

सत्यमेव जयते

Government of India

विद्युतमंत्रालय

Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति

**EASTERN REGIONAL POWER COMMITTEE**

मासिक प्रगति रिपोर्ट

**PROGRESS REPORT FOR THE MONTH OF**

जुलाई - 2021

**JULY-2021**



14, गोल्फ क्लब रोड, टोलीगंज

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## Highlights of Eastern Regional Power System for July - 2021

- The **Maximum Net Demand** met of Eastern Region (ER) during the month of **July, 2021** was **25145 MW** which is 11.05% more than the **July, 2020** (22643 MW). Individual **Peak Demand (MW)** of all the constituents **increased** compared to the corresponding period of last year.
- The **Average Net Energy Consumption** per day in ER for the month of **July, 2021** was **498.44 MU** excluding export, which is 11.37% more than the corresponding period of last year (447.56 MU).
- **The Average regional PLF of thermal units during the month is 68.97 %**, which is 5.60% more than the corresponding period of the last year (**63.37%**).  
CESC (Budge-Budge) registered the highest **PLF** of 92.75%, followed by Haldia (HEL) 91.67% and DVC (Bokaro-A 1) 91.17% during the month of **July, 2021**.
- **Maximum Net generation** was **28924 MW** against total **Effective Capacity of 39823.41 MW** (including import from Bhutan). At the time of Regional peak (**25145 MW** on 16.07.2021 at 22.00 hrs.) the generation was **28536 MW** and import from CPP was 1502 MW, Net export was 4893 MW.
- The system frequency in the IEGC recommended band (49.9 Hz to 50.05 Hz) remained for 75.05% of time during the month. **Average frequency** for the month was **50.00 Hz**. The instantaneous maximum and the minimum frequency touched were 50.26 Hz and 49.51 Hz respectively. The integrated (Fifteen minutes time block average) maximum and minimum frequency were **50.21 Hz** and **49.71 Hz** respectively (**refer Annexure-I**).
- The **Maximum Voltage** recorded 420 KV at Jeerat 400 KV S/s whereas the minimum voltage recorded 387 KV at Muzaffarpur 400 KV S/s of Power grid.
- **The Maximum Export from ER to outside region was 9869 MW (including Nepal and Bangladesh) on 5<sup>th</sup> July, 2021 at 08:00 hrs. Total net energy export during the month was 4075.89 MU (Inc.Transmission loss) MU which is corresponds to 22.11 % of ex-bus total generation 18433.74 MU of Eastern Region.**
- **The import from CPPs was 1093.90 MU during the month.**

➤ **Export(+)/Import(-) during the month:**

| Region/Country         | Max. Export of Power from ER (MW) | Max. Import of Power by ER (MW) | Net Export of Energy inc.Transmission loss(MU) |
|------------------------|-----------------------------------|---------------------------------|--|
| NR                     | 6946                              | 0                               | 3239.47  |
| WR                     | 1673                              | 3859                            | -1110.34                                       |
| SR                     | 3097                              | 529                             | 893.34   |
| NER                    | 1281                              | 197                             | 377.82   |
| BANGLADESH             | 924                               |                                 | 591.72   |
| NEPAL (via-CTU)        | 272                               |                                 | 83.86  |
| <b>Total</b>           |                                   |                                 | <b>4075.89</b>                                 |
| NEPAL by Bihar(NBPDCL) |                                   |                                 | 45.031   |

**SALIENT FEATURES**

( YEAR TO YEAR COMPARISON )

|   |      | Jul-21   | JULY-2020   | CHANGE     | % CHANGE |
|---|------|----------|-------------|------------|----------|
| 1) Effective Capacity (end of the Month)  |      |          |             |            |          |
| THERMAL   | (MW) | 30120    | 30130       | -10        | -0.03    |
| HYDRO   | (MW) | 5990     | \$ 5877     | 113        | 2        |
| DIESEL  | (MW) | 0        | 0           | 0          | 0        |
| RES   | (MW) | 1518     | 1489        | 0          | 0        |
| TOTAL   | (MW) | 37627    | 37496       | 131        | 0.35     |
| 2) Peak Demand ( MW )   |      | 26019    | 22735       | 3284       | 14.44    |
| 3) Peak Demand Met ( MW )   |      | 25145    | 22643       | 2502       | 11.05    |
| 4) Shortage ( MW )  |      | 874      | 92          | 782        | 0.00     |
| 5) % Shortage   |      | 3.36     | 0.40        | 2.96       | 0.00     |
| 6) Average Energy Requirement Per Day ( MU )                                      |      | 500.02   | 448.25      | 51.77      | 11.55    |
| 7) Average Energy Availability Per Day ( MU )                                     |      | 498.44   | 447.56      | 50.88      | 11.37    |
| 8) Average Shortage Per Day ( MU )  |      | 1.57     | 0.70        | 0.87       | 124.97   |
| 9) % Shortage   |      | 0.31     | 0.16        | 0.15       | 96.85    |
| 10) Net Generation for the Month  |      |          |             |            |          |
| Thermal ( MU )  |      | 14342.53 | 13086.68    | 1255.85    | 9.60     |
| Hydro ( MU )  |      | 4001.28  | * 4381.29   | -380.01    | -8.67    |
| RES (MU)  |      | 89.93    | 74.12       | 0.00       | -        |
| Total ( MU )  |      | 18433.74 | 17542.09    | 891.65     | 5.08     |
| 11) Generation at the Time of Max. Regional Demand Met ( 16-07-21 at 22.00 Hrs. ) |      |          |             |            |          |
| Thermal ( MW )  |      | 21463    | 20398       | 1065       | 5.22     |
| Hydro ( MW )  |      | 7015     | * 7213      | -198       | -2.74    |
| RES( MW )   |      | 58       | 50          | 8          | 15.21    |
| Total ( MW )  |      | 28536    | 27661       | 875        | 3.16     |
| 12) Inter-Regional Energy Transfer  |      |          |             |            |          |
| Export ( MU )   |      | 5186.22  | 5561.57     | -375.35    | -6.75    |
| Import ( MU )   |      | 1110.34  | 1034.13     | 76.21      | 7.37     |
| Net Exp.(+)/Net Imp.(-) ( MU )  |      | 4075.89  | 4527.44     | -451.55    | -9.97    |
| 13) Import From Captive(MU)   |      | 1093.90  | 859.69      | 234.21     | 27.24    |
| 14) Peak Inter Regional Power Transfer  |      |          |             |            |          |
| Max Export ( MW ) on 05-07-21 at 08.00Hrs   |      | 9869     | 9814        | 55         | 0.56     |
| Max Import ( MW ) on 29-07-21 at 03.00Hrs   |      | 3859     | 3307        | 552        | 16.69    |
| Max Net Export(+)/Import (-) ( MW )   |      | 9869     | 9077        | 792        | 8.73     |
| 15) Maximum voltage recorded  |      | 420      | JEERAT      | 400 kv s/s |          |
| 16) Minimum voltage recorded  |      | 387      | MUZAFFARPUR | 400 kv s/s |          |

\$ Excludes 2196 MW contribution from HEPs of Bhutan

\* Includes contribution from HEP of Bhutan ( Chukha, Kurichhu ,Dagahhu , Tala & Mangdechhu HEP )

POWER SUPPLY POSITION FOR THE MONTH OF JULY'2021

**A ) Net Average Energy Per Day**

| System        | Demand Met<br>(MU/Day) | Requirement<br>(MU/Day) | Shortage<br>(MU/Day) | % Shortage  |
|---------------|------------------------|-------------------------|----------------------|-------------|
| BSPHCL        | 123.14                 | 123.81                  | 0.67                 | 0.54        |
| JUVNL         | 30.63                  | 31.42                   | 0.79                 | 2.51        |
| DVC           | 62.30                  | 62.31                   | 0.01                 | 0.01        |
| ODISHA        | 110.71                 | 110.73                  | 0.02                 | 0.01        |
| WBSEDCL       | 137.78                 | 137.91                  | 0.13                 | 0.09        |
| CESC          | 32.30                  | 32.30                   | 0.00                 | 0.01        |
| SIKKIM        | 1.54                   | 1.54                    | 0.00                 | 0.01        |
| <b>REGION</b> | <b>498.44</b>          | <b>500.02</b>           | <b>1.57</b>          | <b>0.31</b> |

**B) Peak Demand in MW:**

| System        | Demand Met<br>(MW) | Requirement<br>(MW) | Shortage<br>(MW) | % Shortage  |
|---------------|--------------------|---------------------|------------------|-------------|
| BSPHCL        | 6490               | 7154                | 664              | 9.28        |
| JUVNL         | 1590               | 1709                | 118              | 6.93        |
| DVC           | 2909               | 2909                | 0                | 0.00        |
| ODISHA        | 5561               | 5561                | 0                | 0.00        |
| WBSEDCL       | 7243               | 7259                | 16               | 0.23        |
| CESC          | 1805               | 1805                | 0                | 0.0         |
| SIKKIM        | 96                 | 96                  | 0                | 0.00        |
| <b>REGION</b> | <b>25145</b>       | <b>26019</b>        | <b>874</b>       | <b>3.36</b> |

➤ **DIVERSITY FACTOR : 1.02**

➤ **Regional Peak Demand Met on 16-7-2021 at 22.00 hrs. at 49.88 Hz.**

**CONSTITUENT-WISE PERFORMANCE DATA JULY-2021**

| SYSTEM   | Gross Generation(MU) |                 |                |                 | Auxiliary power Consumption(MU) |                |             |                | Net Generation (MU) |                 |              |                 | Import from<br>Captive (MU) | Exchange<br>Net Import(+)<br>Net Export(-) | Energy<br>Consumption(MU) | Per Day<br>Cons.(MU) | Net Peak<br>Demand<br>Met (MW) | Gross Peak<br>Demand<br>Met (MW) |
|--|----------------------|-----------------|----------------|-----------------|---------------------------------|----------------|-------------|----------------|---------------------|-----------------|--------------|-----------------|-----------------------------|--|---------------------------|----------------------|--------------------------------|----------------------------------|
|  | HYDRO                | Thermal         | RES (Hy+Solar) | Total           | HYDRO                           | Thermal        | Solar       | Total          | HYDRO               | Thermal         | Solar        | Total           |                             |  |                           |                      |                                |                                  |
|  |                      |                 |                |                 |                                 |                |             |                |                     |                 |              |                 |                             |  |                           |                      |                                |                                  |
| BSPHCL   | 0.00                 | 187.63          | 19.65          | 207.28          | 0.00                            | 24.04          | 0.00        | 24.04          | 0.00                | 163.60          | 19.65        | 183.24          | 0.00                        | 3633.98                                    | 3817.23                   | 123.1                | 6490                           | 6520                             |
| JUVNL  | 49.09                | 109.22          | 0.00           | 158.31          | 0.00                            | 13.46          | 0.00        | 13.46          | 49.09               | 95.76           | 0.00         | 144.85          | 36.99                       | 767.75                                     | 949.59                    | 30.6                 | 1590                           | 1609                             |
| DVC  | 70.92                | 3401.76         | 0.00           | 3472.68         | 0.20                            | 253.26         | 0.00        | 253.46         | 70.72               | 3148.50         | 0.00         | 3219.22         | 12.77                       | -1300.74                                   | 1931.24                   | 62.3                 | 2909                           | 3273                             |
| ODISHA(OPGC+OHPC+TTPS)   | 510.90               | 806.27          | 47.73          | 1364.90         | 4.91                            | 69.33          | 0.00        | 74.24          | 505.99              | 736.94          | 47.73        | 1290.67         | 899.28                      | 1242.09                                    | 3432.04                   | 110.7                | 5561                           | 5666                             |
| WBPDC+WBSEDCL+DPL  | 170.94               | 2526.54         | 19.61          | 2717.08         | 0.00                            | 237.88         | 0.00        | 237.88         | 170.94              | 2288.66         | 19.61        | 2479.21         | 144.87                      | 1647.29                                    | 4271.36                   | 137.8                | 7243                           | 7645                             |
| CESC   | 0.00                 | 517.79          | 0.00           | 517.79          | 0.00                            | 39.40          | 0.00        | 39.40          | 0.00                | 478.39          | 0.00         | 478.39          | 0.00                        | 522.65                                     | 1001.05                   | 32.3                 | 1805                           | 1866                             |
| HEL  | 0.00                 | 409.20          | 0.00           | 409.20          | 0.00                            | 31.38          | 0.00        | 31.38          | 0.00                | 377.82          | 0.00         | 377.82          | 0.00                        | -377.82                                    |                           |                      |                                |                                  |
| SIKKIM   | 0.00                 | 0.00            | 2.00           | 2.00            | 0.00                            | 0.00           | 0.00        | 0.00           | 0.00                | 0.00            | 2.00         | 2.00            | 0.00                        | 45.77                                      | 47.77                     | 1.5                  | 96                             | 96                               |
| NTPC   | 0.00                 | 5512.55         | 0.00           | 5512.55         | 0.00                            | 428.29         | 0.00        | 428.29         | 0.00                | 5084.27         | 0.00         | 5084.27         | 0.00                        | -5084.27                                   |                           |                      |                                |                                  |
| MPL  | 0.00                 | 681.84          | 0.00           | 681.84          | 0.00                            | 39.72          | 0.00        | 39.72          | 0.00                | 642.12          | 0.00         | 642.12          | 0.00                        | -642.12                                    |                           |                      |                                |                                  |
| APNRL  | 0.00                 | 317.28          | 0.00           | 317.28          | 0.00                            | 29.92          | 0.00        | 29.92          | 0.00                | 287.36          | 0.00         | 287.36          | 0.00                        | -287.36                                    |                           |                      |                                |                                  |
| GMR  | 0.00                 | 382.55          | 0.00           | 382.55          | 0.00                            | 27.63          | 0.00        | 27.63          | 0.00                | 354.92          | 0.00         | 354.92          | 0.00                        | -354.92                                    |                           |                      |                                |                                  |
| JITPL  | 0.00                 | 733.53          | 0.00           | 733.53          | 0.00                            | 49.34          | 0.00        | 49.34          | 0.00                | 684.19          | 0.00         | 684.19          | 0.00                        | -684.19                                    |                           |                      |                                |                                  |
| NHPC (Inc TLDP= 185.2MU)   | 602.07               | 0.00            | 0.00           | 602.07          | 0.00                            | 0.00           | 0.00        | 0.00           | 602.07              | 0.00            | 0.00         | 602.07          | 0.00                        | -602.07                                    | 0.00                      |                      |                                |                                  |
| CHUZACHEN HPS  | 88.10                | 0.00            | 0.00           | 88.10           | 0.00                            | 0.00           | 0.00        | 0.00           | 88.10               | 0.00            | 0.00         | 88.10           | 0.00                        | -88.10                                     | 0.00                      |                      |                                |                                  |
| DIKCHU HPS   | 76.77                | 0.00            | 0.00           | 76.77           | 0.00                            | 0.00           | 0.00        | 0.00           | 76.77               | 0.00            | 0.00         | 76.77           | 0.00                        | -76.77                                     | 0.00                      |                      |                                |                                  |
| JORHANG HPS  | 72.11                | 0.00            | 0.00           | 72.11           | 0.00                            | 0.00           | 0.00        | 0.00           | 72.11               | 0.00            | 0.00         | 72.11           | 0.00                        | -72.11                                     | 0.00                      |                      |                                |                                  |
| TASHIDING HPS  | 74.86                | 0.00            | 0.00           | 74.86           | 0.00                            | 0.00           | 0.00        | 0.00           | 74.86               | 0.00            | 0.00         | 74.86           | 0.00                        | -74.86                                     | 0.00                      |                      |                                |                                  |
| TEESTA-III HPS   | 937.51               | 0.00            | 0.00           | 937.51          | 0.00                            | 0.00           | 0.00        | 0.00           | 937.51              | 0.00            | 0.00         | 937.51          | 0.00                        | -937.51                                    | 0.00                      |                      |                                |                                  |
| RONGNICHU HEP  | 64.85                | 0.00            | 0.00           | 64.85           | 0.00                            | 0.00           | 0.00        | 0.00           | 64.85               | 0.00            | 0.00         | 64.85           | 0.00                        | -64.85                                     | 0.00                      |                      |                                |                                  |
| CHPC(Birpara Receipt)  | 277.79               | 0.00            | 0.00           | 277.79          | 0.00                            | 0.00           | 0.00        | 0.00           | 277.79              | 0.00            | 0.00         | 277.79          | 0.00                        | -277.79                                    | 0.00                      |                      |                                |                                  |
| KHPS   | 10.03                | 0.00            | 0.00           | 10.03           | 0.00                            | 0.00           | 0.00        | 0.00           | 10.03               | 0.00            | 0.00         | 10.03           | 0.00                        | -10.03                                     | 0.00                      |                      |                                |                                  |
| THPS   | 490.85               | 0.00            | 0.00           | 490.85          | 0.00                            | 0.00           | 0.00        | 0.00           | 490.85              | 0.00            | 0.00         | 490.85          | 0.00                        | -490.85                                    | 0.00                      |                      |                                |                                  |
| DAGACHU HPS  | 85.10                | 0.00            | 0.00           | 85.10           | 0.00                            | 0.00           | 0.00        | 0.00           | 85.10               | 0.00            | 0.00         | 85.10           | 0.00                        | -85.10                                     | 0.00                      |                      |                                |                                  |
| Mangdechhu HEP   | 424.52               | 0.00            | 0.00           | 424.52          | 0.00                            | 0.00           | 0.00        | 0.00           | 424.52              | 0.00            | 0.00         | 424.52          | 0.00                        | -424.52                                    | 0.00                      |                      |                                |                                  |
| <b>Total Drawal by HVDC Sahasram,Alipurduar &amp; Kuruchhu HEP</b> |                      |                 |                |                 |                                 |                |             |                |                     |                 |              |                 |                             | 1.48                                       | 1.48                      |                      |                                |                                  |
| <b>Total</b>   | <b>4006.39</b>       | <b>15586.16</b> | <b>88.99</b>   | <b>19681.54</b> | <b>5.11</b>                     | <b>1243.63</b> | <b>0.00</b> | <b>1248.74</b> | <b>4001.28</b>      | <b>14342.53</b> | <b>88.99</b> | <b>18432.80</b> | <b>1093.90</b>              | <b>-4075.89</b>                            | <b>15451.75</b>           | <b>498.4</b>         | <b>25145</b>                   | <b>26191</b>                     |

