

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	July 12, 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	186.50	400kV THP - Siliguri Fdr- I	256.31	+	
		Unit- II	186.10	400kV THP - Siliguri Fdr- II	254.03	+	
		Unit- III	186.62	400kV THP - Siliguri Fdr- IV	246.24	+	
		Unit- IV	186.63	400kV THP - Malbase Fdr- III	346.56	+	
		Unit- V	186.82	400kV Malbase - Siliguri	219.31	+	
		Unit- VI	185.40	-	-	-	
		<b>Total</b>	<b>1,118.07</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>14.93</b>		
2	720MW MHP	Unit-I	172.70	400kV MHP - Jigmeling Fdr - I	86.10		COD for Unit-I: 12:30PM, 28th June, 2019. The current local load/auxiliary load is met from BPC, externally)
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	86.10		
		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>172.70</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.50</b>		
2	336MW CHP	Unit- I	92.48	220kV CHP - Birpara Fdr- I	97.89	+	CHP Unit-III tripped at 17:56Hrs due to rise in bearing temperature
		Unit- II	91.33	220kV CHP - Birpara Fdr- II	97.82	+	
		Unit- III	0.00	220kV CHP - Malbase Fdr- III	114.43	+	
		Unit- IV	91.75	220kV CHP - Semtokha Fdr- IV	-47.75	-	
		-	-	220kV Malbase - Birpara Fdr.	72.52	+	
		-	-	66kV CHP - Chumdo Fdr.	2.92	+	
		-	-	66kV CHP - Gedu Fdr.	7.41	+	
		-	-	3x3MVA, 66/11kV TFR	1.08	+	
<b>Total</b>	<b>275.56</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.76</b>				
3	24MW BHP (U/S)	Unit- I	11.85	220kV BHP - Semtokha Fdr.	74.96	+	
		Unit- II	11.85	66kV BHP - Lobeyasa Fdr.	18.18	+	
		<b>Total</b>	<b>23.70</b>	220kV BHP - Tsirang Fdr.	-28.35	-	
	60MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	1.21	+	
		Unit- II	20.76	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.00</b>				
4	126MW DHPC	Unit-I	63.54	220kV DHPC - Tsirang Fdr.	126.30	+	
		Unit-II	63.54	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>127.08</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.78</b>		
5	60MW KHP	Unit- I	16.54	132kV KHP - Nangkor Fdr- I	57.06	+	Note: Motanga Substation is bypassed through ERS tower
		Unit-II	16.58	132kV KHP - Kilikhar Fdr- II	8.31	+	
		Unit- III	16.52	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.49	132kV Gelephu - Salakati Fdr.	48.17	+	
		-	-	132kV Motanga - Rangia Fdr.	55.92	+	
		-	-	220kV Tsirang - Jigmeling	93.79	+	
		<b>Total</b>	<b>66.13</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.36</b>		

**Note: Load summary on July 12, 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	1,585.71	247.80	231.33	1,244.12	16.47
2	Eastern Grid	238.83	56.33	55.47	276.29	0.86
	<b>Total</b>	<b>1,824.54</b>	<b>304.13</b>	<b>286.80</b>	<b>1,520.41</b>	<b>17.33</b>

**Note: Load Summary on July 12, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	216.18	227.03	280.97
2	Eastern Grid	33.46	35.57	57.66
	<b>National</b>	<b>249.64</b>	<b>262.60</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 13, 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	187.52	400kV THP - Siliguri Fdr- I	267.34	+	
		Unit- II	187.32	400kV THP - Siliguri Fdr- II	265.23	+	
		Unit- III	187.75	400kV THP - Siliguri Fdr- IV	257.53	+	
		Unit- IV	187.53	400kV THP - Malbase Fdr- III	313.64	+	
		Unit- V	185.96	400kV Malbase - Siliguri	239.63	+	
		Unit- VI	186.68	-	-	-	
		<b>Total</b>	<b>1,122.76</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>19.02</b>		
2	720MW MHP	Unit-I	172.30	400kV MHP - Jigmeling Fdr - I	172.00		Unit-II trip at 01:30hrs on 13/07/2019
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	0.00		
		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>172.30</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.30</b>		
3	336MW CHP	Unit- I	91.06	220kV CHP - Birpara Fdr- I	119.85	+	
		Unit- II	91.76	220kV CHP - Birpara Fdr- II	119.93	+	
		Unit- III	91.63	220kV CHP - Malbase Fdr- III	171.37	+	
		Unit- IV	91.16	220kV CHP - Semtokha Fdr- IV	-56.82	-	
		-	-	220kV Malbase - Birpara Fdr.	64.24	+	
		-	-	66kV CHP - Chumdo Fdr.	0.55	+	
		-	-	66kV CHP - Gedu Fdr.	8.27	+	
		<b>Total</b>	<b>365.61</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.57</b>		
4	24MW BHP (U/S)	Unit- I	11.84	220kV BHP - Semtokha Fdr.	78.07	+	
		Unit- II	11.84	66kV BHP - Lobeyasa Fdr.	16.36	+	
		<b>Total</b>	<b>23.68</b>	220kV BHP - Tsirang Fdr.	-28.59	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.42	+	
		Unit- II	20.81	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.35</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-1.23</b>		
5	126MW DHPC	Unit-I	51.18	220kV DHPC - Tsirang Fdr.	102.72	+	
		Unit-II	52.08	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>103.26</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.54</b>		
6	60MW KHP	Unit- I	16.59	132kV KHP - Nangkor Fdr- I	61.56	+	Note: Motanga Substation is bypassed through ERS tower.
		Unit-II	16.62	132kV KHP - Kilikhar Fdr- II	3.54	+	
		Unit- III	16.38	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.44	132kV Gelephu - Salakati Fdr.	46.59	+	
		-	-	132kV Motanga - Rangia Fdr.	36.85	+	
		-	-	220kV Tsirang - Jigmeling	71.11	+	
		<b>Total</b>	<b>66.03</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.53</b>		

**Note: Load summary on July 13, 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	1,656.66	251.80	231.90	1,333.75	19.90
2	Eastern Grid	238.33	54.00	53.17	255.44	0.83
	<b>Total</b>	<b>1,894.99</b>	<b>305.80</b>	<b>285.07</b>	<b>1,589.19</b>	<b>20.73</b>

**Note: Load Summary on July 13, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	193.74	228.85	280.97
2	Eastern Grid	27.49	37.87	57.66
	<b>National</b>	<b>221.23</b>	<b>266.72</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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