

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	November 2, 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	148.59	400kV THP - Siliguri Fdr- I	0.00		Unit II & V under shutdown. Unit-III standby 400kV THP_SILI 1 line under antitheft charge.
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	0.00	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	182.31	+	
		Unit- IV	139.46	400kV THP - Malbase Fdr- III	269.42	+	
		Unit- V	0.00	400kV Malbase - Siliguri	159.62	+	
		Unit- VI	169.62	-	-	-	
		<b>Total</b>	<b>457.67</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>5.94</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00	+	MHP units under maintenance
		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	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>0.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.00</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	48.12	+	Unit-I under shutdown
		Unit- II	75.71	220kV CHP - Birpara Fdr- II	47.79	+	
		Unit- III	71.65	220kV CHP - Malbase Fdr- III	80.69	+	
		Unit- IV	72.43	220kV CHP - Semtokha Fdr- IV	24.40	+	
		-	-	220kV Malbase - Birpara Fdr.	16.40	+	
		-	-	66kV CHP - Chumdo Fdr.	11.57	+	
		-	-	66kV CHP - Gedu Fdr.	5.56	+	
		-	-	3x3MVA, 66/11kV TFR	1.47	+	
		<b>Total</b>	<b>219.79</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.19</b>		
3	24MW BHP (U/S)	Unit- I	7.43	220kV BHP - Semtokha Fdr.	21.63	+	
		Unit- II	7.43	66kV BHP - Lobeysa Fdr.	16.29	+	
		<b>Total</b>	<b>14.86</b>	220kV BHP - Tsirang Fdr.	5.36	+	
	40MW BHP (L/S)	Unit- I	14.87	5MVA, 66/11kV TFR	0.62	+	
		Unit- II	14.28	30MVA ICT, 220/66kV			
<b>Total</b>	<b>29.15</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.11</b>				
4	126MW DHPC	Unit-I	45.38	220kV DHPC - Tsirang Fdr.	45.15	+	Unit II Standby
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>45.38</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>		
5	60MW KHP	Unit- I	14.32	132kV KHP - Nangkhor Fdr- I	36.34	+	Unit-IV Standby
		Unit-II	14.28	132kV KHP - Kilikhar Fdr- II	6.77	+	
		Unit- III	15.20	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	0.00	132kV Gelephu - Salakati Fdr.	9.86	+	
		-	-	132kV Motanga - Rangia Fdr.	14.85	+	
		-	-	220kV Tsirang - Jigmeling	48.24	+	
		<b>Total</b>	<b>43.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.29</b>		

**Note: Load summary on November 02, 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	766.85	264.37	257.90	454.24	6.47
2	Eastern Grid	43.80	67.33	67.04	24.71	0.29
	<b>Total</b>	<b>810.65</b>	<b>331.70</b>	<b>324.94</b>	<b>478.95</b>	<b>6.76</b>

**Note: Load Summary on November 02, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	257.10	261.71	281.60
2	Eastern Grid	48.83	53.96	62.24
	<b>National</b>	<b>305.93</b>	<b>315.67</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.

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	November 3, 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	99.59	400kV THP - Siliguri Fdr- I	0.00	+	Unit-II & V under shutdown. Unit-III under standby.400kV THP_SILI I under ideal charge.
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	105.26	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	99.44	+	
		Unit- IV	140.51	400kV THP - Malbase Fdr- III	148.37	+	
		Unit- V	0.00	400kV Malbase - Siliguri	88.76	+	
		Unit- VI	120.49	-	-	-	
		<b>Total</b>	<b>360.59</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>7.52</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	95.42	+	Unit- I Standby & UnitII & III under break down
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	94.78	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	194.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>194.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.80</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	42.89	+	CHP Unit-I under shutdownn.
		Unit- II	65.36	220kV CHP - Birpara Fdr- II	43.09	+	
		Unit- III	63.46	220kV CHP - Malbase Fdr- III	92.85	+	
		Unit- IV	63.51	220kV CHP - Semtokha Fdr- IV	-1.54	-	
		-	-	220kV Malbase - Birpara Fdr.	-0.30	-	
		-	-	66kV CHP - Chumdo Fdr.	8.10	+	
		-	-	66kV CHP - Gedu Fdr.	4.40	+	
		<b>Total</b>	<b>192.33</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.43</b>		
4	24MW BHP (U/S)	Unit- I	7.35	220kV BHP - Semtokha Fdr.	36.54	+	
		Unit- II	7.35	66kV BHP - Lobeyasa Fdr.	14.07	+	
		<b>Total</b>	<b>14.70</b>	220kV BHP - Tsirang Fdr.	-6.81	-	
	40MW BHP (L/S)	Unit- I	14.99	5MVA, 66/11kV TFR	0.39	+	
		Unit- II	14.30	30MVA ICT, 220/66kV			
<b>Total</b>	<b>29.29</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.20</b>				
5	126MW DHPC	Unit-I	45.39	220kV DHPC - Tsirang Fdr.	45.16	+	Unit-II Standby
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>45.39</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>		
6	60MW KHP	Unit- I	13.11	132kV KHP - Nangkhor Fdr- I	36.24	+	Unit-IV Standby
		Unit-II	13.24	132kV KHP - Kilikhar Fdr- II	4.78	+	
		Unit- III	15.25	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	0.00	132kV Gelephu - Salakati Fdr.	15.05	+	
		-	-	132kV Motanga - Rangia Fdr.	20.87	+	
		-	-	220kV Tsirang - Jigmeling	36.07	+	
		<b>Total</b>	<b>41.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.18</b>		

Note: Load summary on November 03, 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	642.30	227.09	218.11	379.14	8.98
2	Eastern Grid	235.60	45.55	41.57	226.12	3.98
	<b>Total</b>	<b>877.90</b>	<b>272.64</b>	<b>259.68</b>	<b>605.26</b>	<b>12.96</b>

Note: Load Summary on November 03, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	224.10	243.24	293.93
2	Eastern Grid	40.58	51.76	62.30
	<b>National</b>	<b>264.68</b>	<b>295.00</b>	<b>356.23</b>

NOTES: EAST load collected from site.

- 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.