

LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

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

Date: June 24, 2018
Hours: 19:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|--------------|------|-----------------------|
| 1 | THP | Unit- I | 137.19 | 400kV THP - Siliguri Fdr- I | 124.40 | + | Unit -IV & VI Standby |
| | | Unit- II | 0.00 | 400kV THP - Siliguri Fdr- II | 122.96 | + | |
| | | Unit- III | 139.07 | 400kV THP - Siliguri Fdr- IV | 120.17 | + | |
| | | Unit- IV | 0.00 | 400kV THP - Malbase Fdr- III | 161.26 | + | |
| | | Unit- V | 118.25 | 400kV Malbase - Siliguri | 109.30 | + | |
| | | Unit- VI | 139.49 | | | | |
| | | Total | 534.00 | Error At Station/Auxiliary Consumption/Losses | 5.21 | | |
| 2 | CHP | Unit- I | 71.59 | 220kV CHP - Birpara Fdr- I | 65.26 | + | |
| | | Unit- II | 73.51 | 220kV CHP - Birpara Fdr- II | 65.11 | + | |
| | | Unit- III | 72.02 | 220kV CHP - Malbase Fdr- III | 139.47 | + | |
| | | Unit- IV | 79.40 | 220kV CHP - Semtokha Fdr- IV | 3.30 | + | |
| | | | | 220kV Malbase - Birpara Fdr. | 0.26 | + | |
| | | | | 66kV CHP - Chumdo Fdr. | 10.95 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 9.81 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 1.19 | + | |
| | | Total | 296.52 | Error At Station/Auxiliary Consumption/Losses | 1.43 | | |
| 3 | BHP (U/S) | Unit- I | 5.69 | 220kV BHP - Semtokha Fdr. | 17.65 | + | |
| | | Unit- II | 5.69 | 66kV BHP - Lobeysa Fdr. | 11.30 | + | |
| | | Total | 11.38 | 220kV BHP - Tsirang Fdr. | 3.79 | + | |
| | BHP (L/S) | Unit- I | 10.65 | 5MVA, 66/11kV TFR | 0.57 | + | |
| | | Unit- II | 11.79 | 30MVA ICT, 220/66kV | | | |
| | | Total | 22.44 | Error At Station/Auxiliary Consumption/Losses | 0.51 | | |
| 4 | DHPC | Unit-I | 31.07 | 220kV DHPC - Tsirang Fdr. | 34.77 | + | Unit II Standby |
| | | Unit-II | 0.00 | 220kV DHPC - Jigmeling Fdr. | 0.00 | | |
| | | | | 5MVA, 220/33kV TFR | 0.00 | | |
| | | Total | 31.07 | Error At Station/Auxiliary Consumption/Losses | -3.70 | | |
| 5 | KHP | Unit- I | 16.54 | 132kV KHP - Nangkhor Fdr- I | 57.36 | + | |
| | | Unit-II | 16.44 | 132kV KHP - Kilikhar Fdr- II | 7.94 | + | |
| | | Unit- III | 16.69 | 5MVA, 132/11kV TFR | 0.50 | + | |
| | | Unit- IV | 16.55 | 132kV Gelephu - Salakati Fdr. | 14.26 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | 37.35 | + | |
| | | | | 220kV Tsirang - Jigmeling | 37.87 | + | |
| | | Total | 66.22 | Error At Station/Auxiliary Consumption/Losses | 0.42 | | |

Note: Load summary on June 24, 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 | 895.41 | 250.08 | 246.63 | 607.46 | 3.45 |
| 2 | Eastern Grid | 66.22 | 52.48 | 52.06 | 51.61 | 0.42 |
| | Total | 961.63 | 302.56 | 298.69 | 659.07 | 3.87 |

Note: Load Summary on June 24, 2017 at 19:00hrs

| Sl. No | Region | 19:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 222.13 | 232.04 | 272.24 |
| 2 | Eastern Grid | 53.15 | 54.65 | 60.94 |
| | National | 275.28 | 286.69 | 322.46 |

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) |
|-----------|----------|----------|
| 24-Feb-18 | 18:34hrs | 375.23 |