3A 18432.80

15451.75

POWER SUPPLY POSITION IN EASTERN REGION DURING THE YEAR AS COMPARED TO PREVIOUS YEAR

**A ) Net Average Energy**

| Month     | 2020-21                |                         |                      |              |                    | 2021-22                |                         |                      |              |                    |
|-----------|------------------------|-------------------------|----------------------|--------------|--------------------|------------------------|-------------------------|----------------------|--------------|--------------------|
|           | Demand Met<br>(MU/Day) | Requirement<br>(MU/Day) | Shortage<br>(MU/Day) | Shortage (%) | Avg. Freq.<br>(HZ) | Demand Met<br>(MU/Day) | Requirement<br>(MU/Day) | Shortage<br>(MU/Day) | Shortage (%) | Avg. Freq.<br>(HZ) |
| APRIL     | 323.27                 | 324.20                  | 0.93                 | 0.29         | 50.00              | <b>495.89</b>          | <b>497.87</b>           | <b>1.98</b>          | <b>0.40</b>  | <b>49.99</b>       |
| MAY       | 355.60                 | 360.37                  | 4.77                 | 1.32         | 50.00              | <b>429.83</b>          | <b>430.89</b>           | <b>1.06</b>          | <b>0.25</b>  | <b>49.99</b>       |
| JUNE      | 425.23                 | 425.91                  | 0.69                 | 0.16         | 50.00              | <b>462.07</b>          | <b>462.84</b>           | <b>0.77</b>          | <b>0.17</b>  | <b>49.99</b>       |
| JULY      | 447.56                 | 448.25                  | 0.70                 | 0.16         | 49.99              | <b>498.44</b>          | <b>500.02</b>           | <b>1.57</b>          | <b>0.31</b>  | <b>50.00</b>       |
| AUGUST    | 447.69                 | 449.62                  | 1.93                 | 0.43         | 49.99              | -                      | -                       | -                    | -            | -                  |
| SEPTEMBER | 465.31                 | 465.52                  | 0.20                 | 0.04         | 49.99              | -                      | -                       | -                    | -            | -                  |
| OCTOBER   | 448.87                 | 448.96                  | 0.09                 | 0.02         | 50.00              | -                      | -                       | -                    | -            | -                  |
| NOVEMBER  | 358.25                 | 358.45                  | 0.20                 | 0.06         | 49.99              | -                      | -                       | -                    | -            | -                  |
| DECEMBER  | 361.19                 | 361.95                  | 0.76                 | 0.21         | 50.00              | -                      | -                       | -                    | -            | -                  |
| JANUARY   | 385.74                 | 386.81                  | 1.07                 | 0.28         | 49.99              | -                      | -                       | -                    | -            | -                  |
| FEBRUARY  | 395.83                 | 397.69                  | 1.86                 | 0.47         | 49.99              | -                      | -                       | -                    | -            | -                  |
| MARCH     | 452.63                 | 455.10                  | 2.48                 | 0.54         | 49.99              | -                      | -                       | -                    | -            | -                  |

**B) Peak in MW:**

| Month     | 2020-21            |                     |                  |              |                    | 2021-22            |                     |                  |              |                    |
|-----------|--------------------|---------------------|------------------|--------------|--------------------|--------------------|---------------------|------------------|--------------|--------------------|
|           | Demand Met<br>(MW) | Requirement<br>(MW) | Shortage<br>(MW) | Shortage (%) | Avg. Freq.<br>(HZ) | Demand Met<br>(MW) | Requirement<br>(MW) | Shortage<br>(MW) | Shortage (%) | Avg. Freq.<br>(HZ) |
| APRIL     | 18093              | 18302               | 209              | 1.14         | 50.00              | <b>24405</b>       | <b>24405</b>        | <b>0</b>         | <b>0.00</b>  | <b>49.99</b>       |
| MAY       | 20166              | 20306               | 140              | 0.69         | 50.00              | <b>24191</b>       | <b>24191</b>        | <b>0</b>         | <b>0.00</b>  | <b>49.99</b>       |
| JUNE      | 21832              | 21989               | 156              | 0.71         | 50.00              | <b>23494</b>       | <b>23521</b>        | <b>28</b>        | <b>0.12</b>  | <b>49.99</b>       |
| JULY      | 22643              | 22735               | 92               | 0.40         | 49.99              | <b>25145</b>       | <b>26019</b>        | <b>874</b>       | <b>3.36</b>  | <b>50.00</b>       |
| AUGUST    | 22192              | 22399               | 207              | 0.92         | 49.99              | -                  | -                   | -                | -            | -                  |
| SEPTEMBER | 23563              | 23619               | 56               | 0.24         | 49.99              | -                  | -                   | -                | -            | -                  |
| OCTOBER   | 23374              | 23374               | 0                | 0.00         | 50.00              | -                  | -                   | -                | -            | -                  |
| NOVEMBER  | 20406              | 20465               | 59               | 0.29         | 49.99              | -                  | -                   | -                | -            | -                  |
| DECEMBER  | 19546              | 19697               | 151              | 0.77         | 50.00              | -                  | -                   | -                | -            | -                  |
| JANUARY   | 20496              | 20703               | 207              | 1.00         | 49.99              | -                  | -                   | -                | -            | -                  |
| FEBRUARY  | 20643              | 20854               | 211              | 1.01         | 49.99              | -                  | -                   | -                | -            | -                  |
| MARCH     | 24016              | 24016               | 0                | 0.00         | 49.99              | -                  | -                   | -                | -            | -                  |

PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF JULY -2021

| ORGANI-<br>SATION  | TYPE                     | POWER<br>STATION         | INSTALLED<br>CAPACITY<br>( in MW ) | EFFECTIVE<br>CAPACITY<br>( in MW ) | Gross<br>Energy<br>Generation<br>in MU | Net<br>Energy<br>Generation<br>in MU | Cummulative Gross<br>Energy Generation<br>upto Current Month<br>( 2021-22) in MU | Cummulative Net<br>Energy Generation<br>upto Current Month<br>( 2021-22) in MU |
|--------------------|--------------------------|--------------------------|------------------------------------|------------------------------------|--|--------------------------------------|--|--|
| BIHAR              | NTPC                     | Barauni (U# 6,7 )        | 220.00                             | 210.00                             | 23.77                                  | 19.27                                | 40.74  | 30.83  |
|                    | Thermal                  | Barauni (U# 8)           | 250.00                             | 250.00                             | 140.60                                 | 125.33                               | 532.34   | 463.47   |
|                    |                          | Barauni (U# 9)           | 0.00                               | 0.00                               | 0.00                                   | 0.00                                 | 40.73  | 40.73  |
|                    | (Dedicated<br>for Bihar) | Muzaffarpur Stg-I        | 220.00                             | 220.00                             | 23.26                                  | 19.00                                | 216.45   | 186.87   |
|                    |                          | Thermal Total            | 690.00                             | 680.00                             | 187.63                                 | 163.60                               | 830.26   | 717.83   |
|                    | RES                      |                          | 354.91                             | 354.91                             | 19.65                                  | 19.65                                | 70.20  | 70.20  |
|                    |                          | Total BIHAR              |                                    | <b>1044.91</b>                     | <b>1034.91</b>                         | <b>207.28</b>                        | <b>183.24</b>  | <b>900.46</b>  |
| <b>JHARKHAND</b>   |                          |                          |                                    |                                    |  |                                      |  |  |
| TVNL               | Thermal                  | TVNL                     | 420.00                             | 420.00                             | 109.22                                 | 95.76                                | 481.25   | 422.55   |
| JSEB               | Hydro                    | Subarnrekha (U#1,2)      | 130.00                             | 130.00                             | 49.09                                  | 49.09                                | 73.10  | 73.09  |
|                    | RES                      |                          | 60.41                              | 60.41                              | 0.00                                   | 0.00                                 | 0.00   | 0.00   |
|                    |                          | Total                    | <b>190.41</b>                      | <b>190.41</b>                      | <b>49.09</b>                           | <b>49.09</b>                         | <b>73.10</b>   | <b>73.09</b>   |
| DVC                | Thermal                  | Bokaro-B(3)              | 0.00                               | 0.00                               | 0.00                                   | -0.89                                | 0.00   | -3.54  |
|                    |                          | Chandrapura( U7 # 8)     | 500.00                             | 500.00                             | 336.21                                 | 303.66                               | 1294.58  | 1169.59  |
|                    |                          | Durgapur(4)              | 210.00                             | 210.00                             | 17.52                                  | 14.18                                | 49.57  | 39.67  |
|                    |                          | Mezia(1,2,3,4,5,6)       | 1340.00                            | 1340.00                            | 665.31                                 | 593.94                               | 2676.83  | 2399.28  |
|                    |                          | Mezia( U # 7,8)          | 1000.00                            | 1000.00                            | 582.99                                 | 549.86                               | 2308.92  | 2176.63  |
|                    |                          | Bokaro-A(1)              | 500.00                             | 500.00                             | 339.15                                 | 320.83                               | 1134.57  | 1070.55  |
|                    |                          | Durgapur STPS (U#1,2)    | 1000.00                            | 1000.00                            | 458.20                                 | 426.93                               | 2084.03  | 1960.27  |
|                    |                          | Raghunathpur TPS (U#1,2) | 1200.00                            | 1200.00                            | 507.10                                 | 472.73                               | 1857.35  | 1738.24  |
|                    |                          | Koderma STPS (U#1,2)     | 1000.00                            | 1000.00                            | 495.28                                 | 467.27                               | 2476.85  | 2342.15  |
|                    |                          | Total Thermal            | 6750.00                            | 6750.00                            | 3401.76                                | 3148.50                              | 13882.71   | 12892.83   |
|                    | Hydro                    | Maithon (U#1,2,3)        | 63.20                              | 63.20                              | 35.04                                  | 35.00                                | 77.91  | 77.77  |
|                    |                          | Panchet (U#1,2)          | 80.00                              | 80.00                              | 33.19                                  | 33.03                                | 80.36  | 79.88  |
|                    |                          | Tilaya (U#1,2)           | 4.00                               | 4.00                               | 2.70                                   | 2.7                                  | 4.16   | 4.1  |
|                    |                          | Hydro Total              | <b>147.20</b>                      | <b>147.20</b>                      | <b>70.92</b>                           | <b>70.72</b>                         | <b>162.42</b>  | <b>161.77</b>  |
|                    | Total DVC                | <b>6897.20</b>           | <b>6897.20</b>                     | <b>3472.68</b>                     | <b>3219.22</b>                         | <b>14045.13</b>                      | <b>13054.60</b>  |  |
| <b>WEST BENGAL</b> |                          |                          |                                    |                                    |  |                                      |  |  |
| WBPDCCL            | Thermal                  | Bandel TPS               | 380.00                             | 335.00                             | 145.17                                 | 130.97                               | 575.59   | 519.75   |
|                    |                          | Santaldih TPS(U#5&6)     | 500.00                             | 500.00                             | 330.23                                 | 301.91                               | 1354.06  | 1240.57  |
|                    |                          | Kolaghat TPS             | 1260.00                            | 1260.00                            | 362.20                                 | 321.34                               | 1259.98  | 1118.79  |
|                    |                          | Bakreswar TPP            | 1050.00                            | 1050.00                            | 711.21                                 | 648.17                               | 2783.37  | 2538.66  |
|                    |                          | Sagardighi TPP           | 1600.00                            | 1600.00                            | 736.90                                 | 669.89                               | 3832.26  | 3527.65  |
|                    |                          | DPPS (300+250 *)         | <b>550.00</b>                      | <b>550.00</b>                      | <b>240.83</b>                          | <b>216.38</b>                        | <b>869.64</b>  | <b>780.93</b>  |
|                    |                          | Thermal Total            | <b>5340.00</b>                     | <b>5295.00</b>                     | <b>2526.54</b>                         | <b>2288.66</b>                       | <b>10674.91</b>  | <b>9726.36</b>   |
| WBSIEDCL           | Hydro                    | Jaldhaka (3x9+2x4)       | 35.00                              | 35.00                              | 27.25                                  | 27.25                                | 72.45  | 72.45  |
|                    |                          | Ramam (4x12.73)          | 51.00                              | 51.00                              | 38.09                                  | 38.09                                | 89.01  | 89.01  |
|                    |                          | Teesta C.F. (3x3x7.5)    | 67.50                              | 67.50                              | 12.18                                  | 12.18                                | 23.88  | 23.88  |
|                    |                          | Purulia PSS (4x225)      | 900.00                             | 900.00                             | 93.41                                  | 93.41                                | 358.19   | 358.19   |
|                    |                          | Total Hydro              | 1053.50                            | 1053.50                            | 170.94                                 | 170.94                               | 543.53   | 543.53   |
|                    |                          | RES                      | 500.76                             | 500.76                             | 19.61                                  | 19.61                                | 57.92  | 57.92  |

