

## LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

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

**Date:** June 23, 2018  
**Hours:** 19:00 Hours

| Sl. No. | Hydropower Plant | Unit         | MW            | Name of Feeders                                      | Load (MW)   | Sign | Remarks               |
|---------|------------------|--------------|---------------|--|-------------|------|-----------------------|
| 1       | THP              | Unit- I      | 137.01        | 400kV THP - Siliguri Fdr- I                          | 134.02      | +    | Unit -IV & VI Standby |
|         |                  | Unit- II     | 150.02        | 400kV THP - Siliguri Fdr- II                         | 132.05      | +    |                       |
|         |                  | Unit- III    | 138.22        | 400kV THP - Siliguri Fdr- IV                         | 128.39      | +    |                       |
|         |                  | Unit- IV     | 0.00          | 400kV THP - Malbase Fdr- III                         | 183.47      | +    |                       |
|         |                  | Unit- V      | 159.21        | 400kV Malbase - Siliguri                             | 113.62      | +    |                       |
|         |                  | Unit- VI     | 0.00          |  |             |      |                       |
|         |                  | <b>Total</b> | <b>584.46</b> | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>6.53</b> |      |                       |
| 2       | CHP              | Unit- I      | 73.45         | 220kV CHP - Birpara Fdr- I                           | 66.39       | +    |                       |
|         |                  | Unit- II     | 74.08         | 220kV CHP - Birpara Fdr- II                          | 66.02       | +    |                       |
|         |                  | Unit- III    | 73.94         | 220kV CHP - Malbase Fdr- III                         | 127.86      | +    |                       |
|         |                  | Unit- IV     | 73.76         | 220kV CHP - Semtokha Fdr- IV                         | 11.64       | +    |                       |
|         |                  |              |               | 220kV Malbase - Birpara Fdr.                         | 10.09       | +    |                       |
|         |                  |              |               | 66kV CHP - Chumdo Fdr.                               | 10.53       | +    |                       |
|         |                  |              |               | 66kV CHP - Gedu Fdr.                                 | 9.08        | +    |                       |
|         |                  |              |               | 3x3MVA, 66/11kV TFR                                  | 0.99        | +    |                       |
|         |                  | <b>Total</b> | <b>295.23</b> | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>2.72</b> |      |                       |
| 3       | BHP (U/S)        | Unit- I      | 4.67          | 220kV BHP - Semtokha Fdr.                            | 8.16        | +    |                       |
|         |                  | Unit- II     | 4.67          | 66kV BHP - Lobeysa Fdr.                              | 10.45       | +    |                       |
|         |                  | <b>Total</b> | <b>9.34</b>   | 220kV BHP - Tsirang Fdr.                             | 7.32        | +    |                       |
|         | BHP (L/S)        | Unit- I      | 8.57          | 5MVA, 66/11kV TFR                                    | 0.63        | +    |                       |
|         |                  | Unit- II     | 8.97          | 30MVA ICT, 220/66kV                                  |             |      |                       |
|         |                  | <b>Total</b> | <b>17.54</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.32</b> |      |                       |
| 4       | DHPC             | Unit-I       | 31.07         | 220kV DHPC - Tsirang Fdr.                            | 30.80       | +    | Unit II Standby       |
|         |                  | Unit-II      | 0.00          | 220kV DHPC - Jigmeling Fdr.                          | 0.00        |      |                       |
|         |                  |              |               | 5MVA, 220/33kV TFR                                   | 0.00        |      |                       |
|         |                  | <b>Total</b> | <b>31.07</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.27</b> |      |                       |
| 5       | KHP              | Unit- I      | 16.44         | 132kV KHP - Nangkhor Fdr- I                          | 56.07       | +    |                       |
|         |                  | Unit-II      | 16.59         | 132kV KHP - Kilikhar Fdr- II                         | 8.70        | +    |                       |
|         |                  | Unit- III    | 16.44         | 5MVA, 132/11kV TFR                                   | 0.50        | +    |                       |
|         |                  | Unit- IV     | 16.35         | 132kV Gelephu - Salakati Fdr.                        | 9.49        | +    |                       |
|         |                  |              |               | 132kV Motanga - Rangia Fdr.                          | 41.00       | +    |                       |
|         |                  |              |               | 220kV Tsirang - Jigmeling                            | 38.40       | +    |                       |
|         |                  | <b>Total</b> | <b>65.82</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.55</b> |      |                       |

**Note: Load summary on June 23, 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 | 937.64                | 248.66                               | 238.82                            | 650.58              | 9.84         |
| 2      | Eastern Grid | 65.82                 | 53.73                                | 53.18                             | 50.49               | 0.55         |
|        | <b>Total</b> | 1,003.46              | 302.39                               | 292.00                            | 701.07              | 10.39        |

**Note: Load Summary on June 23, 2017 at 19:00hrs**

| Sl. No | Region          | 19:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1      | Western Grid    | 237.30             | 237.83             | 272.24               |
| 2      | Eastern Grid    | 53.20              | 57.90              | 60.94                |
|        | <b>National</b> | <b>290.50</b>      | <b>295.73</b>      | <b>322.46</b>        |

