

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	July 23, 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	186.98	400kV THP - Siliguri Fdr- I	257.98	+	
		Unit- II	183.79	400kV THP - Siliguri Fdr- II	256.67	+	
		Unit- III	186.71	400kV THP - Siliguri Fdr- IV	249.47	+	
		Unit- IV	186.94	400kV THP - Malbase Fdr- III	338.61	+	
		Unit- V	187.79	400kV Malbase - Siliguri	224.55	+	
		Unit- VI	186.05	-	-	-	
		<b>Total</b>	<b>1,118.26</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>15.53</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00		MHEP Unit-I and 400kV MHP-JLG I under breakdown.
		Unit-II	196.40	400kV MHP - Jigmeling Fdr - II	196.00	+	
		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>196.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.40</b>		
2	336MW CHP	Unit- I	91.59	220kV CHP - Birpara Fdr- I	112.34	+	
		Unit- II	91.43	220kV CHP - Birpara Fdr- II	112.31	+	
		Unit- III	91.44	220kV CHP - Malbase Fdr- III	148.93	+	
		Unit- IV	91.24	220kV CHP - Semtokha Fdr- IV	-16.56	-	
		-	-	220kV Malbase - Birpara Fdr.	68.85	+	
		-	-	66kV CHP - Chumdo Fdr.	5.30	+	
		-	-	66kV CHP - Gedu Fdr.	1.34	+	
		-	-	3x3MVA, 66/11kV TFR	1.19	+	
		<b>Total</b>	<b>365.70</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.85</b>		
3	24MW BHP (U/S)	Unit- I	12.30	220kV BHP - Semtokha Fdr.	42.16	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	17.70	+	
		<b>Total</b>	<b>24.50</b>	220kV BHP - Tsirang Fdr.	3.91	+	
	40MW BHP (L/S)	Unit- I	20.50	5MVA, 66/11kV TFR	0.81	+	
		Unit- II	20.10	30MVA ICT, 220/66kV			
<b>Total</b>	<b>40.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.52</b>				
4	126MW DHPC	Unit-I	40.40	220kV DHPC - Tsirang Fdr.	80.07	+	
		Unit-II	40.12	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>80.52</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.45</b>		
5	60MW KHP	Unit- I	16.35	132kV KHP - Nangkhor Fdr- I	53.61	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.59	132kV KHP - Kilikhar Fdr- II	9.23	+	
		Unit- III	16.13	5MVA, 132/11kV TFR	0.60	+	
		Unit- IV	16.22	132kV Gelephu - Salakati Fdr.	35.69	+	
		-	-	132kV Motanga - Rangia Fdr.	60.96	+	
		-	-	220kV Tsirang - Jigmeling	73.66	+	
		<b>Total</b>	<b>65.29</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.85</b>		

**Note: Load summary on July 23, 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	1,629.58	273.75	256.40	1,282.17	17.35
2	Eastern Grid	261.69	42.70	40.45	292.65	2.25
	<b>Total</b>	<b>1,891.27</b>	<b>316.45</b>	<b>296.85</b>	<b>1,574.82</b>	<b>19.60</b>

**Note: Load Summary on July 23, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	238.08	244.53	280.97
2	Eastern Grid	44.58	52.15	57.66
	<b>National</b>	<b>282.66</b>	<b>296.68</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 24, 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	187.00	400kV THP - Siliguri Fdr- I	269.00	+	
		Unit- II	187.00	400kV THP - Siliguri Fdr- II	268.00	+	
		Unit- III	187.00	400kV THP - Siliguri Fdr- IV	307.00	+	
		Unit- IV	187.00	400kV THP - Malbase Fdr- III	258.00	+	
		Unit- V	187.00	400kV Malbase - Siliguri	241.00	+	
		Unit- VI	187.00	-	-	-	
		<b>Total</b>	<b>1,122.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>20.00</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00	+	MHEP Unit-I and 400kV MHP-JLG I under breakdown.
		Unit-II	195.00	400kV MHP - Jigmeling Fdr - II	193.40	+	
		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			
		-	-	(Local Load)			
		<b>Total</b>	<b>195.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.60</b>		
3	336MW CHP	Unit- I	92.00	220kV CHP - Birpara Fdr- I	122.00	+	
		Unit- II	92.00	220kV CHP - Birpara Fdr- II	122.00	+	
		Unit- III	92.00	220kV CHP - Malbase Fdr- III	186.00	+	
		Unit- IV	92.00	220kV CHP - Semtokha Fdr- IV	-68.00	-	
		-	-	220kV Malbase - Birpara Fdr.	56.00	+	
		-	-	66kV CHP - Chumdo Fdr.	1.30	+	
		-	-	66kV CHP - Gedu Fdr.	1.50	+	
		-	-	3x3MVA, 66/11kV TFR	0.90	+	
		<b>Total</b>	<b>368.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.30</b>		
4	24MW BHP (U/S)	Unit- I	12.30	220kV BHP - Semtokha Fdr.	98.56	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	17.14	+	
		<b>Total</b>	<b>24.50</b>	220kV BHP - Tsirang Fdr.	-50.60	-	
	40MW BHP (L/S)	Unit- I	20.70	5MVA, 66/11kV TFR	0.90	+	
		Unit- II	21.00	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>41.70</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.20</b>		
5	126MW DHPC	Unit-I	63.54	220kV DHPC - Tsirang Fdr.	126.20	+	
		Unit-II	63.38	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>126.92</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.72</b>		
6	60MW KHP	Unit- I	16.44	132kV KHP - Nangkor Fdr- I	60.03	+	Note: Motanga Substation is bypassed through ERS tower.
		Unit-II	16.62	132kV KHP - Kilikhar Fdr- II	4.04	+	
		Unit- III	15.77	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	15.78	132kV Gelephu - Salakati Fdr.	51.90	+	
		-	-	132kV Motanga - Rangia Fdr.	61.02	+	
		-	-	220kV Tsirang - Jigmeling	81.63	+	
		<b>Total</b>	<b>64.61</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.14</b>		

**Note: Load summary on July 24, 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	1,683.12	216.49	193.27	1,385.00	23.22
2	Eastern Grid	259.61	34.92	33.18	306.32	1.74
	<b>Total</b>	<b>1,942.73</b>	<b>251.41</b>	<b>226.45</b>	<b>1,691.32</b>	<b>24.96</b>

**Note: Load Summary on July 24, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	144.85	242.90	280.97
2	Eastern Grid	43.48	50.91	57.66
	<b>National</b>	<b>188.33</b>	<b>293.81</b>	<b>338.63</b>

**NOTES: WLDC LOAD COLLECTED FROM SITE**

- 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.