

**LOAD-GENERATION BALANCE REPORT**

Maximum Load/Demand till Date

Date:	October 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	0.00	400kV THP - Siliguri Fdr- I	185.84	+	Unit-I standby. Unit III & V under shutdown. 400kV THP_MAL line under maintenance.
		Unit- II	187.92	400kV THP - Siliguri Fdr- II	184.74	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	180.42	+	
		Unit- IV	187.04	400kV THP - Malbase Fdr- III	0.00		
		Unit- V	0.00	400kV Malbase - Siliguri	-48.46	-	
		Unit- VI	186.81	-	-	-	
		<b>Total</b>	<b>561.77</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>10.77</b>		
2	720MW MHP	Unit-I	84.21	400kV MHP - Jigmeling Fdr - I	186.03	+	Unit-III under shutdown.
		Unit-II	157.24	400kV MHP - Jigmeling Fdr - II	181.21	+	
		Unit-III	0.00	400kV MHP - Jigmeling Fdr - III	0.00		
		Unit-IV	127.97	400kV MHP - Jigmeling Fdr - IV	0.00		
		-	-	200MVA, 400/132kV ICT	0.00		
		-	-	(Local Load)	0.00		
		<b>Total</b>	<b>369.42</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.18</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	60.20	+	Unit-I under shutdown
		Unit- II	91.73	220kV CHP - Birpara Fdr- II	60.22	+	
		Unit- III	91.27	220kV CHP - Malbase Fdr- III	127.75	+	
		Unit- IV	91.53	220kV CHP - Semtokha Fdr- IV	6.71	+	
		-	-	220kV Malbase - Birpara Fdr.	1.01	+	
		-	-	66kV CHP - Chumdo Fdr.	8.75	+	
		-	-	66kV CHP - Gedu Fdr.	7.87	+	
		-	-	3x3MVA, 66/11kV TFR	1.49	+	
		<b>Total</b>	<b>274.53</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.54</b>		
		3	24MW BHP (U/S)	Unit- I	9.84	220kV BHP - Semtokha Fdr.	
Unit- II	9.84			66kV BHP - Lobeyasa Fdr.	18.78	+	
<b>Total</b>	<b>19.68</b>			220kV BHP - Tsirang Fdr.	0.50	+	
40MW BHP (L/S)	Unit- I		19.18	5MVA, 66/11kV TFR	0.62	+	
	Unit- II		18.47	30MVA ICT, 220/66kV			
<b>Total</b>	<b>37.65</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.49</b>				
4	126MW DHPC	Unit-I	29.31	220kV DHPC - Tsirang Fdr.	59.10	+	
		Unit-II	30.18	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>59.49</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.39</b>		
5	60MW KHP	Unit- I	16.45	132kV KHP - Nangkhor Fdr- I	56.37	+	
		Unit-II	16.67	132kV KHP - Kilikhar Fdr- II	9.06	+	
		Unit- III	16.57	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.40	132kV Gelephu - Salakati Fdr.	20.06	+	
		-	-	132kV Motanga - Rangia Fdr.	44.79	+	
		-	-	220kV Tsirang - Jigmeling	56.51	+	
		<b>Total</b>	<b>66.09</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.26</b>		

**Note: Load summary on October 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	953.12	272.64	260.43	623.97	12.21
2	Eastern Grid	435.51	59.93	57.49	432.09	2.44
	<b>Total</b>	<b>1,388.63</b>	<b>332.57</b>	<b>317.92</b>	<b>1,056.06</b>	<b>14.65</b>

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

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	244.52	244.52	281.60
2	Eastern Grid	46.63	48.49	62.24
	<b>National</b>	<b>291.15</b>	<b>293.01</b>	<b>343.84</b>

**NOTES:**

1. 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:

- i) 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.
- ii) The clocks of all the locations are not synchronized.

2. 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:	October 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	0.00	400kV THP - Siliguri Fdr- I	176.80	+	Unit-I standby. Unit III & V under shutdown. 400kV THP_MAL line under maintenance.
		Unit- II	184.80	400kV THP - Siliguri Fdr- II	175.66	+	
		Unit- III	0.00	400kV THP - Siliguri Fdr- IV	171.14	+	
		Unit- IV	160.50	400kV THP - Malbase Fdr- III	0.00	+	
		Unit- V	0.00	400kV Malbase - Siliguri	-27.35	-	
		Unit- VI	186.64	-	-	-	
		<b>Total</b>	<b>531.94</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>8.34</b>		
2	720MW MHP	Unit-I	84.00	400kV MHP - Jigmeling Fdr - I	129.55	+	Unit-III & IV under shutdown.
		Unit-II	176.80	400kV MHP - Jigmeling Fdr - II	121.74	+	
		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>260.80</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>9.51</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	65.35	+	CHP Unit-I under shutdown.
		Unit- II	89.93	220kV CHP - Birpara Fdr- II	65.24	+	
		Unit- III	80.77	220kV CHP - Malbase Fdr- III	138.90	+	
		Unit- IV	89.02	220kV CHP - Semtokha Fdr- IV	-23.20	-	
		-	-	220kV Malbase - Birpara Fdr.	1.04	+	
		-	-	66kV CHP - Chumdo Fdr.	4.54	+	
		-	-	66kV CHP - Gedu Fdr.	7.35	+	
		-	-	3x3MVA, 66/11kV TFR	0.91	+	
		<b>Total</b>	<b>259.72</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.63</b>		
4	24MW BHP (U/S)	Unit- I	9.66	220kV BHP - Semtokha Fdr.	53.81	+	
		Unit- II	9.66	66kV BHP - Lobeyasa Fdr.	15.94	+	
		<b>Total</b>	<b>19.32</b>	220kV BHP - Tsirang Fdr.	-13.52	-	
	40MW BHP (L/S)	Unit- I	18.79	5MVA, 66/11kV TFR	0.32	+	
		Unit- II	18.08	30MVA ICT, 220/66kV			
<b>Total</b>	<b>36.87</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.36</b>				
5	126MW DHPC	Unit-I	28.33	220kV DHPC - Tsirang Fdr.	58.12	+	
		Unit-II	30.17	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>58.50</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.38</b>		
6	60MW KHP	Unit- I	16.36	132kV KHP - Nangkhor Fdr- I	60.44	+	
		Unit-II	16.47	132kV KHP - Kilikhar Fdr- II	4.88	+	
		Unit- III	16.46	5MVA, 132/11kV TFR	0.30	+	
		Unit- IV	16.37	132kV Gelephu - Salakati Fdr.	36.72	+	
		-	-	132kV Motanga - Rangia Fdr.	24.45	+	
		-	-	220kV Tsirang - Jigmeling	42.38	+	
		<b>Total</b>	<b>65.66</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.04</b>		

Note: Load summary on October 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	906.35	236.09	227.10	627.88	8.99
2	Eastern Grid	326.46	56.38	46.83	312.46	9.55
	<b>Total</b>	<b>1,232.81</b>	<b>292.47</b>	<b>273.93</b>	<b>940.34</b>	<b>18.54</b>

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

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	235.84	266.95	281.60
2	Eastern Grid	39.03	55.34	62.24
	<b>National</b>	<b>274.87</b>	<b>322.29</b>	<b>343.84</b>

**NOTES:**

1. 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:

- i) 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.
- ii) The clocks of all the locations are not synchronized.

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