➤ DVC, BTPS"B" U#3 210 MW de- commissioned from 01.04.2021



PERFORMANCE OF GENERATING STATIONS IN THE EASTERN REGION DURING THE MONTH OF JULY -2021

| ORGANI-<br>SATION            | TYPE      | POWER<br>STATION           | INSTALLED<br>CAPACITY<br>( in MW ) | EFFECTIVE<br>CAPACITY<br>( in MW ) | Gross<br>Energy<br>Generation<br>in MU | Net<br>Energy<br>Generation<br>in MU | Cummulative Gross<br>Energy Generation<br>upto Current Month<br>( 2021-22) in MU | Cummulative Net<br>Energy Generation<br>upto Current Month<br>( 2021-22) in MU |          |          |
|------------------------------|-----------|----------------------------|------------------------------------|------------------------------------|--|--------------------------------------|--|--|----------|----------|
| CESC                         | Thermal   | Titagarh (4x60)            | 240.00                             | 240.00                             | 0.00                                   | 0.00                                 | 0.00   | 0.00   |          |          |
|                              |           | Southern (2x67.5)          | 135.00                             | 135.00                             | 0.24                                   | 0.21                                 | 50.33  | 45.73  |          |          |
|                              |           | Budge-Budge (3x250)        | 750.00                             | 750.00                             | 517.55                                 | 478.18                               | 2012.32  | 1859.32  |          |          |
|                              |           | Total CESC                 | 1125.00                            | 1125.00                            | 517.79                                 | 478.39                               | 2062.65  | 1905.05  |          |          |
| HEL                          | Thermal   | HEL                        | 600.00                             | 600.00                             | 409.20                                 | 377.82                               | 1571.11  | 1451.04  |          |          |
|                              |           | Total West Bengal          | 8619.26                            | 8574.26                            | 3644.07                                | 3335.42                              | 14910.11   | 13683.90   |          |          |
| OPGC                         | 0 Thermal | IB TPS                     | 420.00                             | 420.00                             | 186.50                                 | 163.46                               | 854.87   | 751.00   |          |          |
|                              |           | IB TPS U#3(660 MW)         | 660.00                             | 660.00                             | 264.17                                 | 244.44                               | 1044.18  | 970.43   |          |          |
|                              |           | IB TPS U#4(660 MW)         | 660.00                             | 660.00                             | 355.61                                 | 329.05                               | 1229.30  | 1143.51  |          |          |
| OHPC                         | Hydro     | Hirakud-I (Burla)          | 275.50                             | 275.50                             | 77.46                                  | 77.22                                | 181.43   | 180.68   |          |          |
|                              |           | Hirakud-II (Chiplima)      | 72.00                              | 72.00                              | 26.19                                  | 26.10                                | 54.44  | 54.11  |          |          |
|                              |           | Balimela (6x60+2x75)       | 510.00                             | 510.00                             | 87.83                                  | 86.87                                | 340.08   | 336.34   |          |          |
|                              |           | Rengali (5x50)             | 250.00                             | 250.00                             | 107.03                                 | 106.91                               | 263.10   | 262.64   |          |          |
|                              |           | Upper Kolab (4x80)         | 320.00                             | 320.00                             | 51.45                                  | 51.14                                | 139.24   | 138.26   |          |          |
|                              |           | Indravati HPS (4x150)      | 600.00                             | 600.00                             | 132.90                                 | 129.72                               | 526.54   | 515.36   |          |          |
|                              |           | Mckd.(Odisha drawal)       | 57.38                              | 57.38                              | 28.03                                  | 28.03                                | 97.87  | 97.87  |          |          |
|                              |           | Total Hydro                | 2084.88                            | 2084.88                            | 510.90                                 | 505.99                               | 1602.70  | 1585.27  |          |          |
|                              |           | RES                        | 539.57                             | 539.57                             | 47.73                                  | 47.73                                | 220.33   | 220.33   |          |          |
|                              |           | Total Odisha               | 4364.45                            | 4364.45                            | 1364.90                                | 1290.67                              | 4951.38  | 4670.53  |          |          |
| (**) SIKKIM                  | Hydro     | RES                        | 52.18                              | 52.18                              | 2.00                                   | 2.00                                 | 6.00   | 6.00   |          |          |
| NTPC                         |           | MTPS Stg-II                | 390.00                             | 390.00                             | 196.4416                               | 174.43                               | 865.13   | 774.59   |          |          |
|                              |           | FSTPP# I&II ( 3x200+2x500) | 1600.00                            | 1600.00                            | 703.13                                 | 640.55                               | 2911.75  | 2657.76  |          |          |
|                              |           | FSTPP (U# 6)               | 500.00                             | 500.00                             | 252.52                                 | 231.81                               | 1120.08  | 1034.14  |          |          |
|                              |           | KhSTPP (4x210+3x500)       | 2340.00                            | 2340.00                            | 1311.45                                | 1218.20                              | 5816.91  | 5411.05  |          |          |
|                              |           | TSTPP (2x500)              | 1000.00                            | 1000.00                            | 633.64                                 | 584.71                               | 2399.62  | 2215.56  |          |          |
|                              |           | BARH STPS II (2X660)       | 1320.00                            | 1320.00                            | 675.01                                 | 632.05                               | 2750.76  | 2582.31  |          |          |
|                              |           | BARH STPS I (1X660)        |                                    |                                    | 14.44                                  | 4.83                                 | 23.38  | 13.77  |          |          |
|                              |           | BRBCL # 1,2,3(3X250 MW)    | 750                                | 750                                | 339.74                                 | 308.23                               | 1708.39  | 1567.96  |          |          |
|                              |           | NSTPS U# I&2               | 1320.00                            | 1320.00                            | 451.25                                 | 424.99                               | 1686.83  | 1598.17  |          |          |
|                              |           | NSTPS U#2 infirm           |                                    |                                    | 191.89                                 | 174.15                               | 202.55   | 175.72   |          |          |
|                              |           | DSTPP #1                   | 800.00                             | 800.00                             | 579.62                                 | 545.45                               | 1982.65  | 1860.25  |          |          |
|                              |           | DSTPP #2                   |                                    |                                    | 163.42                                 | 144.87                               | 241.92   | 194.80   |          |          |
|                              |           | Total NTPC                 | 10020.00                           | 10020.00                           | 5512.55                                | 5084.27                              | 21709.96   | 20077.13   |          |          |
|                              |           | NHPC                       | HYDRO                              | Rangit (3x20)                      | 60.00                                  | 60.00                                | 41.48  | 41.48  | 117.41   | 117.41   |
| Teesta (3x170)               | 510.00    |                            |                                    | 510.00                             | 360.95                                 | 360.95                               | 1051.64  | 1051.64  |          |          |
| TLDP( 4x33+4x40) for WBSEDCL | 292.00    |                            |                                    | 292.00                             | 199.64                                 | 199.64                               | 555.26   | 555.26   |          |          |
| Total NHPC                   | 862.00    |                            |                                    | 862.00                             | 602.06                                 | 602.06                               | 1724.31  | 1724.31  |          |          |
| MPL (U#1&2)                  | 1050.00   |                            |                                    | 1050.00                            | 681.84                                 | 642.12                               | 2709.27  | 2553.18  |          |          |
| APNRL (U#1,2)                | 540.00    |                            |                                    | 540.00                             | 317.28                                 | 287.36                               | 1267.97  | 1152.69  |          |          |
| GMR (2x350)                  | 700.00    |                            |                                    | 700.00                             | 382.55                                 | 354.92                               | 1595.62  | 1483.13  |          |          |
| JITPL (2X600)                | 1200.00   |                            |                                    | 1200.00                            | 733.53                                 | 684.19                               | 2920.55  | 2729.83  |          |          |
| CHUZACHEN** (2x55)           | 110.00    |                            |                                    | 110.00                             | 88.10                                  | 88.10                                | 218.68   | 218.68   |          |          |
| JOETHANG (2x48)              | 96.00     |                            |                                    | 96.00                              | 72.11                                  | 72.11                                | 158.65   | 158.65   |          |          |
| TEESTA URJA St III (6x200)   | 1200.00   |                            |                                    | 1200.00                            | 937.51                                 | 937.51                               | 2677.13  | 2677.13  |          |          |
| Tashilding (2x48.5)          | 97.00     |                            |                                    | 97.00                              | 74.86                                  | 74.86                                | 152.44   | 152.44   |          |          |
| DICKCHU (2x48)               | 96.00     |                            |                                    | 96.00                              | 76.77                                  | 76.77                                | 230.52   | 230.52   |          |          |
| RONGNICHU HEP (2x56.5)       |           |                            |                                    |                                    | 64.84                                  | 64.84                                | 71.87  | 71.87  |          |          |
| TALCHER SOLAR                | 10.00     |                            |                                    | 10.00                              | 0.94                                   | 0.94                                 | 4.46   | 4.46   |          |          |
| Total Thermal (E.R)          | 30175.00  |                            |                                    | 30120.00                           | 15586.16                               | 14342.53                             | 62834.59   | 57976.55   |          |          |
| Total Hydro (E.R)            | 5989.58   |                            |                                    | 5989.58                            | 2718.10                                | 2712.99                              | 7615.36  | 7597.26  |          |          |
| Total RES                    | 1517.83   |                            |                                    | 1517.83                            | 89.93                                  | 89.93                                | 358.91   | 358.91   |          |          |
| EASTERN REGIONAL             |           |                            |                                    | <b>TOTAL (E.R)</b>                 | 37682.41                               | 37627.41                             | 18394.19   | 17145.45   | 70808.86 | 65932.72 |
| BHUTAN                       | Hydro     |                            |                                    | CHPC(4x90)                         | 360.00                                 | 270.00                               | 277.79   | 277.79   | 731.80   | 731.80   |
|                              |           |                            |                                    | Kurichu (4x15)                     | 60.00                                  | 60.00                                | 10.03  | 10.03  | 21.12    | 21.12    |
|                              |           |                            |                                    | TALA (6x170)                       | 1020.00                                | 1020.00                              | 490.85   | 490.85   | 1135.59  | 1135.59  |
|                              |           |                            |                                    | DAGACHU (2x63)                     | 126.00                                 | 126.00                               | 85.10  | 85.10  | 166.94   | 166.94   |
|                              |           | MANGDECHU(4x180 )          | 720.00                             | 720.00                             | 424.52                                 | 424.52                               | 1177.57  | 1177.57  |          |          |
|                              |           | <b>Grand Total</b>         | 39968.41                           | 39823.41                           | 19682.48                               | 18433.74                             | 74041.88   | 69165.74   |          |          |

PLANT LOAD FACTOR ( PLF ) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF JULY' 2021

| ORGANI-<br>SATION    | TYPE  | POWER<br>STATION         | INSTALLED<br>CAPACITY<br>( in MW ) | EFFECTIVE<br>CAPACITY<br>( in MW ) | Gross<br>Energy<br>Generation<br>in MU | PLF<br>of Current<br>Month<br>( % ) | Cummulative Gross<br>Energy Generation<br>upto Current Month<br>( 2021-22) in MU | Cummulative PLF<br>upto Current<br>Month<br>( % ) |
|----------------------|---|--------------------------|------------------------------------|------------------------------------|--|-------------------------------------|--|---|
| BIHAR                | NTPC  | Barauni (U# 6,7 )        | 220.00                             | 210.00                             | 23.77                                  | 15.21                               | 40.74  | 6.63  |
|                      | Thermal   | Barauni (U# 8)           | 250.00                             | 250.00                             | 140.60                                 | 75.59                               | 532.34   | 72.72   |
|                      |   | Barauni (U# 9)           | 0.00                               | 0.00                               | 0.00                                   | 0.00                                | 40.73  | 0.00  |
|                      | (Dedicated<br>for Bihar)  | Muzaffarpur Stg-I        | 220.00                             | 220.00                             | 23.26                                  | 14.21                               | 216.45   | 33.60   |
|                      | Thermal Total   |                          | 690.00                             | 680.00                             | 187.63                                 | 37.09                               | 830.26   | 39.65   |
|                      | RES   |                          | 354.91                             | 354.91                             | 19.65                                  |                                     | 70.20  |   |
|                      | Total BIHAR   |                          | 1044.91                            | 1034.91                            | 207.28                                 |                                     | 900.46   |   |
| <b>JHARKHAND</b>     |   |                          |                                    |                                    |  |                                     |  |   |
| TVNL                 | Thermal   | TVNL                     | 420.00                             | 420.00                             | 109.22                                 | 34.95                               | 481.25   | 39.13   |
| JSEB                 | Hydro   | Subarnrekha (U#1,2)      | 130.00                             | 130.00                             | 49.09                                  |                                     | 73.10  |   |
|                      | RES   |                          | 60.41                              | 60.41                              | 0.00                                   |                                     | 0.00   |   |
|                      | Total   |                          | 190.41                             | 190.41                             | 49.09                                  |                                     | 73.10  |   |
| DVC                  | Thermal   | Bokaro-B(3)              | 0.00                               | 0.00                               | 0.00                                   | 0.00                                | 0.00   | 0.00  |
|                      |   | Chandrapura( U7 # 8)     | 500.00                             | 500.00                             | 336.21                                 | 90.38                               | 1294.58  | 88.43   |
|                      |   | Durgapur(4)              | 210.00                             | 210.00                             | 0.00                                   | 11.21                               | 49.57  | 8.06  |
|                      |   | Mezia(1,2,3,4,5,6)       | 1340.00                            | 1340.00                            | 665.31                                 | 66.73                               | 2676.83  | 68.23   |
|                      |   | Mezia( U # 7,8)          | 1000.00                            | 1000.00                            | 582.99                                 | 78.36                               | 2308.92  | 78.86   |
|                      |   | Bokaro-A(1)              | 500.00                             | 500.00                             | 339.15                                 | 91.17                               | 1134.57  | 77.50   |
|                      |   | Durgapur STPS (U#1,2)    | 1000.00                            | 1000.00                            | 458.20                                 | 61.59                               | 2084.03  | 71.18   |
|                      |   | Raghunathpur TPS (U#1,2) | 1200.00                            | 1200.00                            | 507.10                                 | 56.80                               | 1857.35  | 52.86   |
|                      | Koderma STPS (U#1,2)  | 1000.00                  | 1000.00                            | 495.28                             | 66.57                                  | 2476.85                             | 84.59  |   |
|                      | Total Thermal   |                          | 6750.00                            | 6750.00                            | 3401.76                                | 67.74                               | 13882.71   | 70.24   |
| Hydro                | Maithon (U#1,2,3)   | 63.20                    | 63.20                              | 35.04                              |  | 77.91                               |  |   |
|                      | Panchet (U#1,2)   | 80.00                    | 80.00                              | 33.19                              |  | 80.36                               |  |   |
|                      | Tilaya (U#1,2)  | 4.00                     | 4.00                               | 2.70                               |  | 4.16                                |  |   |
|                      | Hydro Total   | 147.20                   | 147.20                             | 70.92                              |  | 162.42                              |  |   |
| Total DVC            |   | 6897.20                  | 6897.20                            | 3472.68                            |  | 14045.13                            |  |   |
| <b>WEST BENGAL</b>   |   |                          |                                    |                                    |  |                                     |  |   |
| WBPDC                | Thermal   | Bandel TPS               | 380.00                             | 335.00                             | 145.17                                 | 58.24                               | 575.59   | 58.68   |
|                      |   | Santalidih TPS(U#5&6)    | 500.00                             | 500.00                             | 330.23                                 | 88.77                               | 1354.06  | 92.49   |
|                      |   | Kolaghat TPS             | 1260.00                            | 1260.00                            | 362.20                                 | 38.64                               | 1259.98  | 34.15   |
|                      |   | Bakreswar TPP            | 1050.00                            | 1050.00                            | 711.21                                 | 91.04                               | 2783.37  | 90.53   |
|                      |   | Sagardighi TPP           | 1600.00                            | 1600.00                            | 736.90                                 | 61.90                               | 3832.26  | 81.80   |
|                      |   | DPPS (300+250 *)         | 550.00                             | 550.00                             | 240.83                                 | 58.85                               | 869.64   | 54.00   |
|                      |   | Thermal Total            | 5340.00                            | 5295.00                            | 2526.54                                | 64.13                               | 10674.91   | 68.85   |
| WBSDC                | Hydro   | Jaldhaka (3x9+2x4)       | 35.00                              | 35.00                              | 27.25                                  |                                     | 72.45  |   |
|                      |   | Ramam (4x12.73)          | 51.00                              | 51.00                              | 38.09                                  |                                     | 89.01  |   |
|                      |   | Teesta C.F. (3x3x7.5)    | 67.50                              | 67.50                              | 12.18                                  |                                     | 23.88  |   |
|                      |   | Purulia PSS (4x225)      | 900.00                             | 900.00                             | 93.41                                  |                                     | 358.19   |   |
|                      |   | Total Hydro              | 1053.50                            | 1053.50                            | 170.94                                 |                                     | 543.53   |   |
|                      |   | RES                      | 500.76                             | 500.76                             | 19.61                                  |                                     | 57.92  |   |
| DE- COMM<br>ISSIONED | WBPDC, Bandel TPS Unit #3 & #4 ( IC=2X82.5 MW, EC=2X60 MW) decommissioned from 01.04.2018.<br>NTPC, TTPS Odisha All Six units(4X62.5+2X110) decommissioned from 01.04.2021<br>DVC, BTSPS(B) Unit #3 (210 MW) de-commissioned from 01.04.2021<br>DPL U#6 (110 MW) Decommissioned from 28.01.20 as per CEA.<br>CTPS U#6 (140 MW) Decommissioned from 19.03.2020 as per CEA. |                          |                                    |                                    |  |                                     |  |   |
| COMMISS-<br>IONED    | 1. IB U#3 (660 MW) COD from 03.07.19<br>2. IB U#4 (660 MW) COD from 21.08.19<br>3. NSTPS U#1(660 MW) COD from 06.09.2019<br>4. BARAUNI TPS U#1(250 MW) COD 01.03.2020<br>5. DARLIPALI S TPS U#1(800 MW) COD 01.03.2020<br>6. NSTPS U#2 (660 MW) COD from 23.07.2021   |                          |                                    |                                    |  |                                     |  |   |

