

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	September 30, 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	187.29	400kV THP - Siliguri Fdr- I	262.15	+	
		Unit- II	187.31	400kV THP - Siliguri Fdr- II	260.32	+	
		Unit- III	187.15	400kV THP - Siliguri Fdr- IV	253.25	+	
		Unit- IV	186.91	400kV THP - Malbase Fdr- III	328.90	+	
		Unit- V	186.79	400kV Malbase - Siliguri	230.27	+	
		Unit- VI	186.34	-	-	-	
		<b>Total</b>	<b>1,121.79</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>17.17</b>		
2	720MW MHP	Unit-I	82.70	400kV MHP - Jigmeling Fdr - I	241.30	+	Unit-III under break down
		Unit-II	193.20	400kV MHP - Jigmeling Fdr - II	230.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	195.90	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>471.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.50</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	90.11	+	Unit-I under breakdown
		Unit- II	91.73	220kV CHP - Birpara Fdr- II	89.79	+	
		Unit- III	91.40	220kV CHP - Malbase Fdr- III	128.44	+	
		Unit- IV	92.12	220kV CHP - Semtokha Fdr- IV	-48.37	-	
		-	-	220kV Malbase - Birpara Fdr.	49.24	+	
		-	-	66kV CHP - Chumdo Fdr.	5.60	+	
		-	-	66kV CHP - Gedu Fdr.	7.42	+	
		<b>Total</b>	<b>275.25</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.67</b>		
3	24MW BHP (U/S)	Unit- I	11.81	220kV BHP - Semtokha Fdr.	88.46	+	
		Unit- II	11.81	66kV BHP - Lobeyasa Fdr.	21.50	+	
		<b>Total</b>	<b>23.62</b>	220kV BHP - Tsirang Fdr.	-44.64	-	
	40MW BHP (L/S)	Unit- I	21.00	5MVA, 66/11kV TFR	0.66	+	
		Unit- II	20.21	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.21</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.15</b>				
4	126MW DHPC	Unit-I	63.25	220kV DHPC - Tsirang Fdr.	125.74	+	
		Unit-II	63.05	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>126.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.56</b>		
5	60MW KHP	Unit- I	16.60	132kV KHP - Nangkor Fdr- I	56.33	+	
		Unit-II	16.51	132kV KHP - Kilikhar Fdr- II	9.10	+	
		Unit- III	16.71	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.52	132kV Gelephu - Salakati Fdr.	34.09	+	
		-	-	132kV Motanga - Rangia Fdr.	41.65	+	
		-	-	220kV Tsirang - Jigmeling	78.80	+	
		<b>Total</b>	<b>66.34</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.41</b>		

**Note: Load summary on September 30, 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	1,588.17	274.24	256.99	1,235.13	17.25
2	Eastern Grid	538.14	69.90	68.99	547.04	0.91
	<b>Total</b>	<b>2,126.31</b>	<b>344.14</b>	<b>325.98</b>	<b>1,782.17</b>	<b>18.16</b>

**Note: Load Summary on September 30, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	237.81	241.95	256.15
2	Eastern Grid	48.66	48.66	57.74
	<b>National</b>	<b>286.47</b>	<b>290.61</b>	<b>313.89</b>

1. 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:

- i) 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.
- ii) The clocks of all the locations are not synchronized.

2. 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

<b>Date:</b>	<b>October 1, 2019</b>
<b>Hours:</b>	<b>09:00 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	187.14	400kV THP - Siliguri Fdr- I	271.09	+	
		Unit- II	187.07	400kV THP - Siliguri Fdr- II	268.69	+	
		Unit- III	186.63	400kV THP - Siliguri Fdr- IV	261.62	+	
		Unit- IV	187.22	400kV THP - Malbase Fdr- III	302.28	+	
		Unit- V	187.32	400kV Malbase - Siliguri	247.11	+	
		Unit- VI	186.58	-	-	-	
		<b>Total</b>	<b>1,121.96</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>18.28</b>		
2	720MW MHP	Unit-I	82.90	400kV MHP - Jigmeling Fdr - I	241.00	+	Unit-III under breakdown.
		Unit-II	193.20	400kV MHP - Jigmeling Fdr - II	237.40	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	195.50	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>471.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-6.80</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	102.63	+	Unit-I under breakdown.
		Unit- II	91.09	220kV CHP - Birpara Fdr- II	102.85	+	
		Unit- III	91.68	220kV CHP - Malbase Fdr- III	160.47	+	
		Unit- IV	91.38	220kV CHP - Semtokha Fdr- IV	-102.69	-	
		-	-	220kV Malbase - Birpara Fdr.	44.82	+	
		-	-	66kV CHP - Chumdo Fdr.	-0.33	+	
		-	-	66kV CHP - Gedu Fdr.	8.67	+	
		<b>Total</b>	<b>274.15</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.75</b>		
4	24MW BHP (U/S)	Unit- I	11.79	220kV BHP - Semtokha Fdr.	128.10	+	
		Unit- II	11.79	66kV BHP - Lobeyasa Fdr.	19.73	+	
		<b>Total</b>	<b>23.58</b>	220kV BHP - Tsirang Fdr.	-81.61	-	
	40MW BHP (L/S)	Unit- I	20.99	5MVA, 66/11kV TFR	0.35	+	
		Unit- II	20.20	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.19</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-1.80</b>		
5	126MW DHPC	Unit-I	58.35	220kV DHPC - Tsirang Fdr.	117.99	+	
		Unit-II	60.14	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>118.49</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.50</b>		
6	60MW KHP	Unit- I	16.48	132kV KHP - Nangkhor Fdr- I	60.44	+	
		Unit-II	16.58	132kV KHP - Kilikhar Fdr- II	5.10	+	
		Unit- III	16.61	5MVA, 132/11kV TFR	0.20	+	
		Unit- IV	16.45	132kV Gelephu - Salakati Fdr.	0.00	+	
		-	-	132kV Motanga - Rangia Fdr.	52.02	+	
		-	-	220kV Tsirang - Jigmeling	32.51	+	
		<b>Total</b>	<b>66.12</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.38</b>		

**Note: Load summary on October 01, 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	1,579.37	248.05	229.32	1,298.81	18.73
2	Eastern Grid	537.72	39.81	46.23	530.42	-6.42
	<b>Total</b>	<b>2,117.09</b>	<b>287.86</b>	<b>275.55</b>	<b>1,829.23</b>	<b>12.31</b>

**Note: Load Summary on October 01, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	223.67	236.53	281.60
2	Eastern Grid	31.08	40.94	62.24
	<b>National</b>	<b>254.75</b>	<b>277.47</b>	<b>343.84</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.