

LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

| Date | Time | Load(MW) |
|-----------|----------|----------|
| 27-Dec-18 | 18:18hrs | 399.35MW |

Date: May 11, 2019
Hours: 19:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|-------------|------|---|
| 1 | THP | Unit- I | 166.55 | 400kV THP - Siliguri Fdr- I | 0.00 | + | Unit-IV AMP Unit-VI Standby 400kV THP_SIL fdr I & II under breakdown |
| | | Unit- II | 168.58 | 400kV THP - Siliguri Fdr- II | 0.00 | + | |
| | | Unit- III | 172.04 | 400kV THP - Siliguri Fdr- IV | 288.10 | | |
| | | Unit- IV | 0.00 | 400kV THP - Malbase Fdr- III | 380.00 | + | |
| | | Unit- V | 167.46 | 400kV Malbase - Siliguri | 262.00 | + | |
| | | Unit- VI | 0.00 | | | | |
| | | Total | 674.63 | Error At Station/Auxiliary Consumption/Losses | 6.53 | | |
| 2 | CHP | Unit- I | 91.95 | 220kV CHP - Birpara Fdr- I | 61.60 | + | Unit-II Standby |
| | | Unit- II | 0.00 | 220kV CHP - Birpara Fdr- II | 61.30 | + | |
| | | Unit- III | 91.30 | 220kV CHP - Malbase Fdr- III | 79.60 | + | |
| | | Unit- IV | 90.22 | 220kV CHP - Semtokha Fdr- IV | 54.10 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | 92.00 | + | |
| | | | | 66kV CHP - Chumdo Fdr. | 9.50 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 3.30 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 0.83 | + | |
| | | Total | 273.47 | Error At Station/Auxiliary Consumption/Losses | 3.24 | | |
| 3 | BHP (U/S) | Unit- I | 5.50 | 220kV BHP - Semtokha Fdr. | -1.35 | - | Upper stage unit II & lower stage unit-I Standby |
| | | Unit- II | 0.00 | 66kV BHP - Lobeysa Fdr. | 10.41 | + | |
| | | Total | 5.70 | 220kV BHP - Tsirang Fdr. | 6.39 | + | |
| | BHP (L/S) | Unit- I | 0.00 | 5MVA, 66/11kV TFR | 0.93 | + | |
| | | Unit- II | 11.30 | 30MVA ICT, 220/66kV | | | |
| | | Total | 11.30 | Error At Station/Auxiliary Consumption/Losses | 0.62 | | |
| 4 | DHPC | Unit-I | 0.00 | 220kV DHPC - Tsirang Fdr. | 19.00 | + | Unit-I Standby |
| | | Unit-II | 19.21 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 19.21 | Error At Station/Auxiliary Consumption/Losses | 0.21 | | |
| 5 | KHP | Unit- I | 13.25 | 132kV KHP - Nangkhor Fdr- I | 43.59 | + | |
| | | Unit-II | 13.22 | 132kV KHP - Kilikhar Fdr- II | 8.29 | + | |
| | | Unit- III | 13.12 | 5MVA, 132/11kV TFR | 0.60 | + | |
| | | Unit- IV | 13.20 | 132kV Gelephu - Salakati Fdr. | 0.20 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | 26.30 | + | |
| | | | | 220kV Tsirang - Jigmeling | 40.60 | + | |
| | | Total | 52.79 | Error At Station/Auxiliary Consumption/Losses | 0.31 | | |

Note: Load summary on May 11, 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 | 984.31 | 178.71 | 168.11 | 765.00 | 10.60 |
| 2 | Eastern Grid | 52.79 | 66.89 | 66.58 | 26.50 | 0.31 |
| | Total | 1,037.10 | 245.60 | 234.69 | 791.50 | 10.91 |

Note: Load Summary on May 11, 2018 at 19:00hrs

| Sl. No | Region | 19:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 229.00 | 254.33 | 270.60 |
| 2 | Eastern Grid | 59.38 | 59.38 | 62.83 |
| | National | 288.38 | 313.71 | 333.43 |