PLANT LOAD FACTOR ( PLF ) OF THERMAL POWER STATIONS IN EASTERN REGION DURING THE MONTH OF JULY' 2021

| ORGANI-<br>SATION            | TYPE                       | POWER<br>STATION           | INSTALLED<br>CAPACITY<br>( in MW ) | EFFECTIVE<br>CAPACITY<br>( in MW ) | Gross<br>Energy<br>Generation<br>in MU | PLF<br>of Current<br>Month<br>( % ) | Cummulative Gross<br>Energy Generation<br>upto Current Month<br>( 2021-22) in MU | Cummulative PLF<br>upto Current<br>Month<br>( % ) |         |  |
|------------------------------|----------------------------|----------------------------|------------------------------------|------------------------------------|--|-------------------------------------|--|---|---------|--|
| CESC                         | Thermal                    | Titagarh (4x60)            | 240.00                             | 240.00                             | 0.00                                   | 0.00                                | 0.00   | 0.00  |         |  |
|                              |                            | Southern (2x67.5)          | 135.00                             | 135.00                             | 0.24                                   | 0.24                                | 50.33  | 12.73   |         |  |
|                              |                            | Budge-Budge (3x250)        | 750.00                             | 750.00                             | 517.55                                 | 92.75                               | 2012.32  | 91.64   |         |  |
|                              |                            | <b>Total CESC</b>          | <b>1125.00</b>                     | <b>1125.00</b>                     | <b>517.79</b>                          | <b>61.86</b>                        | <b>2062.65</b>   | <b>62.62</b>                                      |         |  |
| HEL                          | Thermal                    |                            | <b>600.00</b>                      | <b>600.00</b>                      | <b>409.20</b>                          | <b>91.67</b>                        | <b>1571.11</b>   | <b>89.43</b>                                      |         |  |
|                              |                            | <b>Total West Bengal</b>   | <b>8619.26</b>                     | <b>8574.26</b>                     | <b>3644.07</b>                         |                                     | <b>14910.11</b>  |   |         |  |
| OPGC                         | 0 Thermal                  | IB TPS                     | <b>420.00</b>                      | <b>420.00</b>                      | <b>186.50</b>                          | <b>59.68</b>                        | <b>854.87</b>  | <b>69.52</b>                                      |         |  |
|                              |                            | IB TPS U#3(660 MW)         | <b>660.00</b>                      | <b>660.00</b>                      | <b>264.17</b>                          | <b>57.51</b>                        | <b>1044.18</b>   | <b>54.03</b>                                      |         |  |
|                              |                            | IB TPS U#4(660 MW)         | <b>660.00</b>                      | <b>660.00</b>                      | <b>355.61</b>                          | <b>72.42</b>                        | <b>1229.30</b>   | <b>63.61</b>                                      |         |  |
| OHPC                         | Hydro                      | Hirakud-I (Burla)          | 275.50                             | 275.50                             | 77.46                                  |                                     | 181.43   |   |         |  |
|                              |                            | Hirakud-II (Chiplima)      | 72.00                              | 72.00                              | 26.19                                  |                                     | 54.44  |   |         |  |
|                              |                            | Balimela (6x60+2x75)       | 510.00                             | 510.00                             | 87.83                                  |                                     | 340.08   |   |         |  |
|                              |                            | Rengali (5x50)             | 250.00                             | 250.00                             | 107.03                                 |                                     | 263.10   |   |         |  |
|                              |                            | Upper Kolab (4x80)         | 320.00                             | 320.00                             | 51.45                                  |                                     | 139.24   |   |         |  |
|                              |                            | Indravati HPS (4x150)      | 600.00                             | 600.00                             | 132.90                                 |                                     | 526.54   |   |         |  |
|                              |                            | Mckd.(Odisha drawal)       | 57.38                              | 57.38                              | 28.03                                  |                                     | 97.87  |   |         |  |
|                              |                            | <b>Total Hydro</b>         | <b>2084.88</b>                     | <b>2084.88</b>                     | <b>510.90</b>                          |                                     | <b>1602.70</b>   |   |         |  |
|                              |                            | RES                        | 539.57                             | 539.57                             | 47.73                                  |                                     | 220.33   |   |         |  |
|                              |                            | <b>Total Odisha</b>        | <b>4364.45</b>                     | <b>4364.45</b>                     | <b>1364.90</b>                         |                                     | <b>4951.38</b>   |   |         |  |
| (**) SIKKIM                  | Hydro                      | RES                        | 52.18                              | 52.18                              | 2.00                                   |                                     | 6.00   |   |         |  |
| NTPC                         |                            | MTPS Stg-II                | 390                                | 390                                | 196.4416                               | 67.70                               | 865.13   | 75.76   |         |  |
|                              |                            | FSTPP# I&II ( 3x200+2x500) | 1600.00                            | 1600.00                            | 703.13                                 | 59.07                               | 2911.75  | 62.15   |         |  |
|                              |                            | FSTPP (U# 6)               | 500.00                             | 500.00                             | 252.52                                 | 67.88                               | 1120.08  | 76.51   |         |  |
|                              |                            | KhSTPP (4x210+3x500)       | 2340.00                            | 2340.00                            | 1311.45                                | 75.33                               | 5816.91  | 84.90   |         |  |
|                              |                            | TSTPP (2x500)              | 1000.00                            | 1000.00                            | 633.64                                 | 85.17                               | 2399.62  | 81.95   |         |  |
|                              |                            | BARH STPS II (2X660)       | 1320.00                            | 1320.00                            | 675.01                                 | 68.73                               | 2750.76  | 71.17   |         |  |
|                              |                            | BARH STPS I (1X660)        |                                    |                                    | 14.44                                  |                                     | 23.38  |   |         |  |
|                              |                            | BRBCL # 1,2,3(3X250 MW)    | 750.00                             | 750.00                             | 339.74                                 | 60.89                               | 1708.39  | 77.80   |         |  |
|                              |                            | NSTPS U# 1&2               | 1320.00                            | 1320.00                            | 451.25                                 | 71.22                               | 1686.83  | 81.29   |         |  |
|                              |                            | NSTPS U#2 infirm           |                                    |                                    | 191.89                                 |                                     | 202.55   |   |         |  |
|                              |                            | DSTPP #1                   | 800.00                             | 800.00                             | 579.62                                 | 97.38                               | 1982.65  | 84.64   |         |  |
|                              |                            | <b>Total NTPC</b>          | <b>10020.00</b>                    | <b>10020.00</b>                    | <b>5512.55</b>                         | <b>72.37</b>                        | <b>21709.96</b>  | <b>77.11</b>                                      |         |  |
|                              |                            | NHPC                       | HYDRO                              | Rangit (3x20)                      | 60.00                                  | 60.00                               | 41.48  |   | 117.41  |  |
|                              |                            |                            |                                    | Teesta (3x170)                     | 510.00                                 | 510.00                              | 360.95   |   | 1051.64 |  |
| TLDP( 4x33+4x40) for WBSEDCL | 292.00                     |                            |                                    | 292.00                             | 199.64                                 |                                     | 555.26   |   |         |  |
| <b>Total NHPC</b>            | <b>862.00</b>              |                            |                                    | <b>862.00</b>                      | <b>602.06</b>                          |                                     | <b>1724.31</b>   |   |         |  |
| Thermal                      | MPL (U#1&2)                |                            | 1050.00                            | 1050.00                            | 681.84                                 | 87.28                               | 2709.27  | 88.12   |         |  |
|                              | APNRL (U#1,2)              |                            | 540.00                             | 540.00                             | 317.28                                 | 78.97                               | 1267.97  | 80.19   |         |  |
|                              | GMR (2x350)                |                            | 700.00                             | 700.00                             | 382.55                                 | 73.45                               | 1595.62  | 77.85   |         |  |
|                              | JITPL (2X600)              |                            | 1200.00                            | 1200.00                            | 733.53                                 | 82.16                               | 2920.55  | 83.12   |         |  |
|                              | CHUZACHEN** (2x55)         |                            | 110.00                             | 110.00                             | 88.10                                  |                                     | 218.68   |   |         |  |
|                              | JORETHANG (2x48)           |                            | 96.00                              | 96.00                              | 72.11                                  |                                     | 158.65   |   |         |  |
|                              | TEESTA URJA St III (6x200) |                            | 1200.00                            | 1200.00                            | 937.51                                 |                                     | 2677.13  |   |         |  |
|                              | Tashilding (2x48.5)        |                            | 97.00                              | 97.00                              | 74.86                                  |                                     | 152.44   |   |         |  |
|                              | DICKCHU (2x48)             |                            | 96.00                              | 96.00                              | 76.77                                  |                                     | 230.52   |   |         |  |
|                              | RONGNICHU HEP (2x56.5)     |                            |                                    |                                    | 64.84                                  |                                     | 71.87  |   |         |  |
|                              | TALCHER SOLAR              |                            | 10.00                              | 10.00                              | 0.94                                   |                                     | 4.46   |   |         |  |
|                              | <b>Total Thermal (E.R)</b> |                            | <b>30175.00</b>                    | <b>30120.00</b>                    | <b>15586.16</b>                        | <b>68.97</b>                        | <b>62834.59</b>  | <b>72.14</b>                                      |         |  |
|                              | <b>Total Hydro (E.R)</b>   |                            | <b>5989.58</b>                     | <b>5989.58</b>                     | <b>2718.10</b>                         |                                     | <b>7615.36</b>   |   |         |  |
| <b>Total RES</b>             | <b>1517.83</b>             | <b>1517.83</b>             | <b>89.93</b>                       |                                    | <b>358.91</b>                          |                                     |  |   |         |  |
| <b>TOTAL (E.R)</b>           | <b>37682.41</b>            | <b>37627.41</b>            | <b>18394.19</b>                    |                                    | <b>70808.86</b>                        |                                     |  |   |         |  |
| BHUTAN                       | Hydro                      | CHPC(4x90)                 | <b>360.00</b>                      | 270.00                             | 277.79                                 |                                     | 731.80   |   |         |  |
|                              |                            | Kurichu (4x15)             | <b>60.00</b>                       | 60.00                              | 10.03                                  |                                     | 21.12  |   |         |  |
|                              |                            | TALA (6x170)               | <b>1020.00</b>                     | 1020.00                            | 490.85                                 |                                     | 1135.59  |   |         |  |
|                              |                            | DAGACHU (2x63)             | <b>126.00</b>                      | 126.00                             | 85.10                                  |                                     | 166.94   |   |         |  |
|                              |                            | MANGDECHU(4x180 )          | <b>720.00</b>                      | <b>720.00</b>                      | <b>424.52</b>                          |                                     | <b>1177.57</b>   |   |         |  |
| <b>Grand Total</b>           |                            |                            | <b>39968.41</b>                    | <b>39823.41</b>                    | <b>19682.48</b>                        |                                     | <b>74041.88</b>  |   |         |  |

CONTRIBUTIONS OF DIFFERENT CONSTITUENTS AT THE TIME OF REGIONAL PEAK  
DURING THE MONTH OF JULY'2021 (16-7-2021)

Date **16-Jul-21**  
Time **22.00** Hrs.  
Frequency **49.88** Hz.

