

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

<b>Date:</b>	<b>August 24, 2019</b>
<b>Hours:</b>	<b>19:00 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	185.51	400kV THP - Siliguri Fdr- I	255.34	+	
		Unit- II	185.40	400kV THP - Siliguri Fdr- II	253.20	+	
		Unit- III	186.73	400kV THP - Siliguri Fdr- IV	247.10	+	
		Unit- IV	187.37	400kV THP - Malbase Fdr- III	345.97	+	
		Unit- V	186.74	400kV Malbase - Siliguri	218.36	+	
		Unit- VI	185.83	-	-	-	
		<b>Total</b>	<b>1,117.58</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>15.97</b>		
2	720MW MHP	Unit-I	186.27	400kV MHP - Jigmeling Fdr - I	187.90	+	Unit- II & III under shutdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	184.80	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	187.63	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>373.90</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.20</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	82.80	+	Unit-I tripped since 23/08/2019.
		Unit- II	91.55	220kV CHP - Birpara Fdr- II	82.84	+	
		Unit- III	91.36	220kV CHP - Malbase Fdr- III	95.53	+	
		Unit- IV	91.09	220kV CHP - Semtokha Fdr- IV	-1.41	+	
		-	-	220kV Malbase - Birpara Fdr.	62.95	+	
		-	-	66kV CHP - Chumdo Fdr.	5.30	+	
		-	-	66kV CHP - Gedu Fdr.	6.44	+	
		-	-	3x3MVA, 66/11kV TFR	1.30	+	
<b>Total</b>	<b>274.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.20</b>				
3	24MW BHP (U/S)	Unit- I	9.20	220kV BHP - Semtokha Fdr.	31.86	+	
		Unit- II	9.20	66kV BHP - Lobeyasa Fdr.	16.19	+	
		<b>Total</b>	<b>18.40</b>	220kV BHP - Tsirang Fdr.	3.23	+	
	40MW BHP (L/S)	Unit- I	17.12	5MVA, 66/11kV TFR	0.66	+	
		Unit- II	16.47	30MVA ICT, 220/66kV			
<b>Total</b>	<b>33.59</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.05</b>				
4	126MW DHPC	Unit-I	29.32	220kV DHPC - Tsirang Fdr.	82.04	+	
		Unit-II	53.13	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>82.45</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.41</b>		
5	60MW KHP	Unit- I	16.53	132kV KHP - Nangkor Fdr- I	57.07	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.54	132kV KHP - Kilikhar Fdr- II	8.29	+	
		Unit- III	16.59	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.37	132kV Gelephu - Salakati Fdr.	31.85	+	
		-	-	132kV Motanga - Rangia Fdr.	46.04	+	
		-	-	220kV Tsirang - Jigmeling	79.78	+	
		<b>Total</b>	<b>66.03</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.17</b>		

**Note: Load summary on August 24, 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	1,526.02	243.65	226.02	1,202.59	17.63
2	Eastern Grid	439.93	69.12	67.75	450.59	1.37
	<b>Total</b>	<b>1,965.95</b>	<b>312.77</b>	<b>293.77</b>	<b>1,653.18</b>	<b>19.00</b>

**Note: Load Summary on August 24, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	242.32	242.32	259.44
2	Eastern Grid	45.43	48.15	55.98
	<b>National</b>	<b>287.75</b>	<b>290.47</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 25, 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	187.03	400kV THP - Siliguri Fdr- I	267.80	+	
		Unit- II	187.23	400kV THP - Siliguri Fdr- II	265.70	+	
		Unit- III	187.10	400kV THP - Siliguri Fdr- IV	256.86	+	
		Unit- IV	187.36	400kV THP - Malbase Fdr- III	318.87	+	
		Unit- V	187.00	400kV Malbase - Siliguri	236.95	+	
		Unit- VI	186.37	-	-	-	
		<b>Total</b>	<b>1,122.09</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>12.86</b>		
2	720MW MHP	Unit-I	186.40	400kV MHP - Jigmeling Fdr - I	187.90	+	Unit- II & III under shutdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	185.40	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	187.60	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>374.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.70</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	84.29	+	
		Unit- II	90.50	220kV CHP - Birpara Fdr- II	84.13	+	
		Unit- III	91.46	220kV CHP - Malbase Fdr- III	131.89	+	
		Unit- IV	91.91	220kV CHP - Semtokha Fdr- IV	-36.73	-	
		-	-	220kV Malbase - Birpara Fdr.	36.43	+	
		-	-	66kV CHP - Chumdo Fdr.	1.89	+	
		-	-	66kV CHP - Gedu Fdr.	6.33	+	
		<b>Total</b>	<b>273.87</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.18</b>		
4	24MW BHP (U/S)	Unit- I	9.99	220kV BHP - Semtokha Fdr.	57.29	+	
		Unit- II	9.99	66kV BHP - Lobeyasa Fdr.	14.40	+	
		<b>Total</b>	<b>19.98</b>	220kV BHP - Tsirang Fdr.	-15.31	+	
	40MW BHP (L/S)	Unit- I	18.51	5MVA, 66/11kV TFR	0.40	+	
		Unit- II	17.83	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>36.34</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.46</b>		
5	126MW DHPC	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	87.00	+	
		Unit-II	57.14	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>87.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.43</b>		
6	60MW KHP	Unit- I	16.45	132kV KHP - Nangkhor Fdr- I	61.30	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.37	132kV KHP - Kilikhar Fdr- II	3.87	+	
		Unit- III	16.42	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.31	132kV Gelephu - Salakati Fdr.	36.47	+	
		-	-	132kV Motanga - Rangia Fdr.	49.25	+	
		-	-	220kV Tsirang - Jigmeling	69.19	+	
		<b>Total</b>	<b>65.55</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.12</b>		

Note: Load summary on August 25, 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	1,539.71	238.36	224.35	1,232.16	14.01
2	Eastern Grid	439.55	49.72	49.14	459.02	0.58
	<b>Total</b>	<b>1,979.26</b>	<b>288.08</b>	<b>273.49</b>	<b>1,691.18</b>	<b>14.59</b>

Note: Load Summary on August 25, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	225.03	251.20	259.44
2	Eastern Grid	38.15	48.66	55.98
	<b>National</b>	<b>263.18</b>	<b>299.86</b>	<b>315.42</b>

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- 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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