

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	September 9, 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	185.89	400kV THP - Siliguri Fdr- I	253.48	+	
		Unit- II	184.35	400kV THP - Siliguri Fdr- II	251.01	+	
		Unit- III	187.36	400kV THP - Siliguri Fdr- IV	263.15	+	
		Unit- IV	186.24	400kV THP - Malbase Fdr- III	349.39	+	
		Unit- V	186.77	400kV Malbase - Siliguri	215.04	+	
		Unit- VI	186.31	-	-	-	
		<b>Total</b>	<b>1,116.92</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.11</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	57.64	+	Unit-III under shutdown. Unit I & II under break down
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	58.33	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	116.80	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>116.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.83</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	96.15	+	Unit-I under breakdown..
		Unit- II	91.73	220kV CHP - Birpara Fdr- II	95.82	+	
		Unit- III	91.87	220kV CHP - Malbase Fdr- III	106.44	+	
		Unit- IV	91.36	220kV CHP - Semtokha Fdr- IV	-37.88	-	
		-	-	220kV Malbase - Birpara Fdr.	75.92	+	
		-	-	66kV CHP - Chumdo Fdr.	4.32	+	
		-	-	66kV CHP - Gedu Fdr.	7.82	+	
		-	-	3x3MVA, 66/11kV TFR	1.41	+	
<b>Total</b>	<b>274.96</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.88</b>				
3	24MW BHP (U/S)	Unit- I	11.81	220kV BHP - Semtokha Fdr.	71.76	+	
		Unit- II	11.81	66kV BHP - Lobeyasa Fdr.	20.45	+	
		<b>Total</b>	<b>23.62</b>	220kV BHP - Tsirang Fdr.	-27.79	-	
	40MW BHP (L/S)	Unit- I	20.98	5MVA, 66/11kV TFR	0.73	+	
		Unit- II	20.16	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.14</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.39</b>				
4	126MW DHPC	Unit-I	33.32	220kV DHPC - Tsirang Fdr.	77.04	+	
		Unit-II	44.12	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>77.44</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.40</b>		
5	60MW KHP	Unit- I	16.48	132kV KHP - Nangkor Fdr- I	56.86	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.52	132kV KHP - Kilikhar Fdr- II	8.33	+	
		Unit- III	16.69	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.28	132kV Gelephu - Salakati Fdr.	73.82	+	
		-	-	132kV Motanga - Rangia Fdr.	-17.00	-	
		-	-	220kV Tsirang - Jigmeling	45.37	+	
		<b>Total</b>	<b>65.97</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.28</b>		

**Note: Load summary on September 09, 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	1,534.08	238.14	237.36	1,250.57	0.78
2	Eastern Grid	182.77	55.35	54.24	172.79	1.11
	<b>Total</b>	<b>1,716.85</b>	<b>293.49</b>	<b>291.60</b>	<b>1,423.36</b>	<b>1.89</b>

**Note: Load Summary on September 09, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	239.68	239.68	256.15
2	Eastern Grid	52.38	52.38	57.74
	<b>National</b>	<b>292.06</b>	<b>292.06</b>	<b>313.89</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: #####  
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	185.78	400kV THP - Siliguri Fdr- I	264.56	+	
		Unit- II	187.90	400kV THP - Siliguri Fdr- II	261.85	+	
		Unit- III	187.22	400kV THP - Siliguri Fdr- IV	263.95	+	
		Unit- IV	186.24	400kV THP - Malbase Fdr- III	321.30	+	
		Unit- V	187.49	400kV Malbase - Siliguri	235.57	+	
		Unit- VI	186.96	-	-	-	
		<b>Total</b>	<b>1,121.59</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>9.93</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	190.60	+	Unit-III under shutdown. Unit I under break down
		Unit-II	187.52	400kV MHP - Jigmeling Fdr - II	184.90	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	189.15	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>376.67</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.17</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	87.75	+	Unit-I under breakdown.
		Unit- II	85.74	220kV CHP - Birpara Fdr- II	87.27	+	
		Unit- III	91.67	220kV CHP - Malbase Fdr- III	124.80	+	
		Unit- IV	91.37	220kV CHP - Semtokha Fdr- IV	-39.19	-	
		-	-	220kV Malbase - Birpara Fdr.	47.61	+	
		-	-	66kV CHP - Chumdo Fdr.	1.06	+	
		-	-	66kV CHP - Gedu Fdr.	7.45	+	
		-	-	3x3MVA, 66/11kV TFR	0.73	+	
<b>Total</b>	<b>268.78</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-1.09</b>				
4	24MW BHP (U/S)	Unit- I	11.80	220kV BHP - Semtokha Fdr.	57.76	+	
		Unit- II	11.80	66kV BHP - Lobeyasa Fdr.	15.76	+	
		<b>Total</b>	<b>23.60</b>	220kV BHP - Tsirang Fdr.	-9.22	-	
	40MW BHP (L/S)	Unit- I	21.01	5MVA, 66/11kV TFR	0.48	+	
		Unit- II	20.18	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.19</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.01</b>		
5	126MW DHPC	Unit-I	30.30	220kV DHPC - Tsirang Fdr.	80.00	+	
		Unit-II	50.13	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>80.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.43</b>		
6	60MW KHP	Unit- I	16.31	132kV KHP - Nangkor Fdr- I	61.85	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.63	132kV KHP - Kilikhar Fdr- II	3.38	+	
		Unit- III	16.45	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.37	132kV Gelephu - Salakati Fdr.	36.28	+	
		-	-	132kV Motanga - Rangia Fdr.	45.08	+	
		-	-	220kV Tsirang - Jigmeling	68.34	+	
		<b>Total</b>	<b>65.76</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.03</b>		

Note: Load summary on September 10, 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	1,535.59	218.69	209.41	1,248.56	9.28
2	Eastern Grid	442.43	53.91	52.71	456.86	1.20
	<b>Total</b>	<b>1,978.02</b>	<b>272.60</b>	<b>262.12</b>	<b>1,705.42</b>	<b>10.48</b>

Note: Load Summary on September 10, 2018 at 09:00hrs

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	213.34	224.66	256.15
2	Eastern Grid	34.67	52.53	57.74
	<b>National</b>	<b>248.01</b>	<b>277.19</b>	<b>313.89</b>

**NOTES:**

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  - 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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