

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	July 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	187.00	400kV THP - Siliguri Fdr- I	258.00	+	
		Unit- II	186.16	400kV THP - Siliguri Fdr- II	257.30	+	
		Unit- III	187.71	400kV THP - Siliguri Fdr- IV	249.72	+	
		Unit- IV	187.25	400kV THP - Malbase Fdr- III	343.76	+	
		Unit- V	186.54	400kV Malbase - Siliguri	222.54	+	
		Unit- VI	186.48	-	-	-	
		<b>Total</b>	<b>1,121.14</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>12.36</b>		
2	720MW MHP	Unit-I	183.10	400kV MHP - Jigmeling Fdr - I	183.80		COD for Unit-I: 12:30PM, 28th June, 2019. The current local load/auxiliary load is met from BPC, externally)
		Unit-II	183.00	400kV MHP - Jigmeling Fdr - II	182.90		
		Unit-III		400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV		400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>366.10</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.60</b>		
2	336MW CHP	Unit- I	90.67	220kV CHP - Birpara Fdr- I	89.21	+	Unit II under maintenance (MIV leakage)
		Unit- II	0.00	220kV CHP - Birpara Fdr- II	89.44	+	
		Unit- III	91.61	220kV CHP - Malbase Fdr- III	107.14	+	
		Unit- IV	91.89	220kV CHP - Semtokha Fdr- IV	-24.20	-	
		-	-	220kV Malbase - Birpara Fdr.	64.83	+	
		-	-	66kV CHP - Chumdo Fdr.	3.54	+	
		-	-	66kV CHP - Gedu Fdr.	7.97	+	
		-	-	3x3MVA, 66/11kV TFR	1.11	+	
<b>Total</b>	<b>274.17</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.04</b>				
3	24MW BHP (U/S)	Unit- I	11.85	220kV BHP - Semtokha Fdr.	53.72	+	
		Unit- II	11.85	66kV BHP - Lobeyasa Fdr.	18.61	+	
		<b>Total</b>	<b>23.70</b>	220kV BHP - Tsirang Fdr.	-7.80	-	
	60MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.30	+	
		Unit- II	20.78	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.32</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.19</b>				
4	126MW DHPC	Unit-I	45.40	220kV DHPC - Tsirang Fdr.	90.12	+	
		Unit-II	45.16	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>90.56</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.44</b>		
5	60MW KHP	Unit- I	16.26	132kV KHP - Nangkhor Fdr- I	57.50	+	Note: Motanga Substation is bypassed through ERS tower
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	7.50	+	
		Unit- III	16.51	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.46	132kV Gelephu - Salakati Fdr.	40.50	+	
		-	-	132kV Motanga - Rangia Fdr.	53.74	+	
		-	-	220kV Tsirang - Jigmeling	76.66	+	
		<b>Total</b>	<b>65.73</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>		

**Note: Load summary on July 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	1,550.89	243.19	230.24	1,231.04	12.95
2	Eastern Grid	431.83	47.55	47.92	460.94	-0.37
	<b>Total</b>	<b>1,982.72</b>	<b>290.74</b>	<b>278.16</b>	<b>1,691.98</b>	<b>12.58</b>

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

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	217.88	230.52	280.97
2	Eastern Grid	40.72	40.72	57.66
	<b>National</b>	<b>258.60</b>	<b>271.24</b>	<b>338.63</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:	July 10, 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	188.10	400kV THP - Siliguri Fdr- I	273.49	+	
		Unit- II	188.51	400kV THP - Siliguri Fdr- II	270.86	+	
		Unit- III	187.73	400kV THP - Siliguri Fdr- IV	264.78	+	
		Unit- IV	186.74	400kV THP - Malbase Fdr- III	298.40	+	
		Unit- V	186.81	400kV Malbase - Siliguri	248.82	+	
		Unit- VI	187.13	-	-	-	
		<b>Total</b>	<b>1,125.02</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>17.49</b>		
2	720MW MHP	Unit-I	182.81	400kV MHP - Jigmeling Fdr - I	177.00		
		Unit-II	181.18	400kV MHP - Jigmeling Fdr - II	178.00		
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III			
		Unit-IV	0.00	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>363.99</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>8.99</b>		
3	336MW CHP	Unit- I	91.54	220kV CHP - Birpara Fdr- I	121.66	+	
		Unit- II	91.31	220kV CHP - Birpara Fdr- II	121.55	+	
		Unit- III	91.09	220kV CHP - Malbase Fdr- III	184.15	+	
		Unit- IV	91.20	220kV CHP - Semtokha Fdr- IV	-72.51	-	
		-	-	220kV Malbase - Birpara Fdr.	57.43	+	
		-	-	66kV CHP - Chumdo Fdr.	-0.58	-	
		-	-	66kV CHP - Gedu Fdr.	9.20	+	
		-	-	3x3MVA, 66/11kV TFR	0.74	+	
<b>Total</b>	<b>365.14</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.93</b>				
4	24MW BHP (U/S)	Unit- I	11.85	220kV BHP - Semtokha Fdr.	91.54	+	
		Unit- II	11.85	66kV BHP - Lobeyasa Fdr.	16.10	+	
		<b>Total</b>	<b>23.70</b>	220kV BHP - Tsirang Fdr.	-41.46	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.14	+	
		Unit- II	20.76	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-1.32</b>		
5	126MW DHPC	Unit-I	57.08	220kV DHPC - Tsirang Fdr.	114.66	+	
		Unit-II	58.04	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>115.12</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.46</b>		
6	60MW KHP	Unit- I	16.36	132kV KHP - Nangkor Fdr- I	59.73	+	Note: Motanga Substation is bypassed through ERS tower
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	4.86	+	
		Unit- III	16.36	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.60	132kV Gelephu - Salakati Fdr.	52.14	+	
		-	-	132kV Motanga - Rangia Fdr.	44.18	+	
		-	-	220kV Tsirang - Jigmeling	69.25	+	
		<b>Total</b>	<b>65.82</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.83</b>		

**Note: Load summary on July 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	1,670.28	242.44	224.88	1,358.59	17.56
2	Eastern Grid	429.81	47.74	37.92	451.32	9.82
	<b>Total</b>	<b>2,100.09</b>	<b>290.18</b>	<b>262.80</b>	<b>1,809.91</b>	<b>27.38</b>

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

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	209.52	228.76	280.97
2	Eastern Grid	28.73	43.01	57.66
	<b>National</b>	<b>238.25</b>	<b>271.77</b>	<b>338.63</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.
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