

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	October 19, 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	194.28	+	Unit-I standby. Unit III under shutdown. 400kV THP_MAL line under maintenance.
		Unit- II	138.83	400kV THP - Siliguri Fdr- II	193.20	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	192.75	+	
		Unit- IV	138.83	400kV THP - Malbase Fdr- III	0.00	+	
		Unit- V	139.01	400kV Malbase - Siliguri	-50.07	-	
		Unit- VI	169.88	-	-	-	
		<b>Total</b>	<b>586.55</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>6.32</b>		
2	720MW MHP	Unit-I	84.40	400kV MHP - Jigmeling Fdr - I	146.90	+	Unit-III under shutdown.
		Unit-II	106.00	400kV MHP - Jigmeling Fdr - II	149.10	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	106.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>296.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.40</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	62.85	+	Unit-I under shutdown
		Unit- II	90.94	220kV CHP - Birpara Fdr- II	62.87	+	
		Unit- III	91.11	220kV CHP - Malbase Fdr- III	127.91	+	
		Unit- IV	91.12	220kV CHP - Semtokha Fdr- IV	1.62	+	
		-	-	220kV Malbase - Birpara Fdr.	4.67	+	
		-	-	66kV CHP - Chumdo Fdr.	8.26	+	
		-	-	66kV CHP - Gedu Fdr.	7.59	+	
		-	-	3x3MVA, 66/11kV TFR	1.45	+	
		<b>Total</b>	<b>273.17</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.62</b>		
3	24MW BHP (U/S)	Unit- I	10.20	220kV BHP - Semtokha Fdr.	40.73	+	
		Unit- II	10.20	66kV BHP - Lobeyasa Fdr.	18.46	+	
		<b>Total</b>	<b>20.40</b>	220kV BHP - Tsirang Fdr.	-0.78	-	
	40MW BHP (L/S)	Unit- I	19.90	5MVA, 66/11kV TFR	1.11	+	
		Unit- II	19.19	30MVA ICT, 220/66kV			
<b>Total</b>	<b>39.09</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.03</b>				
4	126MW DHPC	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	62.04	+	
		Unit-II	32.16	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>62.45</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.41</b>		
5	60MW KHP	Unit- I	14.11	132kV KHP - Nangkhor Fdr- I	48.82	+	
		Unit-II	14.17	132kV KHP - Kilikhar Fdr- II	8.17	+	
		Unit- III	15.42	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	13.91	132kV Gelephu - Salakati Fdr.	20.65	+	
		-	-	132kV Motanga - Rangia Fdr.	33.06	+	
		-	-	220kV Tsirang - Jigmeling	58.57	+	
		<b>Total</b>	<b>57.61</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.22</b>		

Note: Load summary on October 19, 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	981.66	262.54	255.22	660.55	7.32
2	Eastern Grid	354.01	62.87	62.25	349.71	0.62
	<b>Total</b>	<b>1,335.67</b>	<b>325.41</b>	<b>317.47</b>	<b>1,010.26</b>	<b>7.94</b>

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

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	245.09	245.09	281.60
2	Eastern Grid	47.57	50.52	62.24
	<b>National</b>	<b>292.66</b>	<b>295.61</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:	October 20, 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	186.39	+	Unit-I standby. Unit III & V under shutdown. 400kV THP_MAL line under maintenance.
		Unit- II	187.60	400kV THP - Siliguri Fdr- II	185.34	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	185.59	+	
		Unit- IV	186.93	400kV THP - Malbase Fdr- III	0.00	+	
		Unit- V	0.00	400kV Malbase - Siliguri	-34.35	-	
		Unit- VI	187.03	-	-	-	
		<b>Total</b>	<b>561.56</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>4.24</b>		
2	720MW MHP	Unit-I	82.00	400kV MHP - Jigmeling Fdr - I	147.60	+	Unit-III under shutdown.
		Unit-II	109.00	400kV MHP - Jigmeling Fdr - II	147.90	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	109.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>300.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>4.50</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	63.63	+	CHP Unit-I under shutdown.
		Unit- II	91.10	220kV CHP - Birpara Fdr- II	63.58	+	
		Unit- III	86.91	220kV CHP - Malbase Fdr- III	136.85	+	
		Unit- IV	86.52	220kV CHP - Semtokha Fdr- IV	-14.19	-	
		-	-	220kV Malbase - Birpara Fdr.	-0.40	-	
		-	-	66kV CHP - Chumdo Fdr.	5.18	+	
		-	-	66kV CHP - Gedu Fdr.	7.15	+	
		-	-	3x3MVA, 66/11kV TFR	1.08	+	
		<b>Total</b>	<b>264.53</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.25</b>		
4	24MW BHP (U/S)	Unit- I	10.10	220kV BHP - Semtokha Fdr.	46.31	+	
		Unit- II	10.10	66kV BHP - Lobeysha Fdr.	16.43	+	
		<b>Total</b>	<b>20.20</b>	220kV BHP - Tsirang Fdr.	-4.58	-	
	40MW BHP (L/S)	Unit- I	19.59	5MVA, 66/11kV TFR	0.50	+	
		Unit- II	18.83	30MVA ICT, 220/66kV			
<b>Total</b>	<b>38.42</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.04</b>				
5	126MW DHPC	Unit-I	30.29	220kV DHPC - Tsirang Fdr.	61.06	+	
		Unit-II	31.20	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>61.49</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.43</b>		
6	60MW KHP	Unit- I	13.18	132kV KHP - Nangkor Fdr- I	47.07	+	
		Unit-II	13.29	132kV KHP - Kilikhar Fdr- II	5.13	+	
		Unit- III	13.14	5MVA, 132/11kV TFR	0.20	+	
		Unit- IV	13.10	132kV Gelephu - Salakati Fdr.	31.44	+	
		-	-	132kV Motanga - Rangia Fdr.	31.69	+	
		-	-	220kV Tsirang - Jigmeling	54.94	+	
		<b>Total</b>	<b>52.71</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.31</b>		

Note: Load summary on October 20, 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	946.20	241.48	235.60	649.78	5.88
2	Eastern Grid	352.71	49.02	44.21	358.63	4.81
	<b>Total</b>	<b>1,298.91</b>	<b>290.50</b>	<b>279.81</b>	<b>1,008.41</b>	<b>10.69</b>

Note: Load Summary on October 20, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	223.36	246.76	281.60
2	Eastern Grid	32.32	47.25	62.24
	<b>National</b>	<b>255.68</b>	<b>294.01</b>	<b>343.84</b>

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- 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.
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