Date: June 25, 2018
Hours: 09:00 Hours

| Sl. No. | Hydropower Plant | Unit | MW | Name of Feeders | Load (MW) | Sign | Remarks |
|---------|------------------|--------------|---------------|--|--------------|------|----------------------|
| 1 | THP | Unit- I | 137.23 | 400kV THP - Siliguri Fdr- I | 80.72 | + | Unit-II & IV Standby |
| | | Unit- II | 0.00 | 400kV THP - Siliguri Fdr- II | 79.41 | + | |
| | | Unit- III | 69.35 | 400kV THP - Siliguri Fdr- IV | 76.74 | + | |
| | | Unit- IV | 0.00 | 400kV THP - Malbase Fdr- III | 115.00 | + | |
| | | Unit- V | 69.35 | 400kV Malbase - Siliguri | 68.07 | + | |
| | | Unit- VI | 80.66 | | | | |
| | | Total | 356.59 | Error At Station/Auxiliary Consumption/Losses | 4.72 | | |
| 2 | CHP | Unit- I | 0.00 | 220kV CHP - Birpara Fdr- I | 44.60 | + | |
| | | Unit- II | 60.57 | 220kV CHP - Birpara Fdr- II | 44.29 | + | |
| | | Unit- III | 56.21 | 220kV CHP - Malbase Fdr- III | 109.39 | + | |
| | | Unit- IV | 57.29 | 220kV CHP - Semtokha Fdr- IV | -43.46 | - | |
| | | | | 220kV Malbase - Birpara Fdr. | -10.80 | - | |
| | | | | 66kV CHP - Chumdo Fdr. | 8.24 | + | |
| | | | | 66kV CHP - Gedu Fdr. | 8.15 | + | |
| | | | | 3x3MVA, 66/11kV TFR | 0.76 | + | |
| | | Total | 174.07 | Error At Station/Auxiliary Consumption/Losses | 2.10 | | |
| 3 | BHP (U/S) | Unit- I | 9.22 | 220kV BHP - Semtokha Fdr. | 56.38 | + | |
| | | Unit- II | 9.22 | 66kV BHP - Lobeysa Fdr. | 13.26 | + | |
| | | Total | 18.44 | 220kV BHP - Tsirang Fdr. | -18.43 | - | |
| | BHP (L/S) | Unit- I | 16.20 | 5MVA, 66/11kV TFR | 0.36 | + | |
| | | Unit- II | 16.83 | 30MVA ICT, 220/66kV | | | |
| | | Total | 33.03 | Error At Station/Auxiliary Consumption/Losses | -0.10 | | |
| 4 | DHPC | Unit-I | 62.02 | 220kV DHPC - Tsirang Fdr. | 61.71 | + | Unit II Standby |
| | | Unit-II | 0.00 | 220kV DHPC - Jigmeling Fdr. | | | |
| | | | | 5MVA, 220/33kV TFR | | | |
| | | Total | 62.02 | Error At Station/Auxiliary Consumption/Losses | 0.31 | | |
| 5 | KHP | Unit- I | 16.20 | 132kV KHP - Nangkhor Fdr- I | 59.74 | + | |
| | | Unit-II | 16.32 | 132kV KHP - Kilikhar Fdr- II | 4.08 | + | |
| | | Unit- III | 16.32 | 5MVA, 132/11kV TFR | 0.40 | + | |
| | | Unit- IV | 16.25 | 132kV Gelephu - Salakati Fdr. | 21.92 | + | |
| | | | | 132kV Motanga - Rangia Fdr. | 43.73 | + | |
| | | | | 220kV Tsirang - Jigmeling | 41.90 | + | |
| | | Total | 65.09 | Error At Station/Auxiliary Consumption/Losses | 0.87 | | |

Note: Load summary on June 25, 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 | 644.15 | 219.22 | 212.19 | 383.03 | 7.03 |
| 2 | Eastern Grid | 65.09 | 41.34 | 40.47 | 65.65 | 0.87 |
| | Total | 709.24 | 260.56 | 252.66 | 448.68 | 7.90 |

Note: Load Summary on June 25, 2017 at 09:00hrs

| Sl. No | Region | 09:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1 | Western Grid | 207.96 | 235.42 | 272.24 |
| 2 | Eastern Grid | 44.62 | 56.92 | 60.94 |
| | National | 252.58 | 292.34 | 322.46 |

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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