b>Total</b>	<b>1,123.33</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>9.97</b>		
2	720MW MHP	Unit-I	186.30	400kV MHP - Jigmeling Fdr - I	186.20	+	Unit- II & III under shutdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	186.10	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	187.30	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>373.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.30</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	81.43	+	CHP Unit-I under breakdown.
		Unit- II	92.58	220kV CHP - Birpara Fdr- II	81.12	+	
		Unit- III	91.84	220kV CHP - Malbase Fdr- III	128.21	+	
		Unit- IV	91.65	220kV CHP - Semtokha Fdr- IV	-25.16	-	
		-	-	220kV Malbase - Birpara Fdr.	34.65	+	
		-	-	66kV CHP - Chumdo Fdr.	1.49	+	
		-	-	66kV CHP - Gedu Fdr.	7.00	+	
		<b>Total</b>	<b>276.07</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.23</b>		
4	24MW BHP (U/S)	Unit- I	8.52	220kV BHP - Semtokha Fdr.	44.10	+	
		Unit- II	8.52	66kV BHP - Lobeyasa Fdr.	13.24	+	
		<b>Total</b>	<b>17.04</b>	220kV BHP - Tsirang Fdr.	-8.75	+	
	40MW BHP (L/S)	Unit- I	16.29	5MVA, 66/11kV TFR	0.35	+	
		Unit- II	15.60	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>31.89</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.01</b>		
5	126MW DHPC	Unit-I	27.29	220kV DHPC - Tsirang Fdr.	70.88	+	
		Unit-II	43.97	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>71.26</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.38</b>		
6	60MW KHP	Unit- I	16.46	132kV KHP - Nangkor Fdr- I	62.06	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.58	132kV KHP - Kilikhar Fdr- II	3.21	+	
		Unit- III	16.66	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.49	132kV Gelephu - Salakati Fdr.	32.33	+	
		-	-	132kV Motanga - Rangia Fdr.	47.96	+	
		-	-	220kV Tsirang - Jigmeling	60.99	+	
		<b>Total</b>	<b>66.19</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.52</b>		

Note: Load summary on August 26, 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	1,519.59	232.58	221.01	1,226.02	11.57
2	Eastern Grid	439.79	48.19	46.37	452.59	1.82
	<b>Total</b>	<b>1,959.38</b>	<b>280.77</b>	<b>267.38</b>	<b>1,678.61</b>	<b>13.39</b>

Note: Load Summary on August 26, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	226.15	247.57	259.44
2	Eastern Grid	35.22	46.75	55.98
	<b>National</b>	<b>261.37</b>	<b>294.32</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.
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