

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	August 21, 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	186.48	400kV THP - Siliguri Fdr- I	254.00	+	
		Unit- II	186.96	400kV THP - Siliguri Fdr- II	252.86	+	
		Unit- III	187.27	400kV THP - Siliguri Fdr- IV	246.63	+	
		Unit- IV	187.52	400kV THP - Malbase Fdr- III	352.20	+	
		Unit- V	186.90	400kV Malbase - Siliguri	216.78	+	
		Unit- VI	185.87	-	-	-	
		<b>Total</b>	<b>1,121.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>15.31</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	0.00	+	Unit-II under shutdown since 15/08/2019. Unit III tripped on 20/08/2019@ 12:45Hrs. Unit I on emergency shutdown on 21/08/2019 @ 16:18Hrs Unit IV tripped on 21/08/2019 @ 16:25hrs
		Unit-II	0.00	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	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>0.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.00</b>		
2	336MW CHP	Unit- I	91.73	220kV CHP - Birpara Fdr- I	112.20	+	
		Unit- II	91.42	220kV CHP - Birpara Fdr- II	112.21	+	
		Unit- III	92.02	220kV CHP - Malbase Fdr- III	118.53	+	
		Unit- IV	91.79	220kV CHP - Semtokha Fdr- IV	8.18	+	
		-	-	220kV Malbase - Birpara Fdr.	92.77	+	
		-	-	66kV CHP - Chumdo Fdr.	5.22	+	
		-	-	66kV CHP - Gedu Fdr.	7.68	+	
		-	-	3x3MVA, 66/11kV TFR	1.27	+	
<b>Total</b>	<b>366.96</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.67</b>				
3	24MW BHP (U/S)	Unit- I	9.22	220kV BHP - Semtokha Fdr.	21.38	+	
		Unit- II	9.22	66kV BHP - Lobeyasa Fdr.	16.44	+	
		<b>Total</b>	<b>18.44</b>	220kV BHP - Tsirang Fdr.	13.62	+	
	40MW BHP (L/S)	Unit- I	20.30	5MVA, 66/11kV TFR	0.69	+	
		Unit- II	17.29	30MVA ICT, 220/66kV			
<b>Total</b>	<b>37.59</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.90</b>				
4	126MW DHPC	Unit-I	15.30	220kV DHPC - Tsirang Fdr.	74.87	+	
		Unit-II	60.03	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>75.33</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.46</b>		
5	60MW KHP	Unit- I	16.39	132kV KHP - Nangkor Fdr- I	56.84	+	Motanga Substation is bypassed through ERS tower
		Unit-II	16.56	132kV KHP - Kilikhar Fdr- II	8.47	+	
		Unit- III	16.47	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.43	132kV Gelephu - Salakati Fdr.	30.25	+	
		-	-	132kV Motanga - Rangia Fdr.	45.18	+	
		-	-	220kV Tsirang - Jigmeling	86.19	+	
		<b>Total</b>	<b>65.85</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.04</b>		

**Note: Load summary on August 21, 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	1,619.32	245.68	224.34	1,287.45	21.34
2	Eastern Grid	65.85	76.61	76.57	75.43	0.04
	<b>Total</b>	<b>1,685.17</b>	<b>322.29</b>	<b>300.91</b>	<b>1,362.88</b>	<b>21.38</b>

**Note: Load Summary on August 21, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	241.53	241.53	259.44
2	Eastern Grid	47.96	47.96	55.98
	<b>National</b>	<b>289.49</b>	<b>289.49</b>	<b>315.42</b>

**NOTES: DHP LOADS 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.

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	August 22, 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	187.44	400kV THP - Siliguri Fdr- I	262.14	+	
		Unit- II	187.48	400kV THP - Siliguri Fdr- II	260.20	+	
		Unit- III	187.52	400kV THP - Siliguri Fdr- IV	254.91	+	
		Unit- IV	187.17	400kV THP - Malbase Fdr- III	326.62	+	
		Unit- V	187.14	400kV Malbase - Siliguri	231.79	+	
		Unit- VI	185.93	-	-	-	
		<b>Total</b>	<b>1,122.68</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>18.81</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	153.60	+	Unit-I, II & III under shutdown 400kV MHEP-JLG II opened at both ends
		Unit-II	0.00	400kV MHP - Jigmeling Fdr - II	0.00	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	154.80	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT			
		-	-	(Local Load)			
		<b>Total</b>	<b>154.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.20</b>		
3	336MW CHP	Unit- I	91.46	220kV CHP - Birpara Fdr- I	109.30	+	
		Unit- II	91.81	220kV CHP - Birpara Fdr- II	108.94	+	
		Unit- III	91.32	220kV CHP - Malbase Fdr- III	137.47	+	
		Unit- IV	90.77	220kV CHP - Semtokha Fdr- IV	-1.77	-	
		-	-	220kV Malbase - Birpara Fdr.	74.79	+	
		-	-	66kV CHP - Chumdo Fdr.	2.58	+	
		-	-	66kV CHP - Gedu Fdr.	7.41	+	
		<b>Total</b>	<b>365.36</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.03</b>		
4	24MW BHP (U/S)	Unit- I	12.20	220kV BHP - Semtokha Fdr.	23.16	+	BHP U/S Unit II & L/S Unit II under shutdown
		Unit- II	0.00	66kV BHP - Lobeyasa Fdr.	11.54	+	
		<b>Total</b>	<b>12.20</b>	220kV BHP - Tsirang Fdr.	-5.97	-	
	40MW BHP (L/S)	Unit- I	17.40	5MVA, 66/11kV TFR	0.61	+	
		Unit- II	0.00	30MVA ICT, 220/66kV			
		<b>Total</b>	<b>17.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.26</b>		
5	126MW DHPC	Unit-I	18.30	220kV DHPC - Tsirang Fdr.	74.95	+	
		Unit-II	57.10	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>75.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.45</b>		
6	60MW KHP	Unit- I	16.40	132kV KHP - Nangkor Fdr- I	62.17	+	Motanga Substation is bypassed through ERS tower.
		Unit-II	16.52	132kV KHP - Kilikhar Fdr- II	3.14	+	
		Unit- III	16.63	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.53	132kV Gelephu - Salakati Fdr.	32.99	+	
		-	-	132kV Motanga - Rangia Fdr.	45.84	+	
		-	-	220kV Tsirang - Jigmeling	66.68	+	
		<b>Total</b>	<b>66.08</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.27</b>		

**Note: Load summary on August 22, 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	1,593.04	224.29	203.74	1,302.07	20.55
2	Eastern Grid	220.88	55.13	53.66	232.43	1.47
	<b>Total</b>	<b>1,813.92</b>	<b>279.42</b>	<b>257.40</b>	<b>1,534.50</b>	<b>22.02</b>

**Note: Load Summary on August 22, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	197.74	235.91	259.44
2	Eastern Grid	41.74	53.76	55.98
	<b>National</b>	<b>239.48</b>	<b>289.67</b>	<b>315.42</b>

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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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