(All Fig. in MW )

| System/State                              | Installed    | Effective    | Hydro       | Thermal      | RES       | Net Gen      |
|---|--------------|--------------|-------------|--------------|-----------|--------------|
|   | Capacity     | Capacity     |             |              |           | Total        |
| BSPHCL                                    | 1045         | 1035         | 0           | 275          | 0         | 275          |
| JUVNL                                     | 610          | 610          | 104         | 126          | 0         | 230          |
| DVC                                       | 6897         | 6897         | 40          | 4945         | 0         | 4986         |
| ODISHA                                    | 4364         | 4364         | 1230        | 925          | 58        | 2213         |
| WBSEDCL                                   | 6344         | 6299         | 964         | 3459         | 0         | 4423         |
| TLDP                                      | 292          | 292          | 293         | 0            | 0         | 293          |
| HEL HALDIA                                | 600          | 600          | 0           | 549          | 0         | 549          |
| CESC                                      | 1125         | 1125         | 0           | 724          | 0         | 724          |
| DPL                                       | 550          | 550          | 0           | 0            | 0         | 0            |
| SIKKIM                                    | 52           | 52           | 0           | 0            | 0         | 0            |
| NTPC                                      | 10020        | 10020        | 0           | 7554         | 0         | 7554         |
| NHPC                                      | 570          | 570          | 577         | 0            | 0         | 577          |
| CHUKHA                                    | 360          | 270          | 390         | 0            | 0         | 390          |
| KURICHU                                   | 60           | 60           | 78          | 0            | 0         | 78           |
| TALA                                      | 1020         | 1020         | 800         | 0            | 0         | 800          |
| MPL                                       | 1050         | 1050         | 0           | 981          | 0         | 981          |
| OPGC (660 MW)                             | 0            | 0            | 0           | 0            | 0         | 0            |
| APNRL                                     | 540          | 540          | 0           | 244          | 0         | 244          |
| Kamalganga (GMR)                          | 700          | 700          | 0           | 667          | 0         | 667          |
| JITPL                                     | 1200         | 1200         | 0           | 1013         | 0         | 1013         |
| RONGNICHU HEP (2x56.5)                    | 113          | 113          | 101         | 0            | 0         | 101          |
| Chuzachen                                 | 110          | 110          | 119         | 0            | 0         | 119          |
| Jorethang                                 | 96           | 96           | 102         | 0            | 0         | 102          |
| TEESTA URJA St III                        | 1200         | 1200         | 1266        | 0            | 0         | 1266         |
| Tashilding                                | 97           | 97           | 110         | 0            | 0         | 110          |
| DICKCHU                                   | 96           | 96           | 107         | 0            | 0         | 107          |
| <u>Daghachu</u>                           | 126          | 126          | 115         | 0            | 0         | 115          |
| <u>Solar</u>                              | 10           | 10           | 0           | 0            | 0         | 0            |
| <u>Mangdechu</u>                          | 720          | 720          | 619         | 0            | 0         | 619          |
| <u>Total</u>                              | <b>39968</b> | <b>39823</b> | <b>7015</b> | <b>21463</b> | <b>58</b> | <b>28536</b> |
| Import From Captive:                      |              |              |             |              |           | <b>1502</b>  |
| Export To:                                |              |              |             |              |           |              |
| NER                                       |              |              |             |              |           | <b>400</b>   |
| SR  |              |              |             |              |           | <b>-40</b>   |
| WR  |              |              |             |              |           | <b>-868</b>  |
| NR  |              |              |             |              |           | 4444         |
| Bangladesh                                |              |              |             |              |           | 811          |
| Nepal                                     |              |              |             |              |           | 145          |
| <b>Total</b>                              |              |              |             |              |           | <b>4893</b>  |
| ➤ <b>nal Net Peak Demand Met ( MW ) :</b> |              |              |             |              |           | <b>25145</b> |

Indicates Export(+)/Import(-) of Power

**Hourly Load Generation Data OF ER On Regional Peak Day During The Month of JULY'2021 (16-7-2021)**

( All Figures in MW)

| Generation |       |         | Import | Net          | Net                            | Demand                    | Freq. | Load       |      |             |
|------------|-------|---------|--------|--------------|--------------------------------|---------------------------|-------|------------|------|-------------|
| Hrs.       | Hydro | Thermal | Total  | from Captive | Import From<br>Hydro of Bhutan | Export<br>to other region | Met   | Correction | Shed | Requirement |
| 1          | 4048  | 21596   | 25644  | 1414         | 2113                           | 5077                      | 24094 | 4          | 167  | 24265       |
| 2          | 3740  | 21568   | 25308  | 1316         | 2144                           | 5106                      | 23661 | 6          | 167  | 23835       |
| 3          | 3876  | 21247   | 25123  | 1268         | 2150                           | 5135                      | 23406 | 14         | 167  | 23588       |
| 4          | 3580  | 20830   | 24410  | 1299         | 2144                           | 4713                      | 23140 | -26        | 167  | 23281       |
| 5          | 3659  | 20666   | 24325  | 1305         | 2136                           | 4912                      | 22854 | 18         | 167  | 23039       |
| 6          | 3845  | 20182   | 24027  | 1415         | 2118                           | 5877                      | 21682 | -11        | 169  | 21840       |
| 7          | 3728  | 19997   | 23725  | 1413         | 2102                           | 5997                      | 21243 | 15         | 208  | 21466       |
| 8          | 3638  | 19953   | 23592  | 1301         | 2094                           | 5724                      | 21263 | 9          | 168  | 21440       |
| 9          | 3500  | 19694   | 23194  | 1293         | 2099                           | 5251                      | 21336 | -24        | 175  | 21487       |
| 10         | 3683  | 19845   | 23527  | 1282         | 2093                           | 5409                      | 21493 | 17         | 172  | 21682       |
| 11         | 3770  | 20189   | 23959  | 1245         | 2082                           | 5710                      | 21576 | 60         | 482  | 22119       |
| 12         | 3623  | 20152   | 23775  | 1209         | 2083                           | 5380                      | 21686 | 15         | 102  | 21804       |
| 13         | 3622  | 19970   | 23592  | 1233         | 2092                           | 5116                      | 21800 | 8          | 102  | 21909       |
| 14         | 3550  | 19719   | 23270  | 1239         | 2097                           | 4854                      | 21751 | -17        | 1    | 21751       |
| 15         | 3784  | 19531   | 23315  | 1219         | 2113                           | 4656                      | 21990 | 21         | 60   | 22071       |
| 16         | 3719  | 19682   | 23401  | 1254         | 2097                           | 4838                      | 21914 | 29         | 62   | 22005       |
| 17         | 3756  | 19643   | 23399  | 1287         | 2098                           | 5034                      | 21751 | 4          | 66   | 21820       |
| 18         | 3663  | 19702   | 23365  | 1391         | 2109                           | 5776                      | 21089 | 46         | 110  | 21246       |
| 19         | 3778  | 20747   | 24525  | 1418         | 2084                           | 6097                      | 21930 | 23         | 132  | 22084       |
| 20         | 4617  | 21538   | 26155  | 1468         | 2072                           | 5264                      | 24429 | 92         | 728  | 25249       |
| 21         | 4950  | 21600   | 26549  | 1512         | 2094                           | 5313                      | 24842 | 74         | 153  | 25069       |
| 22         | 4969  | 21463   | 26432  | 1502         | 2104                           | 4893                      | 25145 | 106        | 768  | 26019       |
| 23         | 5023  | 21513   | 26537  | 1439         | 2120                           | 5042                      | 25053 | 57         | 153  | 25263       |
| 24         | 4724  | 21355   | 26079  | 1459         | 2133                           | 4709                      | 24962 | 22         | 153  | 25137       |

**Hourly Load Generation Data of ER On Regional Lean Day During The Month of JULY'2021 (31-7-2021)**

( All Figures in MW )

| Generation |       |         | Import | Net          | Net                            | Demand                    | Freq. | Load       |      |             |
|------------|-------|---------|--------|--------------|--------------------------------|---------------------------|-------|------------|------|-------------|
| Hrs.       | Hydro | Thermal | Total  | from Captive | Import From<br>Hydro of Bhutan | Export<br>to other region | Met   | Correction | Shed | Requirement |
| 1          | 2958  | 17588   | 20546  | 1111         | 1909                           | 5109                      | 18458 | -2         | 0    | 18458       |
| 2          | 3022  | 16411   | 19433  | 1125         | 1913                           | 4384                      | 18087 | -6         | 0    | 18087       |
| 3          | 2822  | 15836   | 18658  | 1071         | 1920                           | 3946                      | 17704 | -17        | 0    | 17704       |
| 4          | 2785  | 15666   | 18451  | 1096         | 1926                           | 4118                      | 17354 | -9         | 0    | 17354       |
| 5          | 2837  | 15139   | 17976  | 1106         | 1916                           | 4405                      | 16593 | 7          | 0    | 16600       |
| 6          | 2919  | 14925   | 17845  | 1128         | 1900                           | 4776                      | 16096 | -7         | 0    | 16096       |
| 7          | 3146  | 15003   | 18149  | 1096         | 1867                           | 5578                      | 15535 | 5          | 0    | 15540       |
| 8          | 3450  | 15113   | 18563  | 1107         | 1862                           | 5801                      | 15731 | 52         | 2    | 15785       |
| 9          | 3525  | 15413   | 18937  | 1055         | 1865                           | 6044                      | 15814 | 3          | 3    | 15819       |
| 10         | 3622  | 15988   | 19610  | 1018         | 1879                           | 6678                      | 15829 | -14        | 1    | 15831       |
| 11         | 3576  | 15346   | 18922  | 971          | 1861                           | 5757                      | 15997 | -15        | 1    | 15998       |
| 12         | 3671  | 15188   | 18859  | 961          | 1828                           | 5130                      | 16518 | -12        | 2    | 16520       |
| 13         | 3616  | 15202   | 18817  | 969          | 1702                           | 4731                      | 16757 | -4         | 0    | 16757       |
| 14         | 3479  | 15027   | 18506  | 1002         | 1712                           | 4667                      | 16553 | -3         | 4    | 16554       |
| 15         | 3521  | 15198   | 18720  | 857          | 1710                           | 4473                      | 16813 | 6          | 4    | 16823       |
| 16         | 3530  | 15505   | 19035  | 943          | 1716                           | 4641                      | 17052 | 19         | 4    | 17075       |
| 17         | 3608  | 15507   | 19115  | 1021         | 1783                           | 4983                      | 16935 | 40         | 4    | 16979       |
| 18         | 3505  | 15589   | 19094  | 1119         | 1892                           | 5187                      | 16919 | 16         | 4    | 16939       |
| 19         | 4421  | 16929   | 21349  | 1144         | 1866                           | 4915                      | 19445 | 3          | 4    | 19453       |
| 20         | 5013  | 18786   | 23799  | 1162         | 1879                           | 5503                      | 21336 | 65         | 4    | 21406       |
| 21         | 4611  | 19187   | 23798  | 1111         | 1899                           | 5506                      | 21302 | 43         | 4    | 21349       |
| 22         | 4341  | 19365   | 23706  | 1115         | 1927                           | 5218                      | 21530 | -15        | 4    | 21534       |
| 23         | 4867  | 19144   | 24012  | 1079         | 1947                           | 5434                      | 21603 | -11        | 4    | 21607       |
| 24         | 4302  | 19026   | 23328  | 1066         | 1956                           | 5722                      | 20628 | 0          | 4    | 20632       |

NOTIFIED POWER CUTS/RESTRICTIONS ON INDUSTRIES & POWER SUPPLY TO AGRICULTURE SECTOR

FOR THE MONTH OF JULY'2021

**POWER CUT / RESTRICTIONS**

|                    |   |
|--------------------|---|
| <b>BSPHCL</b>      | NO NOTIFIED CUTS/RESTRICTIONS<br>However there was loadshedding of 20.35 MU |
| <b>JUVNL</b>       | NO NOTIFIED CUTS/RESTRICTIONS<br>However there was loadshedding of 24.33 MU |
| <b>DVC</b>         | NO NOTIFIED CUTS/RESTRICTIONS.<br>However there was loadshedding of 0.00 MU |
| <b>ODISHA</b>      | NO NOTIFIED CUTS/RESTRICTIONS<br>However there was loadshedding of 0.00 MU  |
| <b>WEST BENGAL</b> | NO NOTIFIED CUTS/RESTRICTIONS.<br>However there was loadshedding of 3.39 MU |

**POWER SUPPLY TO AGRICULTURAL SECTOR**

| <b>STATE</b>       | <b>HOURS OF SUPPLY ( AVERAGE / DAY )</b> |
|--------------------|--|
| <b>BIHAR</b>       | 18 HRS.00 MINS.                          |
| <b>JHARKHAND</b>   | ABOUT 20 to 22 HRS.                      |
| <b>ODISHA</b>      | 24 HRS.                                  |
| <b>WEST BENGAL</b> | 23 HRS.                                  |

