

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

<b>Date:</b>	<b>September 11, 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	187.31	400kV THP - Siliguri Fdr- I	205.60	+	Unit-V under shutdown.
		Unit- II	188.70	400kV THP - Siliguri Fdr- II	203.12	+	
		Unit- III	186.45	400kV THP - Siliguri Fdr- IV	196.01	+	
		Unit- IV	185.31	400kV THP - Malbase Fdr- III	320.46	+	
		Unit- V	0.00	400kV Malbase - Siliguri	164.28	+	
		Unit- VI	186.00	-	-	-	
		<b>Total</b>	<b>933.77</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>8.58</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	193.00	+	Unit-III under shutdown. Unit I under break down
		Unit-II	189.30	400kV MHP - Jigmeling Fdr - II	188.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	191.90	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>381.20</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.20</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	59.07	+	Unit-I under breakdown..Unit- II under shutdown.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	58.09	+	
		Unit- III	91.43	220kV CHP - Malbase Fdr- III	65.04	+	
		Unit- IV	90.46	220kV CHP - Semtokha Fdr- IV	-16.59	-	
		-	-	220kV Malbase - Birpara Fdr.	47.57	+	
		-	-	66kV CHP - Chumdo Fdr.	5.74	+	
		-	-	66kV CHP - Gedu Fdr.	7.13	+	
		<b>Total</b>	<b>181.89</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.08</b>		
3	24MW BHP (U/S)	Unit- I	11.79	220kV BHP - Semtokha Fdr.	51.26	+	
		Unit- II	11.79	66kV BHP - Lobeyasa Fdr.	19.78	+	
		<b>Total</b>	<b>23.58</b>	220kV BHP - Tsirang Fdr.	-7.18	-	
	40MW BHP (L/S)	Unit- I	20.97	5MVA, 66/11kV TFR	1.06	+	
		Unit- II	20.17	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.14</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.20</b>				
4	126MW DHPC	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	88.96	+	
		Unit-II	59.10	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>89.39</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.43</b>		
5	60MW KHP	Unit- I	16.59	132kV KHP - Nangkor Fdr- I	57.23	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.78	132kV KHP - Kilikhar Fdr- II	8.60	+	
		Unit- III	16.75	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.66	132kV Gelephu - Salakati Fdr.	31.36	+	
		-	-	132kV Motanga - Rangia Fdr.	51.90	+	
		-	-	220kV Tsirang - Jigmeling	77.60	+	
		<b>Total</b>	<b>66.78</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.45</b>		

**Note: Load summary on September 11, 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	1,269.77	258.43	247.54	933.74	10.89
2	Eastern Grid	447.98	61.32	60.67	464.26	0.65
	<b>Total</b>	<b>1,717.75</b>	<b>319.75</b>	<b>308.21</b>	<b>1,398.00</b>	<b>11.54</b>

**Note: Load Summary on September 11, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	232.45	246.98	256.15
2	Eastern Grid	51.50	51.50	57.74
	<b>National</b>	<b>283.95</b>	<b>298.48</b>	<b>313.89</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 12, 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	187.88	400kV THP - Siliguri Fdr- I	264.16	+	
		Unit- II	188.41	400kV THP - Siliguri Fdr- II	261.48	+	
		Unit- III	186.78	400kV THP - Siliguri Fdr- IV	254.43	+	
		Unit- IV	186.41	400kV THP - Malbase Fdr- III	323.50	+	
		Unit- V	187.12	400kV Malbase - Siliguri	234.42	+	
		Unit- VI	186.71	-	-	-	
		<b>Total</b>	<b>1,123.31</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>19.74</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	193.00	+	Unit-III under shutdown. Unit I under break down
		Unit-II	189.20	400kV MHP - Jigmeling Fdr - II	186.90	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	191.80	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>381.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.10</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	85.48	+	Unit-I under breakdown.
		Unit- II	91.58	220kV CHP - Birpara Fdr- II	85.17	+	
		Unit- III	91.69	220kV CHP - Malbase Fdr- III	132.14	+	
		Unit- IV	92.03	220kV CHP - Semtokha Fdr- IV	-38.83	-	
		-	-	220kV Malbase - Birpara Fdr.	38.48	+	
		-	-	66kV CHP - Chumdo Fdr.	0.98	+	
		-	-	66kV CHP - Gedu Fdr.	8.50	+	
		<b>Total</b>	<b>275.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.15</b>		
4	24MW BHP (U/S)	Unit- I	11.80	220kV BHP - Semtokha Fdr.	58.56	+	
		Unit- II	11.80	66kV BHP - Lobeyasa Fdr.	16.32	+	
		<b>Total</b>	<b>23.60</b>	220kV BHP - Tsirang Fdr.	-10.44	-	
	40MW BHP (L/S)	Unit- I	21.00	5MVA, 66/11kV TFR	0.52	+	
		Unit- II	20.22	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.22</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.14</b>		
5	126MW DHPC	Unit-I	31.41	220kV DHPC - Tsirang Fdr.	83.06	+	
		Unit-II	52.11	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>83.52</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.46</b>		
6	60MW KHP	Unit- I	16.49	132kV KHP - Nangkhor Fdr- I	61.50	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.41	132kV KHP - Kilikhar Fdr- II	3.58	+	
		Unit- III	16.26	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.30	132kV Gelephu - Salakati Fdr.	41.14	+	
		-	-	132kV Motanga - Rangia Fdr.	43.20	+	
		-	-	220kV Tsirang - Jigmeling	70.30	+	
		<b>Total</b>	<b>65.46</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.12</b>		

**Note: Load summary on September 12, 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	1,546.95	253.03	231.82	1,223.62	21.21
2	Eastern Grid	446.46	52.52	51.54	464.24	0.98
	<b>Total</b>	<b>1,993.41</b>	<b>305.55</b>	<b>283.36</b>	<b>1,687.86</b>	<b>22.19</b>

**Note: Load Summary on September 12, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	131.95	231.28	256.15
2	Eastern Grid	40.85	52.84	57.74
	<b>National</b>	<b>172.80</b>	<b>284.12</b>	<b>313.89</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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