

LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

| Date | Time | Load(MW) |
|-----------|----------|----------|
| 24-Feb-18 | 18:34hrs | 375.23 |

Date: June 1, 2018
Hours: 19:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|--------------|------|---|
| 1 | THP | Unit- I | 136.34 | 400kV THP - Siliguri Fdr- I | 0.00 | | Unit-II, III and V Standby. 400kV THP-SIL fdr I under breakdown. |
| | | Unit- II | 0.00 | 400kV THP - Siliguri Fdr- II | 89.96 | + | |
| | | Unit- III | 0.00 | 400kV THP - Siliguri Fdr- IV | 86.51 | + | |
| | | Unit- IV | 139.36 | 400kV THP - Malbase Fdr- III | 194.43 | + | |
| | | Unit- V | 0.00 | 400kV Malbase - Siliguri | 62.58 | + | |
| | | Unit- VI | 100.21 | | | | |
| | | Total | 375.91 | Error At Station/Auxiliary Consumption/Losses | 5.01 | | |
| 2 | CHP | Unit- I | 52.18 | 220kV CHP - Birpara Fdr- I | 26.00 | + | Unit-II standby. |
| | | Unit- II | 0.00 | 220kV CHP - Birpara Fdr- II | 25.75 | + | |
| | | Unit- III | 58.42 | 220kV CHP - Malbase Fdr- III | 47.18 | + | |
| | | Unit- IV | 54.01 | 220kV CHP - Semtokha Fdr- IV | 45.67 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | 6.50 | + | |
| | | | | 66kV CHP - Chumdo Fdr. | 12.85 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 4.82 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 1.23 | + | |
| | | Total | 164.61 | Error At Station/Auxiliary Consumption/Losses | 1.11 | | |
| 3 | BHP (U/S) | Unit- I | 0.00 | 220kV BHP - Semtokha Fdr. | -19.44 | - | (U/S) Unit-I & (L/S) Unit-I Standby. |
| | | Unit- II | 7.32 | 66kV BHP - Lobeysa Fdr. | 9.10 | + | |
| | | Total | 7.32 | 220kV BHP - Tsirang Fdr. | 29.61 | + | |
| | BHP (L/S) | Unit- I | 0.00 | 5MVA, 66/11kV TFR | 0.83 | + | |
| | | Unit- II | 12.68 | 30MVA ICT, 220/66kV | | | |
| | | Total | 12.68 | Error At Station/Auxiliary Consumption/Losses | -0.10 | | |
| 4 | DHPC | Unit-I | 17.21 | 220kV DHPC - Tsirang Fdr. | 16.87 | + | DHP Unit-II Standby. |
| | | Unit-II | 0.00 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 17.21 | Error At Station/Auxiliary Consumption/Losses | 0.34 | | |
| 5 | KHP | Unit- I | 16.24 | 132kV KHP - Nangkhor Fdr- I | 59.99 | + | |
| | | Unit-II | 16.67 | 132kV KHP - Kilikhar Fdr- II | 8.53 | + | |
| | | Unit- III | 16.30 | 5MVA, 132/11kV TFR | 0.66 | + | |
| | | Unit- IV | 16.27 | 132kV Gelephu - Salakati Fdr. | 3.27 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | 39.34 | + | |
| | | | | 220kV Tsirang - Jigmeling | 46.00 | + | |
| | | Total | 65.48 | Error At Station/Auxiliary Consumption/Losses | -3.70 | | |

Note: Load summary on June 01, 2018 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 | 577.73 | 234.43 | 228.07 | 297.30 | 6.36 |
| 2 | Eastern Grid | 65.48 | 68.87 | 72.57 | 42.61 | -3.70 |
| | Total | 643.21 | 303.30 | 300.64 | 339.91 | 2.66 |

Note: Load Summary on June 01, 2017 at 19:00hrs

| Sl. No | Region | 19:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 249.03 | 272.24 | 286.43 |
| 2 | Eastern Grid | 52.67 | 52.76 | 67.48 |
| | National | 301.70 | 325.00 | 342.69 |

