

## LOAD GENERATION BALANCE REPORT

Maximum Load/Demand till Date

**Date:** June 24, 2019  
**Hours:** 19:00 Hours

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

| Sl. No. | Hydropower Plant | Unit         | MW            | Name of Feeders                                      | Load (MW)   | Sign | Remarks  |
|---------|------------------|--------------|---------------|--|-------------|------|--|
| 1       | THP              | Unit- I      | 68.01         | 400kV THP - Siliguri Fdr- I                          | 89.55       | +    | Unit-II & IV Standby<br>400kV THP-SIL Fdr IV Standby         |
|         |                  | Unit- II     | 0.00          | 400kV THP - Siliguri Fdr- II                         | 87.57       | +    |  |
|         |                  | Unit- III    | 79.31         | 400kV THP - Siliguri Fdr- IV                         | 0.00        |      |  |
|         |                  | Unit- IV     | 0.00          | 400kV THP - Malbase Fdr- III                         | 183.53      | +    |  |
|         |                  | Unit- V      | 69.95         | 400kV Malbase - Siliguri                             | 63.06       | +    |  |
|         |                  | Unit- VI     | 150.02        |  |             |      |  |
|         |                  | <b>Total</b> | <b>367.29</b> | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>6.64</b> |      |  |
| 2       | CHP              | Unit- I      | 0.00          | 220kV CHP - Birpara Fdr- I                           | 34.72       | +    | Unit-I under maintenance                                     |
|         |                  | Unit- II     | 62.85         | 220kV CHP - Birpara Fdr- II                          | 34.67       | +    |  |
|         |                  | Unit- III    | 63.82         | 220kV CHP - Malbase Fdr- III                         | 70.60       | +    |  |
|         |                  | Unit- IV     | 69.10         | 220kV CHP - Semtokha Fdr- IV                         | 40.36       | +    |  |
|         |                  |              |               | 220kV Malbase - Birpara Fdr.                         | 1.19        | +    |  |
|         |                  |              |               | 66kV CHP - Chumdo Fdr.                               | 5.45        | +    |  |
|         |                  |              |               | 66kV CHP - Gedu Fdr.                                 | 7.10        | +    |  |
|         |                  |              |               | 3x3MVA, 66/11kV TFR                                  | 1.05        | +    |  |
|         |                  | <b>Total</b> | <b>195.77</b> | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>1.82</b> |      |  |
| 3       | BHP (U/S)        | Unit- I      | 6.41          | 220kV BHP - Semtokha Fdr.                            | -11.88      | -    | Upper Stage Unit II standby<br>Lower Stage Unit I standby    |
|         |                  | Unit- II     | 0.00          | 66kV BHP - Lobeysa Fdr.                              | 10.09       | +    |  |
|         |                  | <b>Total</b> | <b>6.41</b>   | 220kV BHP - Tsirang Fdr.                             | 19.87       | +    |  |
|         | BHP (L/S)        | Unit- I      | 0.00          | 5MVA, 66/11kV TFR                                    | 0.60        | +    |  |
|         |                  | Unit- II     | 12.77         | 30MVA ICT, 220/66kV                                  |             |      |  |
|         |                  | <b>Total</b> | <b>12.77</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.50</b> |      |  |
| 4       | DHPC             | Unit-I       | 22.26         | 220kV DHPC - Tsirang Fdr.                            | 22.06       | +    | Unit-II Standby  |
|         |                  | Unit-II      | 0.00          | 220kV DHPC - Jigmeling Fdr.                          |             |      |  |
|         |                  |              |               | 5MVA, 220/33kV TFR                                   |             |      |  |
|         |                  | <b>Total</b> | <b>22.26</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.20</b> |      |  |
| 5       | KHP              | Unit- I      | 16.49         | 132kV KHP - Nangkhor Fdr- I                          | 59.00       | +    | <b>NOTE:MOTANGA SUBSTATION IS BYPASSED THROUGH ERS TOWER</b> |
|         |                  | Unit-II      | 16.65         | 132kV KHP - Kilikhar Fdr- II                         | 6.63        | +    |  |
|         |                  | Unit- III    | 16.54         | 5MVA, 132/11kV TFR                                   | 0.30        | +    |  |
|         |                  | Unit- IV     | 16.53         | 132kV Gelephu - Salakati Fdr.                        | -1.74       | +    |  |
|         |                  |              |               | 132kV Motanga - Rangia Fdr.                          | 44.38       | +    |  |
|         |                  |              |               | 220kV Tsirang - Jigmeling                            | 39.65       | +    |  |
|         |                  | <b>Total</b> | <b>66.21</b>  | <b>Error At Station/Auxiliary Consumption/Losses</b> | <b>0.28</b> |      |  |

