

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date: August 20, 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	187.65	400kV THP - Siliguri Fdr- I	255.20	+	
		Unit- II	188.28	400kV THP - Siliguri Fdr- II	255.06	+	
		Unit- III	186.36	400kV THP - Siliguri Fdr- IV	255.87	+	
		Unit- IV	188.07	400kV THP - Malbase Fdr- III	351.74	+	
		Unit- V	187.46	400kV Malbase - Siliguri	216.97	+	
		Unit- VI	186.01	-	-	-	
		<b>Total</b>	<b>1,123.83</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>5.96</b>		
2	720MW MHP	Unit-I	185.44	400kV MHP - Jigmeling Fdr - I	92.72	+	Unit-II under shutdown since 15/08/2019. Unit III tripped today @ 12:45Hrs. Unit IV hand tripped today @ 13:54Hrs
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	92.72	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>185.44</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.00</b>		
2	336MW CHP	Unit- I	91.75	220kV CHP - Birpara Fdr- I	110.35	+	
		Unit- II	91.72	220kV CHP - Birpara Fdr- II	110.19	+	
		Unit- III	91.56	220kV CHP - Malbase Fdr- III	124.57	+	
		Unit- IV	91.86	220kV CHP - Semtokha Fdr- IV	6.89	-	
		-	-	220kV Malbase - Birpara Fdr.	84.15	+	
		-	-	66kV CHP - Chumdo Fdr.	5.35	+	
		-	-	66kV CHP - Gedu Fdr.	7.43	+	
		-	-	3x3MVA, 66/11kV TFR	1.31	+	
<b>Total</b>	<b>366.89</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.80</b>				
3	24MW BHP (U/S)	Unit- I	9.63	220kV BHP - Semtokha Fdr.	23.60	+	
		Unit- II	9.63	66kV BHP - Lobeyasa Fdr.	16.44	+	
		<b>Total</b>	<b>19.26</b>	220kV BHP - Tsirang Fdr.	13.73	-	
	40MW BHP (L/S)	Unit- I	20.30	5MVA, 66/11kV TFR	0.64	+	
		Unit- II	17.97	30MVA ICT, 220/66kV			
<b>Total</b>	<b>38.27</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.12</b>				
4	126MW DHPC	Unit-I	26.31	220kV DHPC - Tsirang Fdr.	88.88	+	
		Unit-II	63.05	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>89.36</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.48</b>		
5	60MW KHP	Unit- I	16.39	132kV KHP - Nangkor Fdr- I	55.67	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.56	132kV KHP - Kilikhar Fdr- II	9.27	+	
		Unit- III	16.47	5MVA, 132/11kV TFR	0.60	+	
		Unit- IV	16.43	132kV Gelephu - Salakati Fdr.	40.24	+	
		-	-	132kV Motanga - Rangia Fdr.	50.62	+	
		-	-	220kV Tsirang - Jigmeling	89.76	+	
		<b>Total</b>	<b>65.85</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.31</b>		

Note: Load summary on August 20, 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	1,637.61	260.06	249.70	1,287.79	10.36
2	Eastern Grid	251.29	64.75	64.44	276.30	0.31
	<b>Total</b>	<b>1,888.90</b>	<b>324.81</b>	<b>314.14</b>	<b>1,564.09</b>	<b>10.67</b>

Note: Load Summary on August 20, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	233.67	243.75	259.44
2	Eastern Grid	55.98	55.98	55.98
	<b>National</b>	<b>289.65</b>	<b>299.73</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 21, 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	186.32	400kV THP - Siliguri Fdr- I	261.83	+	
		Unit- II	186.20	400kV THP - Siliguri Fdr- II	259.33	+	
		Unit- III	188.07	400kV THP - Siliguri Fdr- IV	252.41	+	
		Unit- IV	187.50	400kV THP - Malbase Fdr- III	327.86	+	
		Unit- V	186.87	400kV Malbase - Siliguri	230.13	+	
		Unit- VI	185.96	-	-	-	
		<b>Total</b>	<b>1,120.92</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>19.49</b>		
2	720MW MHP	Unit-I	186.19	400kV MHP - Jigmeling Fdr - I	186.00	+	Unit-II under shutdown, Unit-III & IV tripped due to LGB temperature high & 400kV MHEP-JLG II opened due to high voltage
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	0.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>186.19</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.19</b>		
3	336MW CHP	Unit- I	91.23	220kV CHP - Birpara Fdr- I	107.90	+	
		Unit- II	91.27	220kV CHP - Birpara Fdr- II	107.33	+	
		Unit- III	91.02	220kV CHP - Malbase Fdr- III	143.55	+	
		Unit- IV	91.79	220kV CHP - Semtokha Fdr- IV	-5.32	-	
		-	-	220kV Malbase - Birpara Fdr.	66.21	+	
		-	-	66kV CHP - Chumdo Fdr.	2.35	+	
		-	-	66kV CHP - Gedu Fdr.	7.54	+	
		<b>Total</b>	<b>365.31</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.28</b>		
4	24MW BHP (U/S)	Unit- I	0.00	220kV BHP - Semtokha Fdr.	29.47	+	BHP U/S Unit I & L/S Unit I under shutdown
		Unit- II	12.25	66kV BHP - Lobeyasa Fdr.	11.23	+	
		<b>Total</b>	<b>12.25</b>	220kV BHP - Tsirang Fdr.	-9.87	-	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.89	+	
		Unit- II	16.60	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>16.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-2.87</b>		
5	126MW DHPC	Unit-I	17.27	220kV DHPC - Tsirang Fdr.	77.00	+	
		Unit-II	60.16	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>77.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.43</b>		
6	60MW KHP	Unit- I	16.19	132kV KHP - Nangkhor Fdr- I	61.45	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.40	132kV KHP - Kilikhar Fdr- II	3.57	+	
		Unit- III	16.47	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.54	132kV Gelephu - Salakati Fdr.	33.66	+	
		-	-	132kV Motanga - Rangia Fdr.	44.83	+	
		-	-	220kV Tsirang - Jigmeling	71.60	+	
		<b>Total</b>	<b>65.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.08</b>		

Note: Load summary on August 21, 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	1,592.51	235.77	217.44	1,285.14	18.33
2	Eastern Grid	251.79	58.90	58.63	264.49	0.27
	<b>Total</b>	<b>1,844.30</b>	<b>294.67</b>	<b>276.07</b>	<b>1,549.63</b>	<b>18.60</b>

Note: Load Summary on August 21, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	227.76	241.53	259.44
2	Eastern Grid	38.51	47.96	55.98
	<b>National</b>	<b>266.27</b>	<b>289.49</b>	<b>315.42</b>

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  - 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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