FREQUENCY DETAILS FOR THE MONTH OF Jul-21

| D<br>A<br>T<br>E | H O U R S |       |       |       |       |       |       |       |        |       | INST. FREQ. |          |       |          | 15 MIN. INTEGRATED |      |       |      |
|------------------|-----------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------------|----------|-------|----------|--------------------|------|-------|------|
|                  | 00        | 05    | 10    | 17    | 22    | 00    | <49.9 | 49.9  | >50.05 | 49.9  | MAX         | HRS.     | MIN   | HRS.     | MAX                | HRS. | MIN   | HRS. |
|                  | TO        | TO    | TO    | TO    | TO    | TO    |       | TO    |        | TO    | HZ          |          | HZ    |          | HZ                 |      | HZ    |      |
| 01-Jul           | 49.99     | 49.98 | 50.03 | 50.02 | 49.99 | 50.01 | 2.50  | 75.80 | 21.80  | 75.80 | 50.14       | 13:24:50 | 49.84 | 09:08:20 | 50.10              | 0:00 | 49.88 | 0:00 |
| 02-Jul           | 50.02     | 49.99 | 50.02 | 50.04 | 50.01 | 50.02 | 2.10  | 70.80 | 27.10  | 70.80 | 50.24       | 17:02:30 | 49.80 | 14:12:50 | 50.17              | 0:00 | 49.89 | 0:00 |
| 03-Jul           | 50.01     | 49.97 | 50.00 | 50.00 | 49.94 | 49.99 | 11.30 | 63.40 | 25.30  | 63.40 | 50.24       | 18:02:50 | 49.71 | 04:09:20 | 50.16              | 0:00 | 49.75 | 0:00 |
| 04-Jul           | 49.99     | 50.02 | 49.98 | 49.97 | 50.00 | 49.99 | 7.30  | 68.40 | 24.30  | 68.40 | 50.21       | 10:00:50 | 49.73 | 11:56:30 | 50.14              | 0:00 | 49.78 | 0:00 |
| 05-Jul           | 50.01     | 49.98 | 49.99 | 49.94 | 49.92 | 49.97 | 12.20 | 76.00 | 11.80  | 76.00 | 50.11       | 00:00:10 | 49.73 | 19:20:10 | 50.07              | 0:00 | 49.79 | 0:00 |
| 06-Jul           | 49.99     | 50.00 | 49.95 | 49.87 | 49.88 | 49.94 | 22.00 | 69.90 | 8.10   | 69.90 | 50.12       | 05:02:20 | 49.51 | 22:12:30 | 50.06              | 0:00 | 49.71 | 0:00 |
| 07-Jul           | 49.98     | 50.00 | 49.97 | 50.02 | 50.00 | 49.99 | 6.50  | 79.10 | 14.40  | 79.10 | 50.19       | 18:02:50 | 49.79 | 12:21:40 | 50.11              | 0:00 | 49.86 | 0:00 |
| 08-Jul           | 50.03     | 50.05 | 49.98 | 50.01 | 50.02 | 50.01 | 0.70  | 70.50 | 28.90  | 70.50 | 50.17       | 08:49:10 | 49.87 | 13:31:40 | 50.13              | 0:00 | 49.92 | 0:00 |
| 09-Jul           | 50.01     | 49.97 | 50.01 | 50.00 | 50.01 | 50.00 | 4.00  | 75.80 | 20.10  | 75.80 | 50.17       | 10:02:10 | 49.80 | 05:52:00 | 50.12              | 0:00 | 49.85 | 0:00 |
| 10-Jul           | 49.99     | 50.01 | 50.00 | 49.98 | 49.91 | 49.99 | 5.40  | 79.40 | 15.20  | 79.40 | 50.14       | 08:03:00 | 49.79 | 23:30:50 | 50.09              | 0:00 | 49.85 | 0:00 |
| 11-Jul           | 49.93     | 50.03 | 49.98 | 49.99 | 49.99 | 49.98 | 9.00  | 71.10 | 19.90  | 71.10 | 50.16       | 17:02:00 | 49.75 | 14:22:40 | 50.12              | 0:00 | 49.83 | 0:00 |
| 12-Jul           | 50.04     | 50.02 | 50.03 | 49.99 | 50.01 | 50.02 | 3.80  | 59.40 | 36.70  | 59.40 | 50.22       | 13:31:50 | 49.71 | 19:22:30 | 50.16              | 0:00 | 49.82 | 0:00 |
| 13-Jul           | 50.00     | 50.04 | 50.01 | 50.00 | 50.01 | 50.01 | 0.50  | 73.70 | 25.90  | 73.70 | 50.17       | 10:02:10 | 49.86 | 17:48:30 | 50.11              | 0:00 | 49.94 | 0:00 |
| 14-Jul           | 50.02     | 50.01 | 50.03 | 50.01 | 50.01 | 50.01 | 1.30  | 72.40 | 26.30  | 72.40 | 50.24       | 13:18:30 | 49.83 | 15:42:40 | 50.21              | 0:00 | 49.93 | 0:00 |
| 15-Jul           | 49.99     | 49.98 | 50.01 | 49.98 | 49.95 | 49.99 | 4.70  | 80.20 | 15.10  | 80.20 | 50.13       | 16:02:40 | 49.69 | 06:14:10 | 50.08              | 0:00 | 49.89 | 0:00 |
| 16-Jul           | 50.00     | 50.00 | 49.98 | 49.92 | 49.96 | 49.97 | 11.40 | 79.50 | 9.00   | 79.50 | 50.14       | 08:02:20 | 49.73 | 19:40:20 | 50.07              | 0:00 | 49.78 | 0:00 |
| 17-Jul           | 50.02     | 50.04 | 49.99 | 50.01 | 50.03 | 50.01 | 2.70  | 67.80 | 29.50  | 67.80 | 50.18       | 16:18:10 | 49.84 | 19:19:30 | 50.10              | 0:00 | 49.87 | 0:00 |
| 18-Jul           | 50.02     | 50.04 | 50.01 | 50.01 | 50.06 | 50.02 | 0.50  | 65.30 | 34.20  | 65.30 | 50.17       | 23:59:00 | 49.79 | 11:06:40 | 50.12              | 0:00 | 49.90 | 0:00 |
| 19-Jul           | 50.05     | 50.02 | 50.00 | 49.98 | 50.02 | 50.01 | 4.30  | 63.50 | 32.20  | 63.50 | 50.20       | 00:03:50 | 49.86 | 18:51:50 | 50.13              | 0:00 | 49.85 | 0:00 |
| 20-Jul           | 50.01     | 50.01 | 50.02 | 50.01 | 50.01 | 50.01 | 0.90  | 75.00 | 24.20  | 75.00 | 50.26       | 13:07:30 | 49.80 | 14:16:30 | 50.21              | 0:00 | 49.93 | 0:00 |
| 21-Jul           | 50.03     | 49.99 | 50.00 | 49.99 | 50.03 | 50.00 | 1.50  | 78.60 | 19.90  | 78.60 | 50.14       | 13:05:10 | 49.87 | 09:26:00 | 50.09              | 0:00 | 49.90 | 0:00 |
| 22-Jul           | 50.02     | 50.00 | 50.01 | 49.98 | 50.00 | 50.00 | 0.90  | 79.20 | 19.90  | 79.20 | 50.14       | 13:02:40 | 49.69 | 15:45:30 | 50.08              | 0:00 | 49.93 | 0:00 |
| 23-Jul           | 49.98     | 49.96 | 50.01 | 49.94 | 49.95 | 49.97 | 11.80 | 76.70 | 11.50  | 76.70 | 50.12       | 06:01:30 | 49.69 | 20:29:30 | 50.08              | 0:00 | 49.78 | 0:00 |
| 24-Jul           | 49.95     | 49.98 | 49.98 | 49.93 | 49.97 | 49.96 | 14.00 | 80.10 | 5.90   | 80.10 | 50.12       | 15:02:20 | 49.75 | 19:27:50 | 50.06              | 0:00 | 49.80 | 0:00 |
| 25-Jul           | 49.97     | 50.02 | 50.03 | 49.97 | 50.01 | 50.00 | 1.90  | 78.90 | 19.20  | 78.90 | 50.20       | 08:01:20 | 49.74 | 19:47:20 | 50.10              | 0:00 | 49.86 | 0:00 |
| 26-Jul           | 50.00     | 49.97 | 50.00 | 49.96 | 49.98 | 49.99 | 6.50  | 78.40 | 15.10  | 78.40 | 50.12       | 10:35:10 | 49.78 | 08:44:20 | 50.07              | 0:00 | 49.86 | 0:00 |
| 27-Jul           | 49.98     | 49.99 | 49.98 | 49.99 | 50.01 | 49.99 | 4.60  | 83.70 | 11.70  | 83.70 | 50.15       | 08:00:40 | 49.77 | 14:52:30 | 50.09              | 0:00 | 49.84 | 0:00 |
| 28-Jul           | 49.99     | 49.98 | 49.99 | 50.00 | 49.98 | 49.99 | 3.20  | 86.45 | 10.35  | 86.45 | 50.13       | 13:44:10 | 49.83 | 16:42:00 | 50.10              | 0:00 | 49.87 | 0:00 |
| 29-Jul           | 50.02     | 50.00 | 50.01 | 49.99 | 50.02 | 50.00 | 2.75  | 81.85 | 15.40  | 81.85 | 50.17       | 06:02:50 | 49.82 | 17:14:10 | 50.08              | 0:00 | 49.90 | 0:00 |
| 30-Jul           | 50.00     | 50.00 | 50.02 | 49.98 | 50.00 | 50.00 | 0.40  | 84.40 | 15.20  | 84.40 | 50.23       | 13:03:20 | 49.87 | 14:25:40 | 50.17              | 0:00 | 49.94 | 0:00 |
| 31-Jul           | 50.00     | 50.01 | 49.99 | 50.02 | 50.02 | 50.00 | 5.30  | 81.20 | 13.50  | 81.20 | 50.16       | 12:03:00 | 49.74 | 19:47:00 | 50.10              | 0:00 | 49.82 | 0:00 |
| MAX              | 50.05     | 50.05 | 50.03 | 50.04 | 50.06 | 50.02 | 22.00 | 86.45 | 36.70  | 86.45 | 50.26       |          | 49.87 |          | 50.21              |      | 49.94 |      |
| MIN              | 49.93     | 49.96 | 49.95 | 49.87 | 49.88 | 49.94 | 0.40  | 59.40 | 5.90   | 59.40 | 50.11       |          | 49.51 |          | 50.06              |      | 49.71 |      |
| AVG              | 50.00     | 50.00 | 50.00 | 49.98 | 49.99 | 50.00 | 5.35  | 75.05 | 19.60  | 75.05 | 50.17       |          | 49.78 |          | 50.11              |      | 49.86 |      |

SUMMARY:

Avg. Frequency : **50.0 Hz.**

Instantaneous Frequency :

Maximum Frequency : 50.26 Hz at 13:07 Hrs.

Minimum Frequency : 49.51 Hz at 22:12 Hrs.

15 Minutes Integrated Frequency :

Maximum Frequency : 50.21 Hz On 00/01/00 at 00:00 Hrs.

Minimum Frequency : 49.71 Hz On 00/01/00 at 00:00 Hrs

| Frequency Distribution in % of Time |       |            |        |
|-------------------------------------|-------|------------|--------|
| Hz                                  | <49.9 | 49.9-50.05 | >50.05 |
| % of Time                           | 5.35  | 75.05      | 19.60  |

## VOLTAGE ANALYSIS

## MAXIMUM &amp; MINIMUM VOLTAGES RECORDED AT IMPORTANT 400 kV S/S IN THE MONTH OF JULY'2021

( All figs. in kV)

| PGCIL | BINAGURI |     | MAITHON |     | JEERAT |     | BIHARSHARIFF |     |
|-------|----------|-----|---------|-----|--------|-----|--------------|-----|
|       | MAX      | MIN | MAX     | MIN | MAX    | MIN | MAX          | MIN |
|       | 418      | 390 | 417     | 396 | 420    | 394 | 414          | 388 |

| PGCIL | MUZAFFARPUR |     | JAMSHEDPUR |     | ROURKELA |     | JEYPORE |     |
|-------|-------------|-----|------------|-----|----------|-----|---------|-----|
|       | MAX         | MIN | MAX        | MIN | MAX      | MIN | MAX     | MIN |
|       | 419         | 387 | 411        | 394 | 407      | 395 | 418     | 400 |

## ANNEXURE-III

## DETAILS OF CONSTITUENT WISE LOAD SHEDDING IMPLEMENTED THROUGH UFRs IN THE EASTERN REGION

Expected Load Relief through UFRs by ER Constituent:

(All Fig. are in MW )

| STATES/<br>UTILITIES        | STAGE-I<br>(49.4 Hz)<br>(Inst.) | STAGE-II<br>(49.2 Hz)<br>(Inst.) | STAGE-III<br>(49.0 Hz)<br>(Inst.) | STAGE-IV<br>48.8 Hz<br>(Inst.) | Total Load Relief<br>by Control<br>Area |
|-----------------------------|---------------------------------|----------------------------------|-----------------------------------|--------------------------------|---|
| BIHAR                       | 98                              | 99                               | 99                                | 101                            | 397                                     |
| JHARKHAND                   | 61                              | 62                               | 61                                | 62                             | 246                                     |
| DVC                         | 134                             | 135.5                            | 136                               | 137                            | 542.5                                   |
| ODISHA                      | 181.5                           | 183.5                            | 184                               | 186                            | 735                                     |
| WEST BENGAL<br>(incl. CESC) | 345.5                           | 350                              | 350                               | 354                            | 1399.5                                  |
| <b>TOTAL</b>                | <b>820</b>                      | <b>830</b>                       | <b>830</b>                        | <b>840</b>                     | <b>3320</b>                             |

As decided in the National Power Committee (NPC) meeting held on 16.07.2013 and subsequently in the 89th OCC meeting of ERPC to implement the scheme w.e.f. 30.09.2013. Revised UFR Scheme (Stg-I 49.4Hz. Stg-II 49.2 Hz Stg-III 49.0 Hz and Stg-IV 48.8 Hz) implemented from March/ April-2020



A.

**WATER LEVEL OF MAJOR HYDEL RESERVOIRS OF THE REGION IN  
Jul-21**

(All figs.in mtrs.)

| Name of the Reservoirs | FRL | MDDL | As on last day of the |            | As on first day of this month & date |          |
|------------------------|-----|------|-----------------------|------------|--------------------------------------|----------|
|                        |     |      | (31-07-21)            | (31-07-20) |                                      |          |
| Hirakud                | 192 | 180  | 184.47                | 184.58     | 184.74                               | 01.07.21 |
| Balimela               | 462 | 439  | 446.78                | 444.89     | 445.92                               | 01.07.21 |
| Rengali                | 123 | 109  | 116.97                | 113.66     | 115.28                               | 01.07.21 |
| Upperkolab             | 858 | 844  | 846.06                | 847.73     | 846.66                               | 01.07.21 |
| Indravati              | 642 | 625  | 630.10                | 630.80     | 630.07                               | 01.07.21 |
| Subernrekha            | 590 | 580  | 589.18                | 587.14     | 585.52                               | 01.07.21 |

B.

**CPP/IPP IMPORT by Eastern Region Constituents during Jul-21**

(All figs. are in MU)

| System       | Tata Power | Crescent Power | JSPL, Angul | Sterlite | Jindal | NALCO | TISCO | Others | Total   |
|--------------|------------|----------------|-------------|----------|--------|-------|-------|--------|---------|
| JUVNL        | 0          | 0              | 0           | 0        | 0      | 0     | 0     | 0      | 36.99   |
| West Bengal  | 56.39      | 24.27          | 0           | 0        | 0      | 0     | 0     | 64.21  | 144.87  |
| ODISHA       | 0          | 0              | 20.61       | 447.63   | 4.32   | 0.00  | 0     | 426.72 | 899.28  |
| DVC          | 0          | 0              | 0           | 0        | 0      | 0     | 12.77 | 0      | 12.77   |
| <b>TOTAL</b> | 56.39      | 24.27          | 20.61       | 447.63   | 4.32   | 0.00  | 12.77 | 490.92 | 1093.90 |

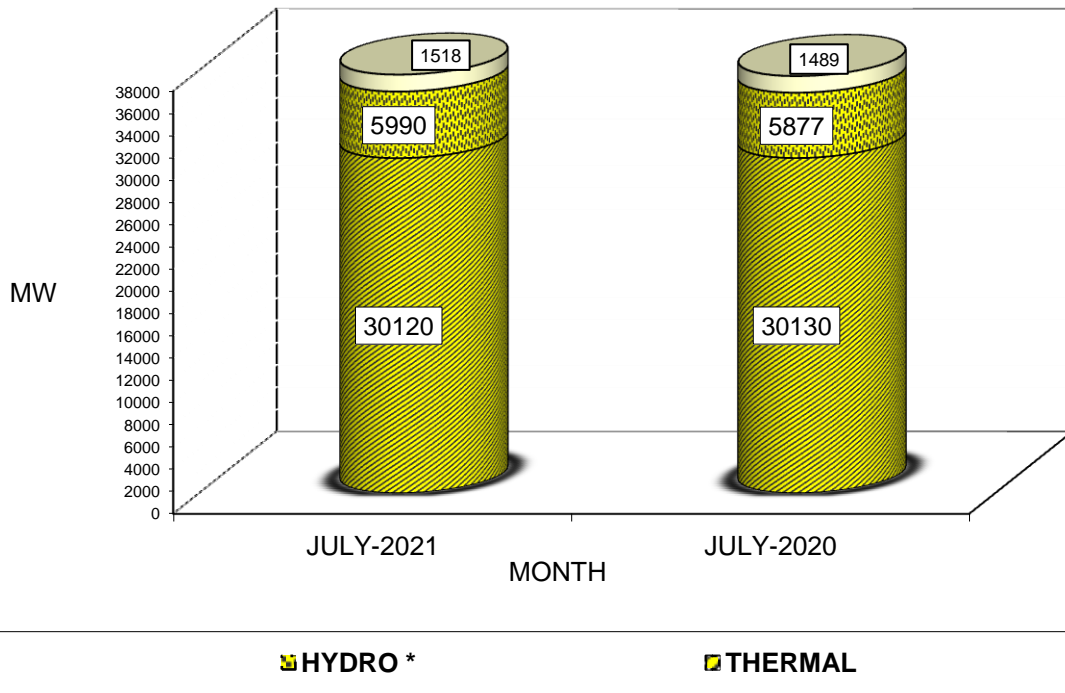
C.

