

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	July 25, 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	187.10	400kV THP - Siliguri Fdr- I	264.92	+	
		Unit- II	186.81	400kV THP - Siliguri Fdr- II	262.32	+	
		Unit- III	188.96	400kV THP - Siliguri Fdr- IV	256.03	+	
		Unit- IV	187.32	400kV THP - Malbase Fdr- III	323.14	+	
		Unit- V	186.94	400kV Malbase - Siliguri	234.14	+	
		Unit- VI	186.71	-	-	-	
		<b>Total</b>	<b>1,123.84</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>17.43</b>		
2	720MW MHP	Unit-I	198.00	400kV MHP - Jigmeling Fdr - I	395.10	+	400kV MHP-JLG II idle charged till MHEP End
		Unit-II	198.00	400kV MHP - Jigmeling Fdr - II	0.00		
		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>396.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.90</b>		
2	336MW CHP	Unit- I	90.92	220kV CHP - Birpara Fdr- I	120.58	+	
		Unit- II	91.77	220kV CHP - Birpara Fdr- II	120.95	+	
		Unit- III	91.42	220kV CHP - Malbase Fdr- III	145.26	+	
		Unit- IV	90.36	220kV CHP - Semtokha Fdr- IV	-35.61	-	
		-	-	220kV Malbase - Birpara Fdr.	87.16	+	
		-	-	66kV CHP - Chumdo Fdr.	3.40	+	
		-	-	66kV CHP - Gedu Fdr.	8.11	+	
		-	-	3x3MVA, 66/11kV TFR	1.13	+	
		<b>Total</b>	<b>364.47</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.65</b>		
3	24MW BHP (U/S)	Unit- I	11.84	220kV BHP - Semtokha Fdr.	66.02	+	
		Unit- II	11.84	66kV BHP - Lobeyasa Fdr.	19.41	+	
		<b>Total</b>	<b>23.68</b>	220kV BHP - Tsirang Fdr.	-21.04	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.83	+	
		Unit- II	20.73	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.27</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.27</b>				
4	126MW DHPC	Unit-I	63.56	220kV DHPC - Tsirang Fdr.	126.21	+	
		Unit-II	63.26	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>126.82</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.61</b>		
5	60MW KHP	Unit- I	0.00	132kV KHP - Nangkhon Fdr- I	-8.60	-	KHP Dam Scouring & 132kV Motanga -Rangia open to avoid over loading in 132kV TIN-NGA line Motanga Substation is bypassed through ERS tower
		Unit-II	0.00	132kV KHP - Kilikhar Fdr- II	8.40	+	
		Unit- III	0.00	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	0.00	132kV Gelephu - Salakati Fdr.	47.30	+	
		-	-	132kV Motanga - Rangia Fdr.	0.00	+	
		-	-	220kV Tsirang - Jigmeling	102.00	+	
		<b>Total</b>	<b>0.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.10</b>		

**Note: Load summary on July 25, 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	1,680.08	231.98	213.56	1,346.10	18.42
2	Eastern Grid	396.00	55.60	54.80	442.40	0.80
	<b>Total</b>	<b>2,076.08</b>	<b>287.58</b>	<b>268.36</b>	<b>1,788.50</b>	<b>19.22</b>

**Note: Load Summary on July 25, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	241.95	246.68	280.97
2	Eastern Grid	49.34	51.05	57.66
	<b>National</b>	<b>291.29</b>	<b>297.73</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 26, 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	187.93	400kV THP - Siliguri Fdr- I	268.21	+	
		Unit- II	188.35	400kV THP - Siliguri Fdr- II	265.31	+	
		Unit- III	187.30	400kV THP - Siliguri Fdr- IV	260.41	+	
		Unit- IV	186.91	400kV THP - Malbase Fdr- III	311.12	+	
		Unit- V	187.01	400kV Malbase - Siliguri	241.80	+	
		Unit- VI	186.31	-	-	-	
		<b>Total</b>	<b>1,123.81</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>18.76</b>		
2	720MW MHP	Unit-I	186.50	400kV MHP - Jigmeling Fdr - I	370.00	+	400kV MHP-JLG II Idle charged till MHEP end
		Unit-II	184.30	400kV MHP - Jigmeling Fdr - II	0.00		
		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>370.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.80</b>		
3	336MW CHP	Unit- I	91.47	220kV CHP - Birpara Fdr- I	119.89	+	
		Unit- II	91.26	220kV CHP - Birpara Fdr- II	120.20	+	
		Unit- III	91.40	220kV CHP - Malbase Fdr- III	179.92	+	
		Unit- IV	91.13	220kV CHP - Semtokha Fdr- IV	-65.67	-	
		-	-	220kV Malbase - Birpara Fdr.	57.80	+	
		-	-	66kV CHP - Chumdo Fdr.	-0.17	+	
		-	-	66kV CHP - Gedu Fdr.	9.49	+	
		-	-	3x3MVA, 66/11kV TFR	0.80	+	
<b>Total</b>	<b>365.26</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.80</b>				
4	24MW BHP (U/S)	Unit- I	11.83	220kV BHP - Semtokha Fdr.	88.03	+	
		Unit- II	11.83	66kV BHP - Lobeyasa Fdr.	17.58	+	
		<b>Total</b>	<b>23.66</b>	220kV BHP - Tsirang Fdr.	-40.52	-	
	40MW BHP (L/S)	Unit- I	20.54	5MVA, 66/11kV TFR	0.96	+	
		Unit- II	20.79	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.33</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-1.06</b>				
5	126MW DHPC	Unit-I	63.53	220kV DHPC - Tsirang Fdr.	126.50	+	
		Unit-II	63.20	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>126.73</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.23</b>		
6	60MW KHP	Unit- I	16.50	132kV KHP - Nangkor Fdr- I	60.41	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.50	132kV KHP - Kilikhar Fdr- II	3.66	+	
		Unit- III	16.96	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.09	132kV Gelephu - Salakati Fdr.	48.50	+	
		-	-	132kV Motanga - Rangia Fdr.	47.17	+	
		-	-	220kV Tsirang - Jigmeling	82.45	+	
		<b>Total</b>	<b>66.05</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.58</b>		

**Note: Load summary on July 26, 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	1,680.79	264.72	245.99	1,333.62	18.73
2	Eastern Grid	436.85	53.63	51.25	465.67	2.38
	<b>Total</b>	2,117.64	318.35	297.24	1,799.29	21.11

**Note: Load Summary on July 26, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	228.21	241.31	280.97
2	Eastern Grid	39.52	57.66	57.66
	<b>National</b>	<b>267.73</b>	<b>298.97</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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