

## LOAD-GENERATION BALANCE REPORT

Maximum Load/Demand till Date

<b>Date:</b>	<b>October 7, 2019</b>
<b>Hours:</b>	<b>19:00 Hours</b>

<b>Date</b>	<b>Time</b>	<b>Load(MW)</b>
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	159.05	400kV THP - Siliguri Fdr- I	281.31	+	400kV THP-SIL III under shutdown
		Unit- II	151.16	400kV THP - Siliguri Fdr- II	279.64	+	
		Unit- III	99.46	400kV THP - Siliguri Fdr- IV	274.63	+	
		Unit- IV	149.94	400kV THP - Malbase Fdr- III	0.00		
		Unit- V	130.67	400kV Malbase - Siliguri	-36.76	-	
		Unit- VI	159.11	-	-	-	
		<b>Total</b>	<b>849.39</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>13.81</b>		
2	720MW MHP	Unit-I	82.50	400kV MHP - Jigmeling Fdr - I	136.00	+	Unit-IV trip at 16:49Hrs & Unit-III under Shutdown
		Unit-II	192.00	400kV MHP - Jigmeling Fdr - II	136.00	+	
		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>274.50</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>2.50</b>		
2	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	73.56	+	Unit-I under Shutdown
		Unit- II	91.82	220kV CHP - Birpara Fdr- II	73.69	+	
		Unit- III	91.75	220kV CHP - Malbase Fdr- III	135.70	+	
		Unit- IV	91.83	220kV CHP - Semtokha Fdr- IV	-22.29	-	
		-	-	220kV Malbase - Birpara Fdr.	17.42	+	
		-	-	66kV CHP - Chumdo Fdr.	5.29	+	
		-	-	66kV CHP - Gedu Fdr.	8.68	+	
		-	-	3x3MVA, 66/11kV TFR	1.53	+	
		<b>Total</b>	<b>275.40</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-0.76</b>		
3	24MW BHP (U/S)	Unit- I	11.78	220kV BHP - Semtokha Fdr.	56.76	+	
		Unit- II	11.78	66kV BHP - Lobeyasa Fdr.	18.66	+	
		<b>Total</b>	<b>23.56</b>	220kV BHP - Tsirang Fdr.	-11.23	-	
	40MW BHP (L/S)	Unit- I	20.95	5MVA, 66/11kV TFR	0.57	+	
		Unit- II	20.15	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.10</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.10</b>				
4	126MW DHPC	Unit-I	42.36	220kV DHPC - Tsirang Fdr.	86.12	+	
		Unit-II	44.18	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>86.54</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.42</b>		
5	60MW KHP	Unit- I	16.45	132kV KHP - Nangkhor Fdr- I	56.15	+	
		Unit-II	16.51	132kV KHP - Kilikhar Fdr- II	8.65	+	
		Unit- III	16.55	5MVA, 132/11kV TFR	0.50	+	
		Unit- IV	16.28	132kV Gelephu - Salakati Fdr.	35.02	+	
		-	-	132kV Motanga - Rangia Fdr.	46.10	+	
		-	-	220kV Tsirang - Jigmeling	71.10	+	
		<b>Total</b>	<b>65.79</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.49</b>		

**Note: Load summary on October 07, 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	1,275.99	241.40	228.03	963.49	13.37
2	Eastern Grid	340.29	58.27	55.28	353.12	2.99
	<b>Total</b>	<b>1,616.28</b>	<b>299.67</b>	<b>283.31</b>	<b>1,316.61</b>	<b>16.36</b>

**Note: Load Summary on October 07, 2018 at 19:00hrs**

Sl. No	Region	19:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	240.68	240.68	281.60
2	Eastern Grid	48.35	53.03	62.24
	<b>National</b>	<b>289.03</b>	<b>293.71</b>	<b>343.84</b>

