

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date: September 2, 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	186.79	400kV THP - Siliguri Fdr- I	215.78	+	
		Unit- II	97.37	400kV THP - Siliguri Fdr- II	210.97	+	
		Unit- III	186.85	400kV THP - Siliguri Fdr- IV	204.47	+	
		Unit- IV	185.92	400kV THP - Malbase Fdr- III	302.69	+	
		Unit- V	99.32	400kV Malbase - Siliguri	178.23	+	
		Unit- VI	186.07	-	-	-	
		<b>Total</b>	<b>942.32</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>8.41</b>		
2	720MW MHP	Unit-I	147.94	400kV MHP - Jigmeling Fdr - I	261.40	+	Unit-III under shutdown
		Unit-II	179.30	400kV MHP - Jigmeling Fdr - II	260.80	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	193.39	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>520.63</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-1.57</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	78.45	+	CHP Unit-I under breakdown..
		Unit- II	90.62	220kV CHP - Birpara Fdr- II	78.21	+	
		Unit- III	91.59	220kV CHP - Malbase Fdr- III	98.78	+	
		Unit- IV	91.58	220kV CHP - Semtokha Fdr- IV	4.16	+	
		-	-	220kV Malbase - Birpara Fdr.	52.57	+	
		-	-	66kV CHP - Chumdo Fdr.	6.15	+	
		-	-	66kV CHP - Gedu Fdr.	5.92	+	
		<b>Total</b>	<b>273.79</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.83</b>		
3	24MW BHP (U/S)	Unit- I	9.13	220kV BHP - Semtokha Fdr.	28.39	+	
		Unit- II	9.13	66kV BHP - Lobeyasa Fdr.	16.54	+	
		<b>Total</b>	<b>18.26</b>	220kV BHP - Tsirang Fdr.	6.42	+	
	40MW BHP (L/S)	Unit- I	17.41	5MVA, 66/11kV TFR	0.82	+	
		Unit- II	16.75	30MVA ICT, 220/66kV			
<b>Total</b>	<b>34.16</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.25</b>				
4	126MW DHPC	Unit-I	29.33	220kV DHPC - Tsirang Fdr.	65.03	+	
		Unit-II	36.14	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>65.47</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.44</b>		
5	60MW KHP	Unit- I	16.52	132kV KHP - Nangkor Fdr- I	56.00	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.67	132kV KHP - Kilikhar Fdr- II	9.24	+	
		Unit- III	16.41	5MVA, 132/11kV TFR	0.60	+	
		Unit- IV	16.39	132kV Gelephu - Salakati Fdr.	29.92	+	
		-	-	132kV Motanga - Rangia Fdr.	37.54	+	
		-	-	220kV Tsirang - Jigmeling	68.57	+	
		<b>Total</b>	<b>65.99</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.15</b>		

Note: Load summary on September 02, 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	1,334.00	246.75	236.82	1,018.68	9.93
2	Eastern Grid	586.62	65.53	66.95	589.66	-1.42
	<b>Total</b>	<b>1,920.62</b>	<b>312.28</b>	<b>303.77</b>	<b>1,608.34</b>	<b>8.51</b>

Note: Load Summary on September 02, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	247.40	247.40	259.44
2	Eastern Grid	41.13	41.13	55.98
	<b>National</b>	<b>288.53</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.

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date: September 3, 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	186.73	400kV THP - Siliguri Fdr- I	254.72	+	
		Unit- II	186.07	400kV THP - Siliguri Fdr- II	252.36	+	
		Unit- III	188.38	400kV THP - Siliguri Fdr- IV	250.76	+	
		Unit- IV	159.89	400kV THP - Malbase Fdr- III	316.69	+	
		Unit- V	179.76	400kV Malbase - Siliguri	224.05	+	
		Unit- VI	185.78	-	-	-	
		<b>Total</b>	<b>1,086.61</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>12.08</b>		
2	720MW MHP	Unit-I	184.70	400kV MHP - Jigmeling Fdr - I	280.50	+	Unit- III under shutdown
		Unit-II	179.30	400kV MHP - Jigmeling Fdr - II	280.10	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	193.20	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>557.20</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-3.40</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	81.82	+	CHP Unit-I under breakdown.
		Unit- II	91.32	220kV CHP - Birpara Fdr- II	81.88	+	
		Unit- III	91.39	220kV CHP - Malbase Fdr- III	128.19	+	
		Unit- IV	91.93	220kV CHP - Semtokha Fdr- IV	-27.23	-	
		-	-	220kV Malbase - Birpara Fdr.	35.66	+	
		-	-	66kV CHP - Chumdo Fdr.	1.59	+	
		-	-	66kV CHP - Gedu Fdr.	7.39	+	
		-	-	3x3MVA, 66/11kV TFR	0.67	+	
<b>Total</b>	<b>274.64</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.33</b>				
4	24MW BHP (U/S)	Unit- I	8.56	220kV BHP - Semtokha Fdr.	47.27	+	
		Unit- II	8.56	66kV BHP - Lobeyasa Fdr.	13.65	+	
		<b>Total</b>	<b>17.12</b>	220kV BHP - Tsirang Fdr.	-11.61	-	
	40MW BHP (L/S)	Unit- I	16.54	5MVA, 66/11kV TFR	0.41	+	
		Unit- II	15.89	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>32.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.17</b>		
5	126MW DHPC	Unit-I	30.32	220kV DHPC - Tsirang Fdr.	78.04	+	
		Unit-II	48.15	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>78.47</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.43</b>		
6	60MW KHP	Unit- I	16.33	132kV KHP - Nangkor Fdr- I	61.65	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.51	132kV KHP - Kilikhar Fdr- II	3.59	+	
		Unit- III	16.58	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.60	132kV Gelephu - Salakati Fdr.	35.69	+	
		-	-	132kV Motanga - Rangia Fdr.	45.35	+	
		-	-	220kV Tsirang - Jigmeling	65.86	+	
		<b>Total</b>	<b>66.02</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.28</b>		

Note: Load summary on September 03, 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	1,489.27	242.16	229.49	1,181.25	12.67
2	Eastern Grid	623.22	47.44	50.56	641.64	-3.12
	<b>Total</b>	<b>2,112.49</b>	<b>289.60</b>	<b>280.05</b>	<b>1,822.89</b>	<b>9.55</b>

Note: Load Summary on September 03, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	205.80	231.58	259.44
2	Eastern Grid	36.92	54.44	55.98
	<b>National</b>	<b>242.72</b>	<b>286.02</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.