**Distribution of Schedule Supply among Key Customers by IPPs during Jul-21**

(All figs. are in MU)

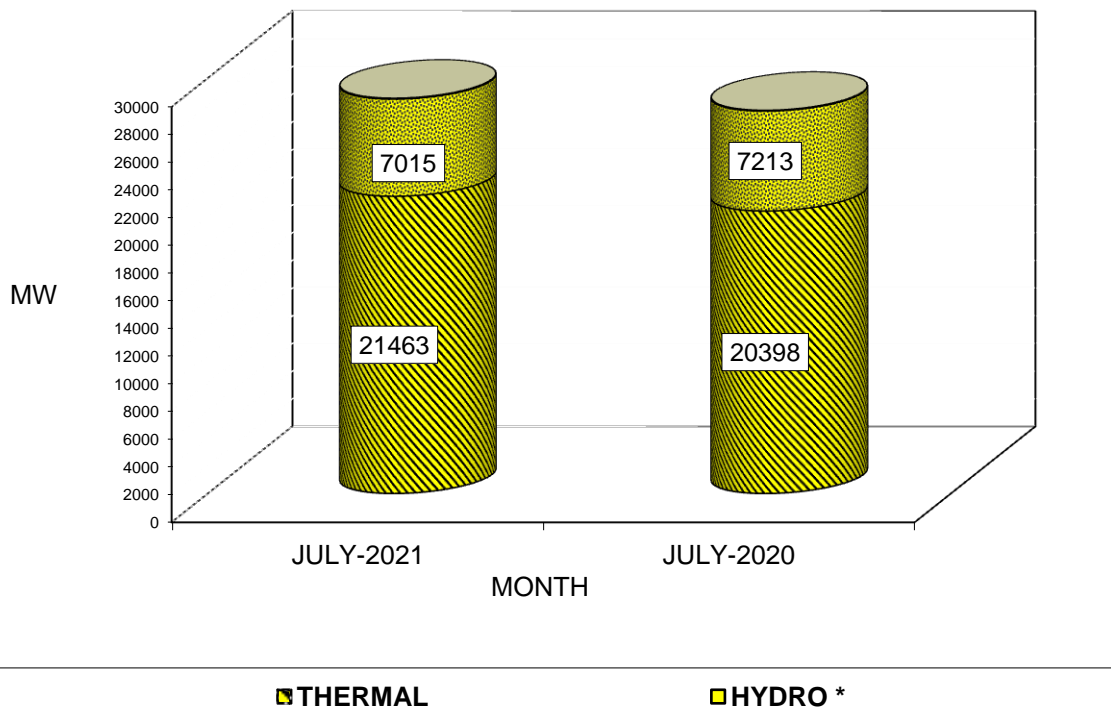
| IPP          | TPDDL  | WBSEDCL/<br>WBPDCCL | DVC   | Sale at<br>IEX/NPCL | ODISHA | JSEB | CTU/Others | Total<br>(Excl. Tr. Loss) |
|--------------|--------|---------------------|-------|---------------------|--------|------|------------|---------------------------|
| MPL          | 184.78 | 192.76              | 87.15 | 0.00                | 0      | 0    | 213.44     | 678.13                    |
| Sterlite     | 0      | 0                   | 0     | 0                   | 0.00   | 0    | 0.00       | 0.00                      |
| APNRL        | 0      | 0.00                | 0     | 0.00                | 0.00   | 0.00 | 0.00       | 0.00                      |
| <b>Total</b> | 184.78 | 192.76              | 87.15 | 0.00                | 0.00   | 0.00 | 213.44     | 678.13                    |

**EFFECTIVE CAPACITY OF EASTERN REGIONAL GRID**



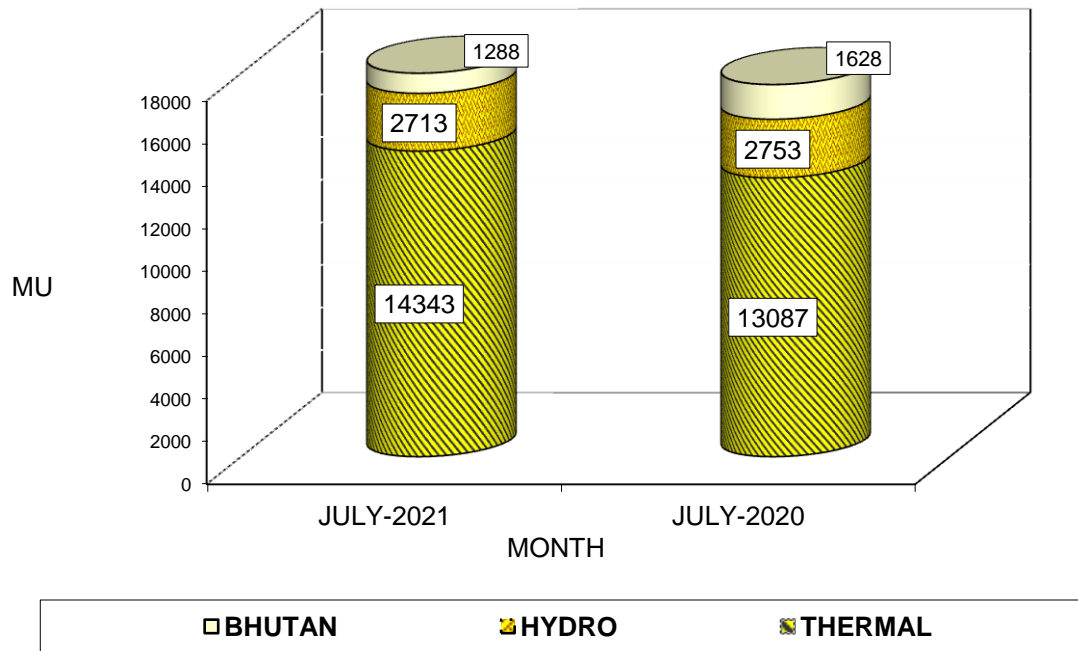
\*Excludes contribution from HEPs of Bhutan