**Note: Load summary on June 24, 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 | 604.50                | 254.09                               | 244.93                            | 310.76              | 9.16         |
| 2      | Eastern Grid | 66.21                 | 63.22                                | 62.94                             | 42.64               | 0.28         |
|        | <b>Total</b> | <b>670.71</b>         | <b>317.31</b>                        | <b>307.87</b>                     | <b>353.40</b>       | <b>9.44</b>  |

**Note: Load Summary on June 24, 2018 at 19:00hrs**

| Sl. No | Region          | 19:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1      | Western Grid    | 231.23             | 261.96             | 261.96               |
| 2      | Eastern Grid    | 43.09              | 44.96              | 61.02                |
|        | <b>National</b> | <b>274.32</b>      | <b>306.92</b>      | <b>322.98</b>        |

- 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) |
|-----------|----------|----------|
| 27-Dec-18 | 18:18hrs | 399.35MW |

Date: **June 25, 2019**  
Hours: **09:00 Hours**

| Sl. No. | Hydropower Plant | Unit         | Sign                        | Remarks  |
|---------|------------------|--------------|-----------------------------|--|
| 1       | THP              | Unit- I      | +                           | Unit-II,IV & V Standby<br>400kV THP-SIL Fdr IV Standby                   |
|         |                  | Unit- II     | +                           |  |
|         |                  | Unit- III    | +                           |  |
|         |                  | Unit- IV     | +                           |  |
|         |                  | Unit- V      | +                           |  |
|         |                  | Unit- VI     | +                           |  |
|         |                  | <b>Total</b> |                             |  |
| 2       | CHP              | Unit- I      | +                           | Unit-I under maintenance &<br>Unit-II on standby.                        |
|         |                  | Unit- II     | +                           |  |
|         |                  | Unit- III    | +                           |  |
|         |                  | Unit- IV     | +                           |  |
|         |                  |              | +                           |  |
|         |                  |              | +                           |  |
|         |                  | <b>Total</b> |                             |  |
| 3       | BHP (U/S)        | Unit- I      | -                           | Upper Stage Unit II standby<br>Lower Stage Unit I standby                |
|         |                  | Unit- II     | +                           |  |
|         |                  | <b>Total</b> | +                           |  |
|         | BHP (L/S)        | Unit- I      | +                           |  |
|         |                  | <b>Total</b> | 0.00                        |  |
| 4       | DHPC             | Unit-I       | +                           | Unit-II standby.   |
|         |                  | Unit-II      | 0.00                        |  |
|         |                  |              | 5MVA, 220/33kV TFR          |  |
|         |                  | <b>Total</b> | 0.00                        |  |
| 5       | KHP              | Unit- I      | +                           | <b>NOTE:MOTANGA<br/>SUBSTATION IS<br/>BYPASSED THROUGH<br/>ERS TOWER</b> |
|         |                  | Unit-II      | +                           |  |
|         |                  | Unit- III    | +                           |  |
|         |                  | Unit- IV     | -                           |  |
|         |                  |              | 132kV Motanga - Rangia Fdr. |  |
|         |                  |              | 220kV Tsirang - Jigmeling   |  |
|         |                  | <b>Total</b> | 0.00                        |  |

**Note: Load summary on June 25, 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 | 0.00                  | 0.00                                 | 0.00                              | 0.00                | 0.00         |
| 2      | Eastern Grid | 0.00                  | 0.00                                 | 0.00                              | 0.00                | 0.00         |
|        | <b>Total</b> | 0.00                  | 0.00                                 | 0.00                              | 0.00                | 0.00         |

**Note: Load Summary on June 25, 2018 at 09:00hrs**

| Sl. No | Region          | 09:00Hrs Load (MW) | Day Peak Load (MW) | Month Peak Load (MW) |
|--------|-----------------|--------------------|--------------------|----------------------|
| 1      | Western Grid    | 206.58             | 261.96             | 261.96               |
| 2      | Eastern Grid    | 30.11              | 44.96              | 61.02                |
|        | <b>National</b> | <b>236.69</b>      | <b>306.92</b>      | <b>322.98</b>        |

**NOTES:**

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