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 | Time | Load(MW) |
|-----------|----------|----------|
| 27-Dec-18 | 18:18hrs | 399.35MW |

Date: May 12, 2019
Hours: 09:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|-----------|-------------|--|
| 1 | THP | Unit- I | 140.00 | 400kV THP - Siliguri Fdr- I | 0.00 | + | Unit-IV AMP Unit-III & VI Standby 400kV THP_SIL IV Standby |
| | | Unit- II | 140.00 | 400kV THP - Siliguri Fdr- II | 0.00 | + | |
| | | Unit- III | 0.00 | 400kV THP - Siliguri Fdr- IV | 413.00 | | |
| | | Unit- IV | 0.00 | 400kV THP - Malbase Fdr- III | 0.00 | + | |
| | | Unit- V | 140.00 | 400kV Malbase - Siliguri | -36.74 | + | |
| | | Unit- VI | 0.00 | | | | |
| | | Total | 420.00 | Error At Station/Auxiliary Consumption/Losses | | 7.00 | |
| 2 | CHP | Unit- I | 72.00 | 220kV CHP - Birpara Fdr- I | 38.62 | + | Unit-III Standby |
| | | Unit- II | 0.00 | 220kV CHP - Birpara Fdr- II | 38.63 | + | |
| | | Unit- III | 78.00 | 220kV CHP - Malbase Fdr- III | 105.15 | + | |
| | | Unit- IV | 65.00 | 220kV CHP - Semtokha Fdr- IV | 19.83 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | -18.86 | + | |
| | | | | 66kV CHP - Chumdo Fdr. | 5.60 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 5.75 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 0.69 | + | |
| | | Total | 215.00 | Error At Station/Auxiliary Consumption/Losses | | 0.73 | |
| 3 | BHP (U/S) | Unit- I | 5.45 | 220kV BHP - Semtokha Fdr. | 8.26 | + | Upper stage unit II & lower stage unit-I Standby □ |
| | | Unit- II | 0.00 | 66kV BHP - Lobeysa Fdr. | 9.03 | + | |
| | | Total | 5.45 | 220kV BHP - Tsirang Fdr. | | -1.79 | |
| | BHP (L/S) | Unit- I | 0.00 | 5MVA, 66/11kV TFR | 0.89 | + | |
| | | Unit- II | 11.13 | 30MVA ICT, 220/66kV | | | |
| | | Total | 11.13 | Error At Station/Auxiliary Consumption/Losses | | 0.19 | |
| 4 | DHPC | Unit-I | 0.00 | 220kV DHPC - Tsirang Fdr. | 17.94 | + | Unit-I standby. |
| | | Unit-II | 18.16 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 18.16 | Error At Station/Auxiliary Consumption/Losses | | 0.22 | |
| 5 | KHP | Unit- I | 16.37 | 132kV KHP - Nangkhor Fdr- I | 60.94 | + | |
| | | Unit-II | 16.38 | 132kV KHP - Kilikhar Fdr- II | 4.12 | + | |
| | | Unit- III | 16.57 | 5MVA, 132/11kV TFR | 0.40 | + | |
| | | Unit- IV | 16.31 | 132kV Gelephu - Salakati Fdr. | 2.95 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | 27.58 | + | |
| | | | | 220kV Tsirang - Jigmeling | 12.49 | + | |
| | | Total | 65.63 | Error At Station/Auxiliary Consumption/Losses | | 0.17 | |

Note: Load summary on May 12, 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 | 669.74 | 222.60 | 214.46 | 434.65 | 8.14 |
| 2 | Eastern Grid | 65.63 | 47.59 | 47.42 | 30.53 | 0.17 |
| | Total | 735.37 | 270.19 | 261.88 | 465.18 | 8.31 |

Note: Load Summary on May 12, 2018 at 09:00hrs

| Sl. No | Region | 09:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 213.77 | 256.84 | 270.60 |
| 2 | Eastern Grid | 51.71 | 59.76 | 62.83 |
| | National | 265.48 | 316.60 | 333.43 |

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.
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