Notes:-

- 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 | Time | Load(MW) |
|-----------|----------|----------|
| 24-Feb-18 | 18:34hrs | 375.23 |

Date: June 2, 2018
Hours: 09:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|-------------|------|---|
| 1 | THP | Unit- I | 117.71 | 400kV THP - Siliguri Fdr- I | 0.00 | + | Unit-II,III and V standby. 400kV Tala-Siliguri Fdr-I under breakdown. |
| | | Unit- II | 0.00 | 400kV THP - Siliguri Fdr- II | 77.81 | + | |
| | | Unit- III | 0.00 | 400kV THP - Siliguri Fdr- IV | 75.64 | + | |
| | | Unit- IV | 99.77 | 400kV THP - Malbase Fdr- III | 162.24 | + | |
| | | Unit- V | 0.00 | 400kV Malbase - Siliguri | 54.59 | + | |
| | | Unit- VI | 99.19 | | | | |
| | | Total | 316.67 | Error At Station/Auxiliary Consumption/Losses | 0.98 | | |
| 2 | CHP | Unit- I | 54.11 | 220kV CHP - Birpara Fdr- I | 32.94 | + | Unit-II Standby. |
| | | Unit- II | 0.00 | 220kV CHP - Birpara Fdr- II | 32.68 | + | |
| | | Unit- III | 58.30 | 220kV CHP - Malbase Fdr- III | 61.34 | + | |
| | | Unit- IV | 54.23 | 220kV CHP - Semtokha Fdr- IV | 23.13 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | 6.01 | + | |
| | | | | 66kV CHP - Chumdo Fdr. | 8.90 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 5.83 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 0.84 | + | |
| | | Total | 166.64 | Error At Station/Auxiliary Consumption/Losses | 0.98 | | |
| 3 | BHP (U/S) | Unit- I | 0.00 | 220kV BHP - Semtokha Fdr. | -2.99 | - | (U/S) Unit-I & (L/S) Unit-I Standby. |
| | | Unit- II | 7.17 | 66kV BHP - Lobeysa Fdr. | 8.36 | + | |
| | | Total | 7.17 | 220kV BHP - Tsirang Fdr. | 14.97 | + | |
| | BHP (L/S) | Unit- I | 0.00 | 5MVA, 66/11kV TFR | 0.40 | + | |
| | | Unit- II | 13.59 | 30MVA ICT, 220/66kV | 0.00 | | |
| | | Total | 13.59 | Error At Station/Auxiliary Consumption/Losses | 0.02 | | |
| 4 | DHPC | Unit-I | 18.93 | 220kV DHPC - Tsirang Fdr. | 18.77 | + | DHP Unit-II Standby. |
| | | Unit-II | 0.00 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 18.93 | Error At Station/Auxiliary Consumption/Losses | 0.16 | | |
| 5 | KHP | Unit- I | 16.50 | 132kV KHP - Nangkhor Fdr- I | 61.76 | + | |
| | | Unit-II | 16.50 | 132kV KHP - Kilikhar Fdr- II | 3.80 | + | |
| | | Unit- III | 16.50 | 5MVA, 132/11kV TFR | 0.20 | + | |
| | | Unit- IV | 16.50 | 132kV Gelephu - Salakati Fdr. | 7.81 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | 42.08 | + | |
| | | | | 220kV Tsirang - Jigmeling | 32.30 | + | |
| | | Total | 66.00 | Error At Station/Auxiliary Consumption/Losses | 0.24 | | |

Note: Load summary on June 02, 2018 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 | 523.00 | 211.03 | 208.89 | 279.67 | 2.14 |
| 2 | Eastern Grid | 66.00 | 48.41 | 48.17 | 49.89 | 0.24 |
| | Total | 589.00 | 259.44 | 257.06 | 329.56 | 2.38 |

Note: Load Summary on June 02, 2017 at 09:00hrs

| Sl. No | Region | 09:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 236.46 | 251.18 | 286.43 |
| 2 | Eastern Grid | 36.16 | 56.88 | 67.48 |
| | National | 272.62 | 308.06 | 342.69 |

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.