

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	October 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	0.00	400kV THP - Siliguri Fdr- I	186.48	+	Unit-I standby. Unit III & V under shutdown. 400kV THP_MAL line under maintenance.
		Unit- II	186.98	400kV THP - Siliguri Fdr- II	185.41	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	185.99	+	
		Unit- IV	187.49	400kV THP - Malbase Fdr- III	0.00		
		Unit- V	0.00	400kV Malbase - Siliguri	-64.10	-	
		Unit- VI	186.75	-	-	-	
		<b>Total</b>	<b>561.22</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.34</b>		
2	720MW MHP	Unit-I	84.15	400kV MHP - Jigmeling Fdr - I	154.80	+	Unit-III under shutdown.
		Unit-II	153.20	400kV MHP - Jigmeling Fdr - II	151.92	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	72.80	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>310.15</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.43</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	57.05	+	Unit-I under shutdown
		Unit- II	87.66	220kV CHP - Birpara Fdr- II	57.15	+	
		Unit- III	91.06	220kV CHP - Malbase Fdr- III	121.44	+	
		Unit- IV	89.21	220kV CHP - Semtokha Fdr- IV	13.24	+	
		-	-	220kV Malbase - Birpara Fdr.	0.57	+	
		-	-	66kV CHP - Chumdo Fdr.	8.98	+	
		-	-	66kV CHP - Gedu Fdr.	7.29	+	
		-	-	3x3MVA, 66/11kV TFR	1.61	+	
		<b>Total</b>	<b>267.93</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.17</b>		
3	24MW BHP (U/S)	Unit- I	9.96	220kV BHP - Semtokha Fdr.	31.03	+	
		Unit- II	9.96	66kV BHP - Lobeyasa Fdr.	18.58	+	
		<b>Total</b>	<b>19.92</b>	220kV BHP - Tsirang Fdr.	7.66	-	
	40MW BHP (L/S)	Unit- I	19.41	5MVA, 66/11kV TFR	0.70	+	
		Unit- II	18.64	30MVA ICT, 220/66kV			
<b>Total</b>	<b>38.05</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.00</b>				
4	126MW DHPC	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	60.08	+	
		Unit-II	30.21	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>60.50</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.42</b>		
5	60MW KHP	Unit- I	14.02	132kV KHP - Nangkhor Fdr- I	46.71	+	
		Unit-II	14.09	132kV KHP - Kilikhar Fdr- II	9.03	+	
		Unit- III	15.11	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	13.09	132kV Gelephu - Salakati Fdr.	21.42	+	
		-	-	132kV Motanga - Rangia Fdr.	37.90	+	
		-	-	220kV Tsirang - Jigmeling	64.90	+	
		<b>Total</b>	<b>56.31</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.07</b>		

**Note: Load summary on October 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	947.62	274.17	269.24	608.55	4.93
2	Eastern Grid	366.46	65.32	61.82	366.04	3.50
	<b>Total</b>	<b>1,314.08</b>	<b>339.49</b>	<b>331.06</b>	<b>974.59</b>	<b>8.43</b>

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

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	246.76	246.76	281.60
2	Eastern Grid	47.25	47.25	62.24
	<b>National</b>	<b>294.01</b>	<b>294.01</b>	<b>343.84</b>

**NOTES:**

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

Date:	October 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	0.00	400kV THP - Siliguri Fdr- I	186.18	+	Unit-I standby. Unit III & V under shutdown. 400kV THP_MAL line under maintenance.
		Unit- II	189.20	400kV THP - Siliguri Fdr- II	185.49	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	185.98	+	
		Unit- IV	186.97	400kV THP - Malbase Fdr- III	0.00	+	
		Unit- V	0.00	400kV Malbase - Siliguri	-21.27	-	
		Unit- VI	186.49	-	-	-	
		<b>Total</b>	<b>562.66</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>5.01</b>		
2	720MW MHP	Unit-I	84.10	400kV MHP - Jigmeling Fdr - I	151.30	+	Unit-III under shutdown.
		Unit-II	151.20	400kV MHP - Jigmeling Fdr - II	154.50	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	73.50	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>308.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.00</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	65.11	+	CHP Unit-I under shutdown.
		Unit- II	90.33	220kV CHP - Birpara Fdr- II	64.98	+	
		Unit- III	90.59	220kV CHP - Malbase Fdr- III	143.42	+	
		Unit- IV	91.01	220kV CHP - Semtokha Fdr- IV	-16.32	-	
		-	-	220kV Malbase - Birpara Fdr.	-2.60	-	
		-	-	66kV CHP - Chumdo Fdr.	4.87	+	
		-	-	66kV CHP - Gedu Fdr.	7.16	+	
		-	-	3x3MVA, 66/11kV TFR	0.86	+	
		<b>Total</b>	<b>271.93</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.85</b>		
4	24MW BHP (U/S)	Unit- I	9.89	220kV BHP - Semtokha Fdr.	46.69	+	
		Unit- II	9.89	66kV BHP - Lobeyasa Fdr.	15.97	+	
		<b>Total</b>	<b>19.78</b>	220kV BHP - Tsirang Fdr.	-4.76	-	
	40MW BHP (L/S)	Unit- I	19.50	5MVA, 66/11kV TFR	0.38	+	
		Unit- II	18.68	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>38.18</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.32</b>		
5	126MW DHPC	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	60.07	+	
		Unit-II	30.18	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>60.47</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.40</b>		
6	60MW KHP	Unit- I	13.96	132kV KHP - Nangkhor Fdr- I	50.87	+	
		Unit-II	14.05	132kV KHP - Kilikhar Fdr- II	5.61	+	
		Unit- III	15.10	5MVA, 132/11kV TFR	0.20	+	
		Unit- IV	13.11	132kV Gelephu - Salakati Fdr.	28.33	+	
		-	-	132kV Motanga - Rangia Fdr.	34.23	+	
		-	-	220kV Tsirang - Jigmeling	51.87	+	
		<b>Total</b>	<b>56.22</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.46</b>		

**Note: Load summary on October 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	953.02	237.28	230.34	663.87	6.94
2	Eastern Grid	365.02	48.53	45.99	368.36	2.54
	<b>Total</b>	<b>1,318.04</b>	<b>285.81</b>	<b>276.33</b>	<b>1,032.23</b>	<b>9.48</b>

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

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	234.72	244.52	281.60
2	Eastern Grid	31.92	48.49	62.24
	<b>National</b>	<b>266.64</b>	<b>293.01</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.