**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 24, 2018  
**Hours:** 09:00 Hours

| Sl. No. | Hydropower Plant | Unit         | MW            | Name of Feeders                                      | Load (MW)    | Sign | Remarks              |
|---------|------------------|--------------|---------------|--|--------------|------|----------------------|
| 1       | THP              | Unit- I      | 136.92        | 400kV THP - Siliguri Fdr- I                          | 97.44        | +    | Unit-II & IV Standby |
|         |                  | Unit- II     | 0.00          | 400kV THP - Siliguri Fdr- II                         | 94.01        | +    |                      |
|         |                  | Unit- III    | 78.23         | 400kV THP - Siliguri Fdr- IV                         | 92.87        | +    |                      |
|         |                  | Unit- IV     | 0.00          | 400kV THP - Malbase Fdr- III                         | 124.64       | +    |                      |
|         |                  | Unit- V      | 99.29         | 400kV Malbase - Siliguri                             | 83.83        | +    |                      |
|         |                  | Unit- VI     | 99.61         |  |              |      |                      |
|         |                  | <b>Total</b> | <b>414.05</b> | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>5.09</b>  |      |                      |
| 2       | CHP              | Unit- I      | 50.06         | 220kV CHP - Birpara Fdr- I                           | 40.35        | +    |                      |
|         |                  | Unit- II     | 50.74         | 220kV CHP - Birpara Fdr- II                          | 40.46        | +    |                      |
|         |                  | Unit- III    | 50.53         | 220kV CHP - Malbase Fdr- III                         | 118.29       | +    |                      |
|         |                  | Unit- IV     | 51.47         | 220kV CHP - Semtokha Fdr- IV                         | -16.95       | -    |                      |
|         |                  |              |               | 220kV Malbase - Birpara Fdr.                         | -24.18       | -    |                      |
|         |                  |              |               | 66kV CHP - Chumdo Fdr.                               | 8.73         | +    |                      |
|         |                  |              |               | 66kV CHP - Gedu Fdr.                                 | 9.00         | +    |                      |
|         |                  |              |               | 3x3MVA, 66/11kV TFR                                  | 0.97         | +    |                      |
|         |                  | <b>Total</b> | <b>202.80</b> | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>1.95</b>  |      |                      |
| 3       | BHP (U/S)        | Unit- I      | 5.04          | 220kV BHP - Semtokha Fdr.                            | 34.56        | +    |                      |
|         |                  | Unit- II     | 5.04          | 66kV BHP - Lobeysa Fdr.                              | 10.19        | +    |                      |
|         |                  | <b>Total</b> | <b>10.08</b>  | 220kV BHP - Tsirang Fdr.                             | -13.46       | -    |                      |
|         | BHP (L/S)        | Unit- I      | 9.85          | 5MVA, 66/11kV TFR                                    | 0.46         | +    |                      |
|         |                  | Unit- II     | 11.10         | 30MVA ICT, 220/66kV                                  |              |      |                      |
|         |                  | <b>Total</b> | <b>20.95</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>-0.72</b> |      |                      |
| 4       | DHPC             | Unit-I       | 41.05         | 220kV DHPC - Tsirang Fdr.                            | 40.77        | +    | Unit II Standby      |
|         |                  | Unit-II      | 0.00          | 220kV DHPC - Jigmeling Fdr.                          |              |      |                      |
|         |                  |              |               | 5MVA, 220/33kV TFR                                   |              |      |                      |
|         |                  | <b>Total</b> | <b>41.05</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.28</b>  |      |                      |
| 5       | KHP              | Unit- I      | 16.40         | 132kV KHP - Nangkhor Fdr- I                          | 59.84        | +    |                      |
|         |                  | Unit-II      | 16.55         | 132kV KHP - Kilikhar Fdr- II                         | 5.06         | +    |                      |
|         |                  | Unit- III    | 16.51         | 5MVA, 132/11kV TFR                                   | 0.25         | +    |                      |
|         |                  | Unit- IV     | 16.63         | 132kV Gelephu - Salakati Fdr.                        | 11.77        | +    |                      |
|         |                  |              |               | 132kV Motanga - Rangia Fdr.                          | 42.77        | +    |                      |
|         |                  |              |               | 220kV Tsirang - Jigmeling                            | 25.00        | +    |                      |
|         |                  | <b>Total</b> | <b>66.09</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.94</b>  |      |                      |

**Note: Load summary on June 24, 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 | 688.93                | 239.15                               | 232.55                            | 424.78              | 6.60         |
| 2      | Eastern Grid | 66.09                 | 36.55                                | 35.61                             | 54.54               | 0.94         |
|        | <b>Total</b> | 755.02                | 275.70                               | 268.16                            | 479.32              | 7.54         |

**Note: Load Summary on June 24, 2017 at 09:00hrs**

| Sl. No | Region          | 09:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1      | Western Grid    | 215.07             | 232.04             | 272.24               |
| 2      | Eastern Grid    | 38.36              | 54.65              | 60.94                |
|        | <b>National</b> | <b>253.43</b>      | <b>286.69</b>      | <b>322.46</b>        |

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