

LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

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

Date: May 1, 2019
Hours: 19:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|-------------|------|--|
| 1 | THP | Unit- I | 69.60 | 400kV THP - Siliguri Fdr- I | 143.95 | + | Unit-VI under AM. 400kV THP_SIL IV under maintenance.(13/04/19 till 04/05/19) |
| | | Unit- II | 139.02 | 400kV THP - Siliguri Fdr- II | 141.65 | + | |
| | | Unit- III | 70.96 | 400kV THP - Siliguri Fdr- IV | 0.00 | | |
| | | Unit- IV | 71.06 | 400kV THP - Malbase Fdr- III | 196.06 | + | |
| | | Unit- V | 138.27 | 400kV Malbase - Siliguri | 122.05 | + | |
| | | Unit- VI | 0.00 | | | | |
| | | Total | 488.91 | Error At Station/Auxiliary Consumption/Losses | 7.25 | | |
| 2 | CHP | Unit- I | 0.00 | 220kV CHP - Birpara Fdr- I | 43.99 | + | Unit-I under AM. |
| | | Unit- II | 78.11 | 220kV CHP - Birpara Fdr- II | 43.89 | + | |
| | | Unit- III | 83.10 | 220kV CHP - Malbase Fdr- III | 104.48 | + | |
| | | Unit- IV | 81.35 | 220kV CHP - Semtokha Fdr- IV | 31.25 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | -7.91 | - | |
| | | | | 66kV CHP - Chumdo Fdr. | 8.56 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 7.77 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 1.36 | + | |
| | | Total | 242.56 | Error At Station/Auxiliary Consumption/Losses | 1.26 | | |
| 3 | BHP (U/S) | Unit- I | 0.00 | 220kV BHP - Semtokha Fdr. | 9.32 | + | Upper Stage Unit-I in standby. Lower Stage Unit-II in standby. |
| | | Unit- II | 5.13 | 66kV BHP - Lobeysa Fdr. | 11.95 | + | |
| | | Total | 5.13 | 220kV BHP - Tsirang Fdr. | -6.06 | - | |
| | BHP (L/S) | Unit- I | 14.43 | 5MVA, 66/11kV TFR | 0.65 | + | |
| | | Unit- II | 0.00 | 30MVA ICT, 220/66kV | | | |
| | | Total | 14.43 | Error At Station/Auxiliary Consumption/Losses | 3.70 | | |
| 4 | DHPC | Unit-I | 17.30 | 220kV DHPC - Tsirang Fdr. | 17.07 | + | Unit-II Standby |
| | | Unit-II | 0.00 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 17.30 | Error At Station/Auxiliary Consumption/Losses | 0.23 | | |
| 5 | KHP | Unit- I | 16.48 | 132kV KHP - Nangkhor Fdr- I | 55.99 | + | |
| | | Unit-II | 16.53 | 132kV KHP - Kilikhar Fdr- II | 9.28 | + | |
| | | Unit- III | 16.45 | 5MVA, 132/11kV TFR | 0.40 | + | |
| | | Unit- IV | 16.57 | 132kV Gelephu - Salakati Fdr. | -7.81 | - | |
| | | | | 132kV Motanga - Rangia Fdr. | 22.08 | + | |
| | | | | 220kV Tsirang - Jigmeling | 8.30 | + | |
| | | Total | 66.03 | Error At Station/Auxiliary Consumption/Losses | 0.36 | | |

Note: Load summary on May 01, 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 | 768.33 | 272.41 | 259.97 | 487.62 | 12.44 |
| 2 | Eastern Grid | 66.03 | 60.06 | 59.70 | 14.27 | 0.36 |
| | Total | 834.36 | 332.47 | 319.67 | 501.89 | 12.80 |

