

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

<b>Date:</b>	<b>September 10, 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	188.30	400kV THP - Siliguri Fdr- I	201.15	+	
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	199.21	+	
		Unit- III	187.34	400kV THP - Siliguri Fdr- IV	193.76	+	
		Unit- IV	187.26	400kV THP - Malbase Fdr- III	325.02	+	
		Unit- V	187.33	400kV Malbase - Siliguri	161.00	+	
		Unit- VI	183.99	-	-	-	
		<b>Total</b>	<b>934.22</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>15.08</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	93.10	+	Unit-III under shutdown. Unit I & II under breakdown
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	93.80	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	189.30	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>189.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.40</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	56.33	+	Unit-I under breakdown. Unit -II under shutdown.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	56.24	+	
		Unit- III	91.79	220kV CHP - Malbase Fdr- III	57.75	+	
		Unit- IV	91.12	220kV CHP - Semtokha Fdr- IV	-1.81	-	
		-	-	220kV Malbase - Birpara Fdr.	48.20	+	
		-	-	66kV CHP - Chumdo Fdr.	6.19	+	
		-	-	66kV CHP - Gedu Fdr.	6.40	+	
		<b>Total</b>	<b>182.91</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.56</b>		
3	24MW BHP (U/S)	Unit- I	11.80	220kV BHP - Semtokha Fdr.	35.96	+	
		Unit- II	11.80	66kV BHP - Lobeyasa Fdr.	19.41	+	
		<b>Total</b>	<b>23.60</b>	220kV BHP - Tsirang Fdr.	8.79	+	
	40MW BHP (L/S)	Unit- I	20.99	5MVA, 66/11kV TFR	0.77	+	
		Unit- II	20.18	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.17</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.16</b>				
4	126MW DHPC	Unit-I	30.31	220kV DHPC - Tsirang Fdr.	71.02	+	
		Unit-II	41.15	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>71.46</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.44</b>		
5	60MW KHP	Unit- I	16.50	132kV KHP - Nangkor Fdr- I	56.64	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.60	132kV KHP - Kilikhar Fdr- II	8.24	+	
		Unit- III	16.25	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.29	132kV Gelephu - Salakati Fdr.	28.07	+	
		-	-	132kV Motanga - Rangia Fdr.	48.36	+	
		-	-	220kV Tsirang - Jigmeling	76.37	+	
		<b>Total</b>	<b>65.64</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.26</b>		

**Note: Load summary on September 10, 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	1,253.36	261.10	245.18	915.89	15.92
2	Eastern Grid	254.94	67.98	65.32	263.33	2.66
	<b>Total</b>	<b>1,508.30</b>	<b>329.08</b>	<b>310.50</b>	<b>1,179.22</b>	<b>18.58</b>

**Note: Load Summary on September 10, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	224.66	224.66	256.15
2	Eastern Grid	49.41	52.53	57.74
	<b>National</b>	<b>274.07</b>	<b>277.19</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 11, 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	178.89	400kV THP - Siliguri Fdr- I	244.40	+	
		Unit- II	187.86	400kV THP - Siliguri Fdr- II	242.63	+	
		Unit- III	185.96	400kV THP - Siliguri Fdr- IV	235.97	+	
		Unit- IV	170.43	400kV THP - Malbase Fdr- III	319.80	+	
		Unit- V	169.50	400kV Malbase - Siliguri	212.74	+	
		Unit- VI	168.38	-	-	-	
		<b>Total</b>	<b>1,061.02</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>18.22</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	192.80	+	Unit-III under shutdown. Unit I under breakdown .
		Unit-II	189.30	400kV MHP - Jigmeling Fdr - II	186.70	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	191.50	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>380.80</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	63.65	+	Unit-I under breakdown. Unit- II under shutdown.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	63.42	+	
		Unit- III	91.66	220kV CHP - Malbase Fdr- III	95.64	+	
		Unit- IV	91.46	220kV CHP - Semtokha Fdr- IV	-49.67	-	
		-	-	220kV Malbase - Birpara Fdr.	30.37	+	
		-	-	66kV CHP - Chumdo Fdr.	0.89	+	
		-	-	66kV CHP - Gedu Fdr.	7.50	+	
		<b>Total</b>	<b>183.12</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.97</b>		
4	24MW BHP (U/S)	Unit- I	11.81	220kV BHP - Semtokha Fdr.	70.40	+	
		Unit- II	11.81	66kV BHP - Lobeyasa Fdr.	16.64	+	
		<b>Total</b>	<b>23.62</b>	220kV BHP - Tsirang Fdr.	-22.14	-	
	40MW BHP (L/S)	Unit- I	20.95	5MVA, 66/11kV TFR	0.51	+	
		Unit- II	20.20	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.15</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.64</b>		
5	126MW DHPC	Unit-I	30.32	220kV DHPC - Tsirang Fdr.	88.24	+	
		Unit-II	58.40	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>88.72</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.48</b>		
6	60MW KHP	Unit- I	16.46	132kV KHP - Nangkhor Fdr- I	58.48	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.54	132kV KHP - Kilikhar Fdr- II	6.38	+	
		Unit- III	16.43	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.25	132kV Gelephu - Salakati Fdr.	36.23	+	
		-	-	132kV Motanga - Rangia Fdr.	45.08	+	
		-	-	220kV Tsirang - Jigmeling	63.00	+	
		<b>Total</b>	<b>65.68</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.32</b>		

**Note: Load summary on September 11, 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	1,397.63	241.45	222.42	1,093.18	19.03
2	Eastern Grid	446.48	48.67	47.05	460.81	1.62
	<b>Total</b>	<b>1,844.11</b>	<b>290.12</b>	<b>269.47</b>	<b>1,553.99</b>	<b>20.65</b>

**Note: Load Summary on September 11, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	226.15	246.98	256.15
2	Eastern Grid	40.70	51.50	57.74
	<b>National</b>	<b>266.85</b>	<b>298.48</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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