

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	December 6, 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	70.63	400kV THP - Siliguri Fdr- I	80.33	+	Unit-II at standby. Unit- V & VI under shutdown. 400kV THP_SILI-IV shutdown			
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	78.27	+				
		Unit- III	159.22	400kV THP - Siliguri Fdr- IV	0.00	-				
		Unit- IV	70.72	400kV THP - Malbase Fdr- III	136.00	+				
		Unit- V	0.00	400kV Malbase - Siliguri	62.92	+				
		Unit- VI	0.00	-	-	-				
		<b>Total</b>	<b>300.57</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>5.97</b>					
2	720MW MHP	Unit-I	144.9	400kV MHP - Jigmeling Fdr - I	0.00		Unit-II, III IV under maintenance. MHP-JLG I under breakdown.			
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	142.90	+				
		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>144.90</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.00</b>					
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	10.01	+	Unit-I & II under shutdown.			
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	10.14	+				
		Unit- III	75.22	220kV CHP - Malbase Fdr- III	64.44	+				
		Unit- IV	78.43	220kV CHP - Sementokha Fdr- IV	45.72	+				
		-	-	220kV Malbase - Birpara Fdr.	-32.35	-				
		-	-	66kV CHP - Chumdo Fdr.	16.19	+				
		-	-	66kV CHP - Gedu Fdr.	3.43	+				
		-	-	3x3MVA, 66/11kV TFR	1.92	+				
		<b>Total</b>	<b>153.65</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.80</b>					
		3	24MW BHP (U/S)	Unit- I	8.94	220kV BHP - Sementokha Fdr.		18.53	+	U/S Unit-II under maintenace. L/S Unit-I at standby.
Unit- II	0.00			66kV BHP - Lobeysa Fdr.	17.67	+				
<b>Total</b>	<b>8.94</b>			220kV BHP - Tsirang Fdr.	-9.37	-				
40MW BHP (L/S)	Unit- I		0.00	5MVA, 66/11kV TFR	0.86	+				
	Unit- II		18.59	30MVA ICT, 220/66kV						
<b>Total</b>	<b>18.59</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.16</b>							
4	126MW DHPC	Unit-I	27.98	220kV DHPC - Tsirang Fdr.	27.75	+	Unit II at Standby.			
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.						
		-	-	5MVA, 220/33kV TFR						
		<b>Total</b>	<b>27.98</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>					
		5	60MW KHP	Unit- I	14.11	132kV KHP - Nangkhor Fdr- I		18.71	+	Unit-II under shutdown. Unit-IV at standby.
				Unit-II	0.00	132kV KHP - Kilikhar Fdr- II		9.29	+	
Unit- III	14.42			5MVA, 132/11kV TFR	0.30	+				
Unit- IV	0.00			132kV Gelephu - Salakati Fdr.	-21.82	-				
-	-			132kV Motanga - Rangia Fdr.	-7.89	-				
<b>Total</b>	<b>28.53</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>							

Note: Load summary on December 06, 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	509.73	286.01	278.17	209.32	7.84
2	Eastern Grid	173.43	74.64	72.41	113.19	2.23
	<b>Total</b>	<b>683.16</b>	<b>360.65</b>	<b>350.58</b>	<b>322.51</b>	<b>10.07</b>

Note: Load Summary on December 06, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	293.33	295.94	319.28
2	Eastern Grid	64.64	64.64	71.32
	<b>National</b>	<b>357.97</b>	<b>360.58</b>	<b>390.60</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:	December 7, 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	67.48	400kV THP - Siliguri Fdr- I	50.42	+	Unit- II at standby. Unit- V & VI under shutdown. 400kV THP_SILI-IV shutdown.
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	50.31	+	
		Unit- III	137.90	400kV THP - Siliguri Fdr- IV	0.00	-	
		Unit- IV	0.00	400kV THP - Malbase Fdr- III	100.87	+	
		Unit- V	0.00	400kV Malbase - Siliguri	36.29	+	
		Unit- VI	0.00	-	-	-	
		<b>Total</b>	<b>205.38</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.78</b>		
2	720MW MHP	Unit-I	140.72	400kV MHP - Jigmeling Fdr- I	0.00		Unit-II, III & IV under maintenance. 400kV MHP-JLG I under breakdown.
		Unit-II	0.00	400kV MHP - Jigmeling Fdr- II	137.40	+	
		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)			
		<b>Total</b>	<b>140.72</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.32</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	0.00	+	Unit-I & II under shutdownn.
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	-1.11	+	
		Unit- III	84.32	220kV CHP - Malbase Fdr- III	51.36	+	
		Unit- IV	0.00	220kV CHP - Sementokha Fdr- IV	20.47	+	
		-	-	220kV Malbase - Birpara Fdr.	-42.13	-	
		-	-	66kV CHP - Chumdo Fdr.	11.98	+	
		-	-	66kV CHP - Gedu Fdr.	4.05	+	
		-	-	3x3MVA, 66/11kV TFR	1.36	+	
<b>Total</b>	<b>84.32</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-3.79</b>				
4	24MW BHP (U/S)	Unit- I	8.83	220kV BHP - Sementokha Fdr.	32.15	+	Upper stage Unit-II shutdown. Lower Stage Unit-I standby.
		Unit- II	0.00	66kV BHP - Lobeysa Fdr.	15.46	+	
		<b>Total</b>	<b>8.83</b>	220kV BHP - Tsirang Fdr.	-21.32	-	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.54	+	
		Unit- II	17.83	30MVA ICT, 220/66kV			
<b>Total</b>	<b>17.83</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.17</b>				
5	126MW DHPC	Unit-I	28.25	220kV DHPC - Tsirang Fdr.	28.05	+	Unit-II at Standby
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>28.25</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.20</b>		
6	60MW KHP	Unit- I	15.90	132kV KHP - Nangkhon Fdr- I	24.06	+	Unit-II under shutdown. Unit-IV Standby.
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	6.55	+	
		Unit- III	15.50	5MVA, 132/11kV TFR	0.20	+	
		Unit- IV	0.00	132kV Gelephu - Salakati Fdr.	-17.40	-	
		-	-	132kV Motanga - Rangia Fdr.	-10.84	-	
		-	-	220kV Tsirang - Jigmeling	5.01	+	
		<b>Total</b>	<b>31.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.59</b>		

**Note: Load summary on December 07, 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	344.61	245.82	245.80	93.78	0.02
2	Eastern Grid	172.12	67.97	64.06	109.16	3.91
	<b>Total</b>	516.73	313.79	309.86	202.94	3.93

**Note: Load Summary on December 07, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	269.06	285.63	319.28
2	Eastern Grid	52.27	59.91	71.32
	<b>National</b>	<b>321.33</b>	<b>345.54</b>	<b>390.60</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.