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

<b>Date:</b>	<b>October 8, 2019</b>
<b>Hours:</b>	<b>09:00 Hours</b>

<b>Date</b>	<b>Time</b>	<b>Load(MW)</b>
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	159.28	400kV THP - Siliguri Fdr- I	283.00	+	400kV THP-Malbase under shutdown.
		Unit- II	148.44	400kV THP - Siliguri Fdr- II	280.00	+	
		Unit- III	100.93	400kV THP - Siliguri Fdr- IV	273.00	+	
		Unit- IV	149.82	400kV THP - Malbase Fdr- III	0.00		
		Unit- V	132.00	400kV Malbase - Siliguri	8.00	+	
		Unit- VI	159.53	-	-	-	
		<b>Total</b>	<b>850.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>14.00</b>		
2	720MW MHP	Unit-I	0.00	400kV MHP - Jigmeling Fdr - I	176.00	+	Unit- I,III & IV under breakdown.400kV MHP_JIG Fdr.II opened at JIG end
		Unit-II	177.00	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			
		-	-	(Local Load)			
		<b>Total</b>	<b>177.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>1.00</b>		
3	336MW CHP	Unit- I	0.00	220kV CHP - Birpara Fdr- I	78.00	+	Unit-I under breakdown.
		Unit- II	92.00	220kV CHP - Birpara Fdr- II	78.10	+	
		Unit- III	92.00	220kV CHP - Malbase Fdr- III	166.00	+	
		Unit- IV	92.00	220kV CHP - Semtokha Fdr- IV	-59.50	-	
		-	-	220kV Malbase - Birpara Fdr.	1.00	+	
		-	-	66kV CHP - Chumdo Fdr.	2.50	+	
		-	-	66kV CHP - Gedu Fdr.	7.00	+	
		<b>Total</b>	<b>276.00</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>3.15</b>		
4	24MW BHP (U/S)	Unit- I	12.60	220kV BHP - Semtokha Fdr.	88.26	+	
		Unit- II	12.20	66kV BHP - Lobeyasa Fdr.	17.84	+	
		<b>Total</b>	<b>24.80</b>	220kV BHP - Tsirang Fdr.	-41.32	-	
	40MW BHP (L/S)	Unit- I	20.60	5MVA, 66/11kV TFR	0.90	+	
		Unit- II	21.00	30MVA ICT, 220/66kV			
<b>Total</b>	<b>41.60</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.72</b>				
5	126MW DHPC	Unit-I	50.39	220kV DHPC - Tsirang Fdr.	103.00	+	
		Unit-II	53.16	220kV Jigmeling - Dagapela Fdr.			
		-	-	5MVA, 220/33kV TFR			
		<b>Total</b>	<b>103.55</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>0.55</b>		
6	60MW KHP	Unit- I	16.26	132kV KHP - Nangkhor Fdr- I	59.50	+	
		Unit-II	16.61	132kV KHP - Kilikhar Fdr- II	8.65	+	
		Unit- III	16.30	5MVA, 132/11kV TFR	0.40	+	
		Unit- IV	16.26	132kV Gelephu - Salakati Fdr.	42.20	+	
		-	-	132kV Motanga - Rangia Fdr.	46.10	+	
		-	-	220kV Tsirang - Jigmeling	59.38	+	
		<b>Total</b>	<b>65.43</b>	<b>Error at Station/Auxiliary Consumption/Losses</b>	<b>-3.12</b>		

**Note: Load summary on October 08, 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	1,295.95	235.47	217.05	1,001.10	18.42
2	Eastern Grid	242.43	37.51	39.63	264.30	-2.12
	<b>Total</b>	<b>1,538.38</b>	<b>272.98</b>	<b>256.68</b>	<b>1,265.40</b>	<b>16.30</b>

**Note: Load Summary on October 08, 2018 at 09:00hrs**

Sl. No	Region	09:00Hrs Load (MW)	Day Peak Load (MW)	Month Peak Load (MW)
1	Western Grid	205.80	250.47	281.60
2	Eastern Grid	42.76	55.36	62.24
	<b>National</b>	<b>248.56</b>	<b>305.83</b>	<b>343.84</b>

### NOTES: WLDC LOADS COLLECTED FROM SITE

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.