

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	December 24, 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	137.79	400kV THP - Siliguri Fdr- I	68.63	+	Unit-III & IV at standby. Unit-II & VI under shutdown. 400kV THP_SILI-IV shutdown
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	66.36	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	0.00		
		Unit- IV	0.00	400kV THP - Malbase Fdr- III	138.66	+	
		Unit- V	139.51	400kV Malbase - Siliguri	46.00	+	
		Unit- VI	0.00	-	-	-	
		<b>Total</b>	<b>277.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.65</b>		
2	720MW MHP	Unit-I	115.00	400kV MHP - Jigmeling Fdr - I	0.00		Unit-II & III under maintenance.Unit-IV under standby 400kV MHP-JLG I under breakdown. 400kV MHP_JIG Fdr-IV at Standby.
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	56.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	56.00	+	
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>115.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.00</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	0.00	+	Unit-I & II under shutdown. 220kV CHP-Bir I Standby
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	2.68	+	
		Unit- III	67.63	220kV CHP - Malbase Fdr- III	54.01	+	
		Unit- IV	67.57	220kV CHP - Sementokha Fdr- IV	55.11	+	
		-	-	220kV Malbase - Birpara Fdr.	-39.00	-	
		-	-	66kV CHP - Chumdo Fdr.	15.79	+	
		-	-	66kV CHP - Gedu Fdr.	3.58	+	
		-	-	3x3MVA, 66/11kV TFR	1.80	+	
		<b>Total</b>	<b>135.20</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.23</b>		
3	24MW BHP (U/S)	Unit- I	7.68	220kV BHP - Sementokha Fdr.	12.26	+	U/S Unit-II under maintenace. L/S Unit-I at standby.
		Unit- II	0.00	66kV BHP - Lobeysa Fdr.	18.27	+	
		<b>Total</b>	<b>7.68</b>	220kV BHP - Tsirang Fdr.	-8.41	-	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.87	+	
		Unit- II	15.55	30MVA ICT, 220/66kV			
<b>Total</b>	<b>15.55</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.24</b>				
4	126MW DHPC	Unit-I	23.27	220kV DHPC - Tsirang Fdr.	23.05	+	Unit II at Standby.
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>23.27</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.22</b>		
5	60MW KHP	Unit- I	12.55	132kV KHP - Nangkhor Fdr- I	14.15	+	Unit-II under shutdown. Unit-III at standby.
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	8.55	+	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.60	+	
		Unit- IV	11.06	132kV Gelephu - Salakati Fdr.	-19.94	-	
		-	-	132kV Motanga - Rangia Fdr.	-1.76	-	
		-	-	220kV Tsirang - Jigmeling	11.48	+	
		<b>Total</b>	<b>23.61</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.31</b>		

Note: Load summary on December 24, 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	459.00	302.85	296.51	144.67	6.34
2	Eastern Grid	138.61	59.79	56.48	90.30	3.31
	<b>Total</b>	<b>597.61</b>	<b>362.64</b>	<b>352.99</b>	<b>234.97</b>	<b>9.65</b>

Note: Load Summary on December 24, 2018 at 19:00hrs

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	294.37	294.64	319.28
2	Eastern Grid	61.89	64.89	71.32
	<b>National</b>	<b>356.26</b>	<b>359.53</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 25, 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	120.00	400kV THP - Siliguri Fdr- I	40.00	+	Unit- III & IV at standby. Unit- II & VI under shutdown. 400kV THP_SILL-IV under shutdown.
		Unit- II	0.00	400kV THP - Siliguri Fdr- II	39.00	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	0.00		
		Unit- IV	0.00	400kV THP - Malbase Fdr- III	102.00	+	
		Unit- V	70.00	400kV Malbase - Siliguri	22.00	+	
		Unit- VI	0.00	-	-	-	
		<b>Total</b>	<b>190.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>9.00</b>		
2	720MW MHP	Unit-I	123.37	400kV MHP - Jigmeling Fdr - I	0.00		Unit-III & IV under maintenance. Unit-II standby 400kV MHP-JLG I under breakdown. 400kV MHP-JLG IV at standby.
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	60.40	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	60.40	+	
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>123.37</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.57</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	0.00	+	Unit-I & II under shutdownn. 220kV CHP-BIR I at standby
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	-6.85	-	
		Unit- III	46.03	220kV CHP - Malbase Fdr- III	42.23	+	
		Unit- IV	44.78	220kV CHP - Sementokha Fdr- IV	36.62	+	
		-	-	220kV Malbase - Birpara Fdr.	-44.00	-	
		-	-	66kV CHP - Chumdo Fdr.	13.20	+	
		-	-	66kV CHP - Gedu Fdr.	3.30	+	
		-	-	3x3MVA, 66/11kV TFR	1.50	+	
		<b>Total</b>	<b>90.81</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.81</b>		
4	24MW BHP (U/S)	Unit- I	7.80	220kV BHP - Sementokha Fdr.	19.31	+	U/S Unit-II under maintenace. L/S Unit-I at standby.
		Unit- II	0.00	66kV BHP - Lobeyasa Fdr.	15.80	+	
		<b>Total</b>	<b>7.80</b>	220kV BHP - Tsirang Fdr.	-13.20	-	
	40MW BHP (L/S)	Unit- I	0.00	5MVA, 66/11kV TFR	0.98	+	
		Unit- II	15.40	30MVA ICT, 220/66kV			
<b>Total</b>	<b>15.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.31</b>				
5	126MW DHPC	Unit-I	14.15	220kV DHPC - Tsirang Fdr.	23.93	+	Unit-II at Standby
		Unit-II	0.00	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>14.15</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-9.78</b>		
6	60MW KHP	Unit- I	12.50	132kV KHP - Nangkhor Fdr- I	17.01	+	Unit-II under shutdown. Unit-III Standby.
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	6.03	+	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.12	+	
		Unit- IV	11.00	132kV Gelephu - Salakati Fdr.	-18.20	-	
		-	-	132kV Motanga - Rangia Fdr.	-8.15	-	
		-	-	220kV Tsirang - Jigmeling	5.96	+	
		<b>Total</b>	<b>23.50</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.34</b>		

Note: Load summary on December 25, 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	318.16	262.05	261.71	50.15	0.34
2	Eastern Grid	146.87	58.38	55.47	94.45	2.91
	<b>Total</b>	<b>465.03</b>	<b>320.43</b>	<b>317.18</b>	<b>144.60</b>	<b>3.25</b>

Note: Load Summary on December 25, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	282.83	308.95	319.28
2	Eastern Grid	48.06	69.34	71.32
	<b>National</b>	<b>330.89</b>	<b>378.29</b>	<b>390.60</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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