Note: Load Summary on May 01, 2018 at 19:00hrs

| Sl. No | Region | 19:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 251.12 | 252.94 | 270.60 |
| 2 | Eastern Grid | 52.12 | 52.12 | 62.83 |
| | National | 303.24 | 305.06 | 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 2, 2019
Hours: 09:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|-----------|--------------|--|
| 1 | THP | Unit- I | 69.36 | 400kV THP - Siliguri Fdr- I | 169.62 | + | Unit-VI under AM. 400kV THP_SIL IV under maintenance.(13/04/19 till 04/05/19) |
| | | Unit- II | 138.27 | 400kV THP - Siliguri Fdr- II | 166.44 | + | |
| | | Unit- III | 70.98 | 400kV THP - Siliguri Fdr- IV | 0.00 | | |
| | | Unit- IV | 139.35 | 400kV THP - Malbase Fdr- III | 175.01 | + | |
| | | Unit- V | 100.24 | 400kV Malbase - Siliguri | 156.19 | + | |
| | | Unit- VI | 0.00 | | | | |
| | | Total | 518.20 | Error At Station/Auxiliary Consumption/Losses | | 7.13 | |
| 2 | CHP | Unit- I | 0.00 | 220kV CHP - Birpara Fdr- I | 62.89 | + | Unit-I under AM. □ |
| | | Unit- II | 91.53 | 220kV CHP - Birpara Fdr- II | 62.91 | + | |
| | | Unit- III | 91.35 | 220kV CHP - Malbase Fdr- III | 150.61 | + | |
| | | Unit- IV | 91.44 | 220kV CHP - Semtokha Fdr- IV | -14.81 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | -12.25 | - | |
| | | | | 66kV CHP - Chumdo Fdr. | 3.46 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 8.06 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 0.89 | + | |
| | | Total | 274.32 | Error At Station/Auxiliary Consumption/Losses | | 0.31 | |
| 3 | BHP (U/S) | Unit- I | 0.00 | 220kV BHP - Semtokha Fdr. | 43.10 | + | Upper Stage Unit-I at standby. Lower stage Unit- II Standby. □ |
| | | Unit- II | 5.52 | 66kV BHP - Lobeysa Fdr. | 9.78 | + | |
| | | Total | 5.52 | 220kV BHP - Tsirang Fdr. | | -35.40 | |
| | BHP (L/S) | Unit- I | 11.40 | 5MVA, 66/11kV TFR | 0.47 | + | |
| | | Unit- II | 0.00 | 30MVA ICT, 220/66kV | | | |
| | | Total | 11.40 | Error At Station/Auxiliary Consumption/Losses | | -1.03 | |
| 4 | DHPC | Unit-I | 18.25 | 220kV DHPC - Tsirang Fdr. | 18.06 | + | Unit-II under standby. |
| | | Unit-II | 0.00 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 18.25 | Error At Station/Auxiliary Consumption/Losses | | 0.19 | |
| 5 | KHP | Unit- I | 16.49 | 132kV KHP - Nangkhor Fdr- I | 61.97 | + | |
| | | Unit-II | 16.55 | 132kV KHP - Kilikhar Fdr- II | 3.62 | + | |
| | | Unit- III | 16.58 | 5MVA, 132/11kV TFR | 0.30 | + | |
| | | Unit- IV | 16.41 | 132kV Gelephu - Salakati Fdr. | 13.40 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | -15.43 | - | |
| | | | | 220kV Tsirang - Jigmeling | -14.78 | - | |
| | | Total | 66.03 | Error At Station/Auxiliary Consumption/Losses | | 0.14 | |

Note: Load summary on May 02, 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 | 827.69 | 236.67 | 230.07 | 605.80 | 6.60 |
| 2 | Eastern Grid | 66.03 | 53.28 | 53.14 | -2.03 | 0.14 |
| | Total | 893.72 | 289.95 | 283.21 | 603.77 | 6.74 |

Note: Load Summary on May 02, 2018 at 09:00hrs

| Sl. No | Region | 09:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 231.99 | 268.73 | 270.60 |
| 2 | Eastern Grid | 44.63 | 54.95 | 62.83 |
| | National | 276.62 | 323.68 | 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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