**GENERATION CORRESPONDING TO PEAK DEMAND MET**

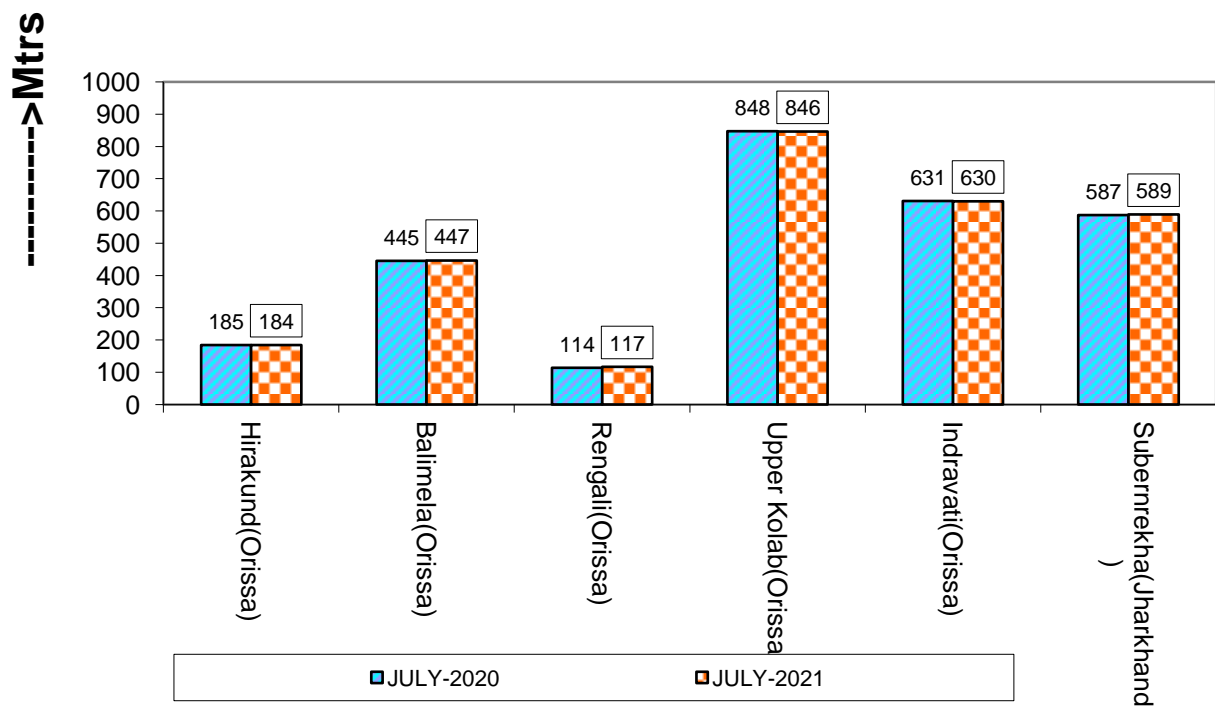


\*Includes contribution from HEP of Bhutan

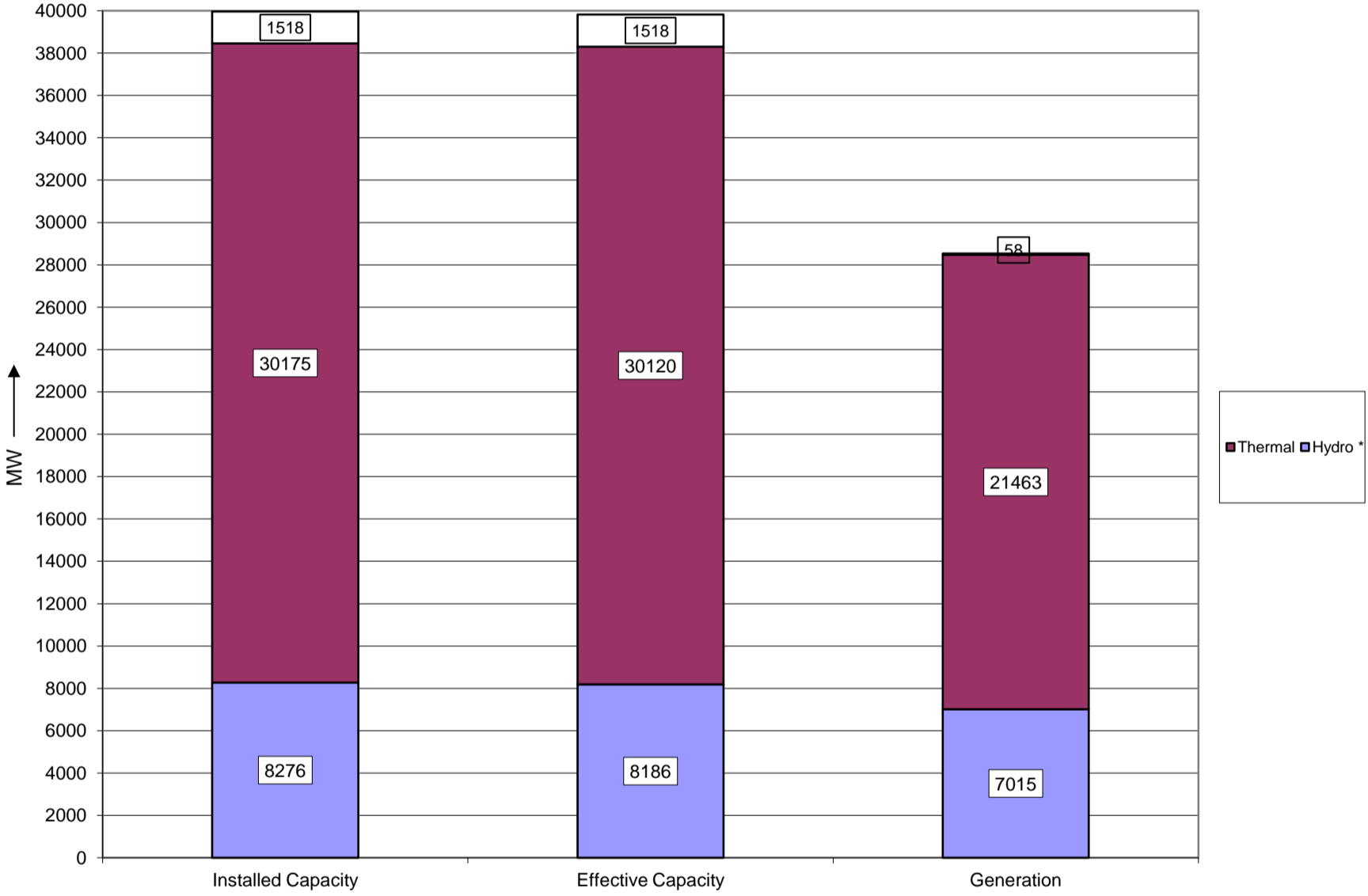
**NET ENERGY GENERATION**



**RESERVOIR LEVEL OF HPS OF ER (RECORDED ON LAST DAY OF MONTH)**

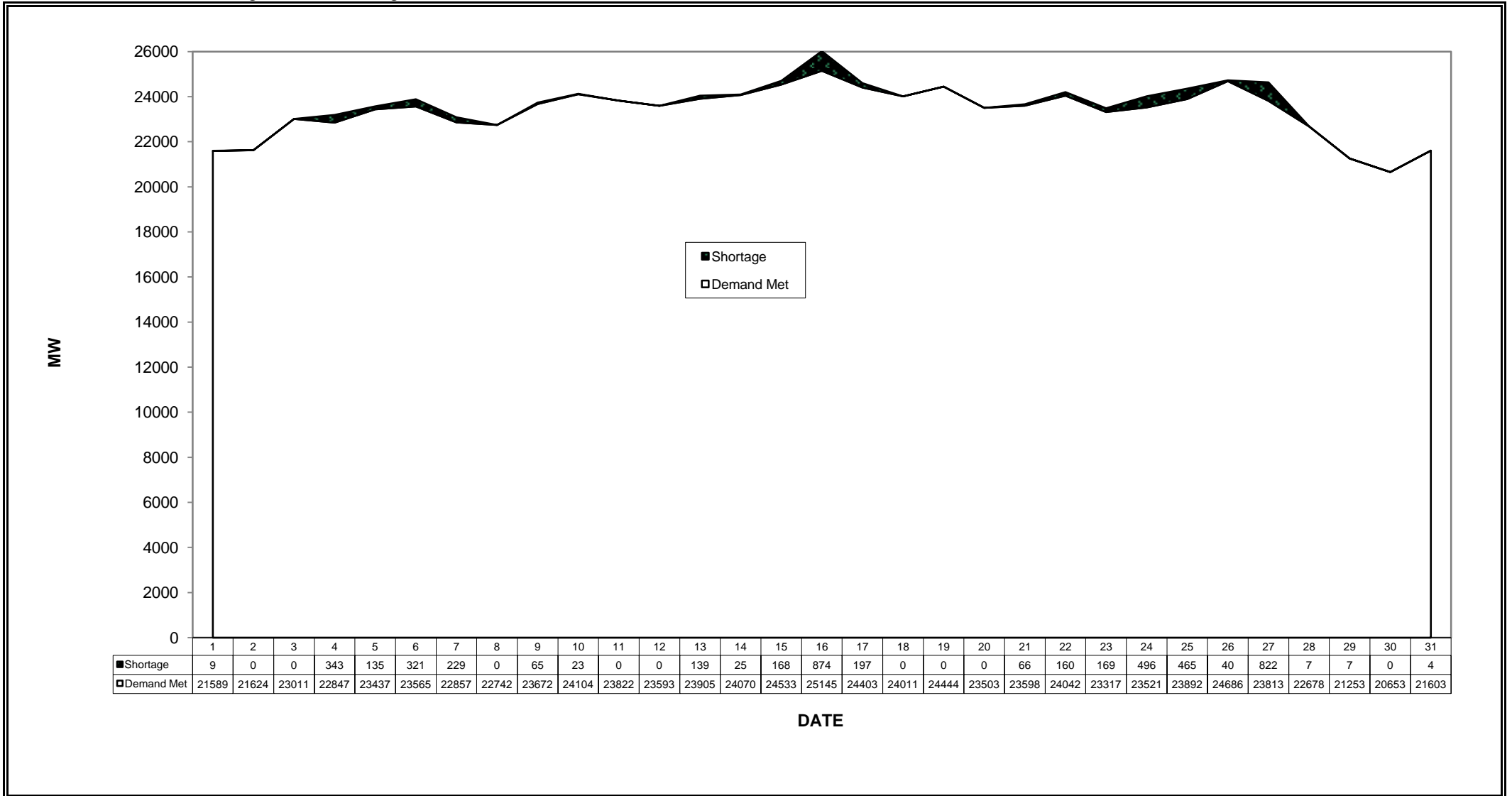


**Capacity / Actual Generation Pattern of ER on Peak Day (16-7-2021) at 22.00 hrs.**

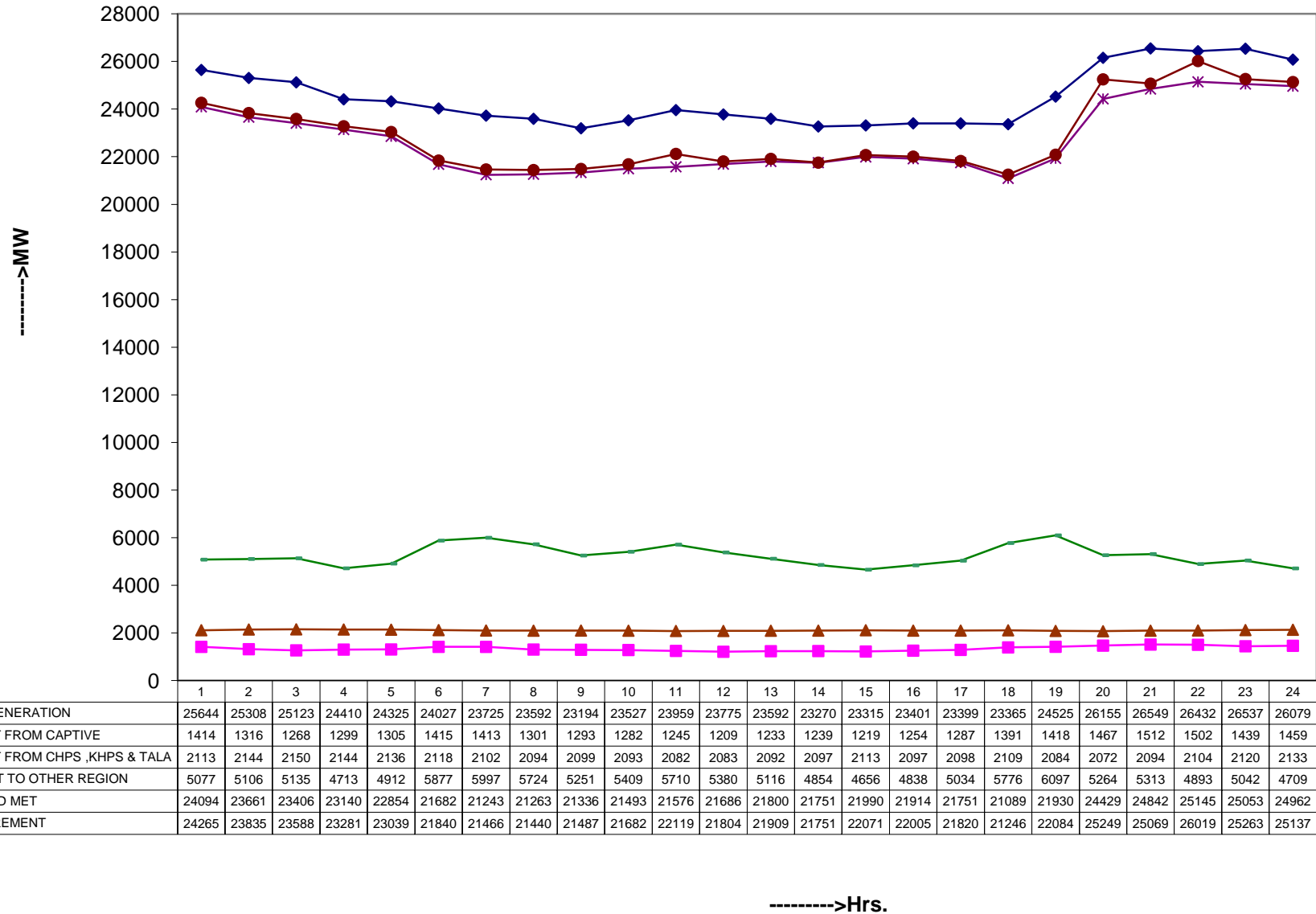


(\*)--Includes contribution from HEP of Bhutan (Chukka, Kurichhu & Tala)

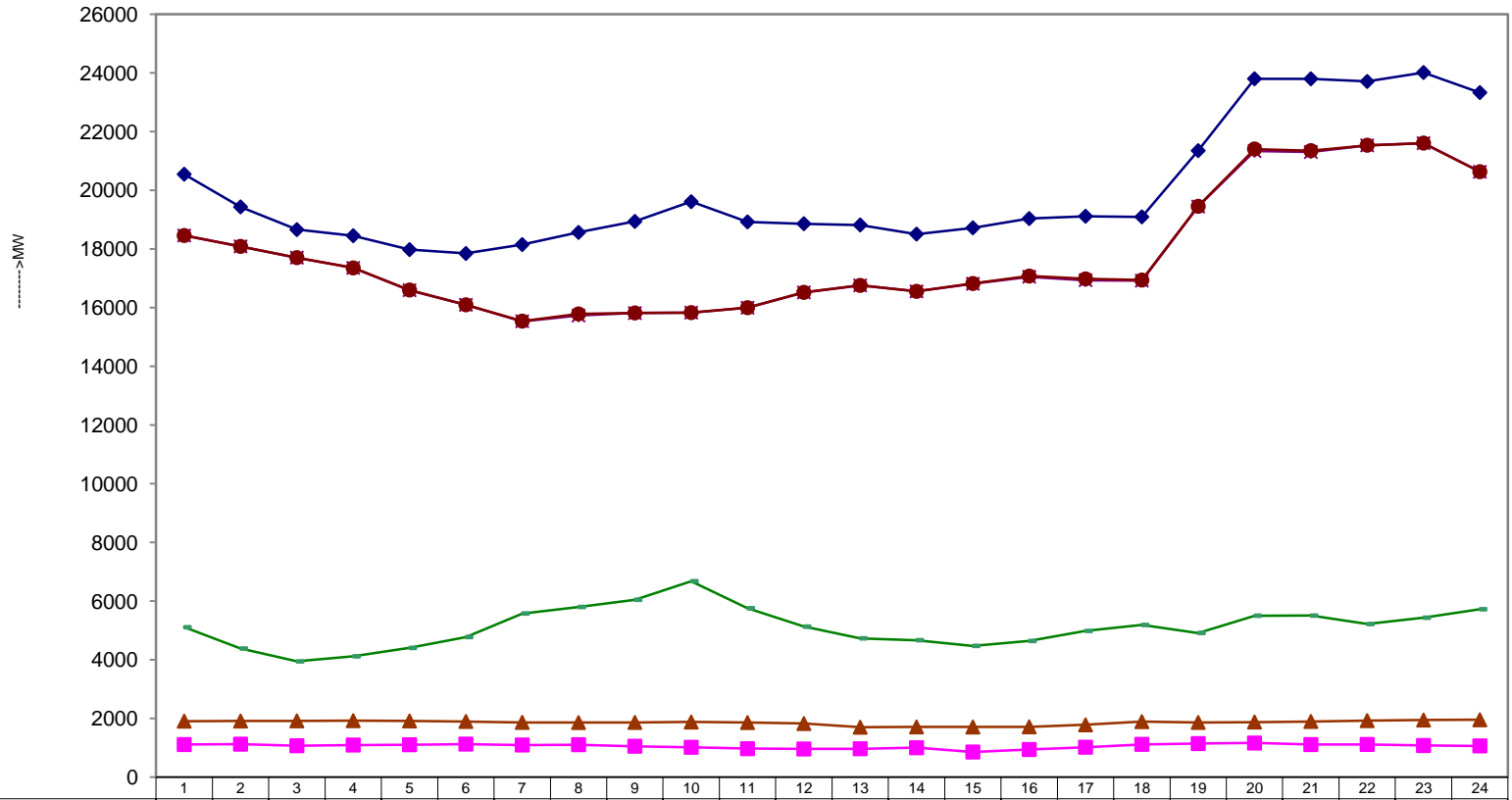
Peak Demand Met / Shortage of Eastern Region For The Month Of JULY'2021



Hourly Load Generation Data OF ER On Regional Peak Day During The Month of JULY'2021 (16-7-2021)



Hourly Load Generation Data of ER On Regional Lean Day During The Month of JULY'2021 (31-7-2021)

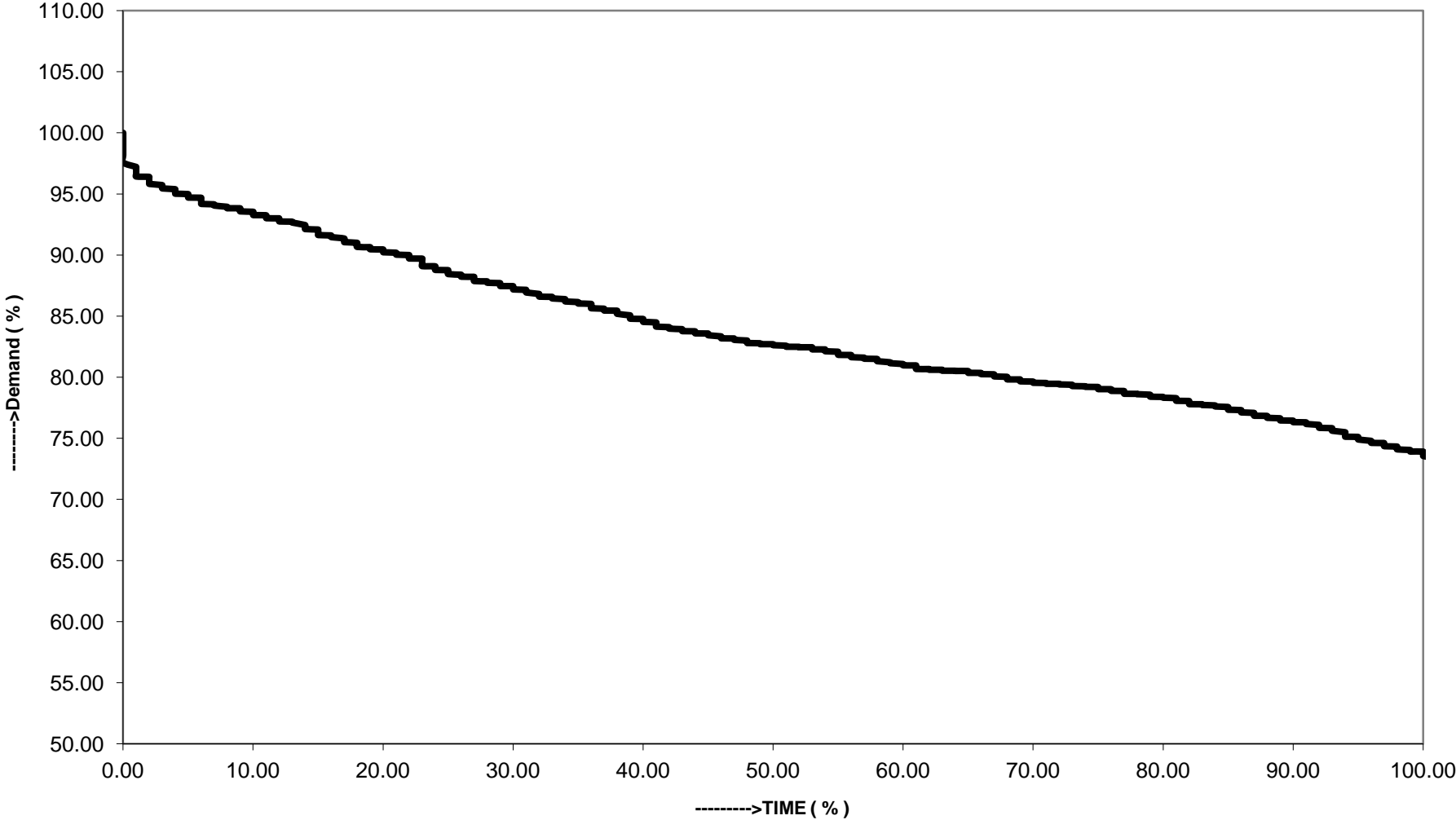


|                              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OWN GENERATION               | 20546 | 19433 | 18658 | 18451 | 17976 | 17845 | 18149 | 18563 | 18937 | 19610 | 18922 | 18859 | 18817 | 18506 | 18720 | 19035 | 19115 | 19094 | 21349 | 23799 | 23798 | 23706 | 24012 | 23328 |
| IMPORT FROM CAPTIVE          | 1111  | 1125  | 1071  | 1096  | 1106  | 1128  | 1096  | 1107  | 1055  | 1018  | 971   | 961   | 969   | 1002  | 857   | 943   | 1021  | 1119  | 1144  | 1162  | 1111  | 1115  | 1079  | 1066  |
| IMPORT FROM CHPS, KHPS, TALA | 1909  | 1913  | 1920  | 1926  | 1916  | 1900  | 1867  | 1862  | 1865  | 1879  | 1861  | 1828  | 1702  | 1712  | 1710  | 1716  | 1783  | 1892  | 1866  | 1879  | 1899  | 1927  | 1947  | 1956  |
| EXPORT TO OTHER REGION       | 5109  | 4384  | 3946  | 4118  | 4405  | 4776  | 5578  | 5801  | 6044  | 6678  | 5757  | 5130  | 4731  | 4667  | 4473  | 4641  | 4983  | 5187  | 4915  | 5503  | 5506  | 5218  | 5434  | 5722  |
| DEMAND MET                   | 18458 | 18087 | 17704 | 17354 | 16593 | 16096 | 15535 | 15731 | 15814 | 15829 | 15997 | 16518 | 16757 | 16553 | 16813 | 17052 | 16935 | 16919 | 19445 | 21336 | 21302 | 21530 | 21603 | 20628 |
| REQUIREMENT                  | 18458 | 18087 | 17704 | 17354 | 16600 | 16096 | 15540 | 15785 | 15819 | 15831 | 15998 | 16520 | 16757 | 16554 | 16823 | 17075 | 16979 | 16939 | 19453 | 21406 | 21349 | 21534 | 21607 | 20632 |

----->Hrs.

Monthly Load Duration Curve of Eastern Region for JULY-2021

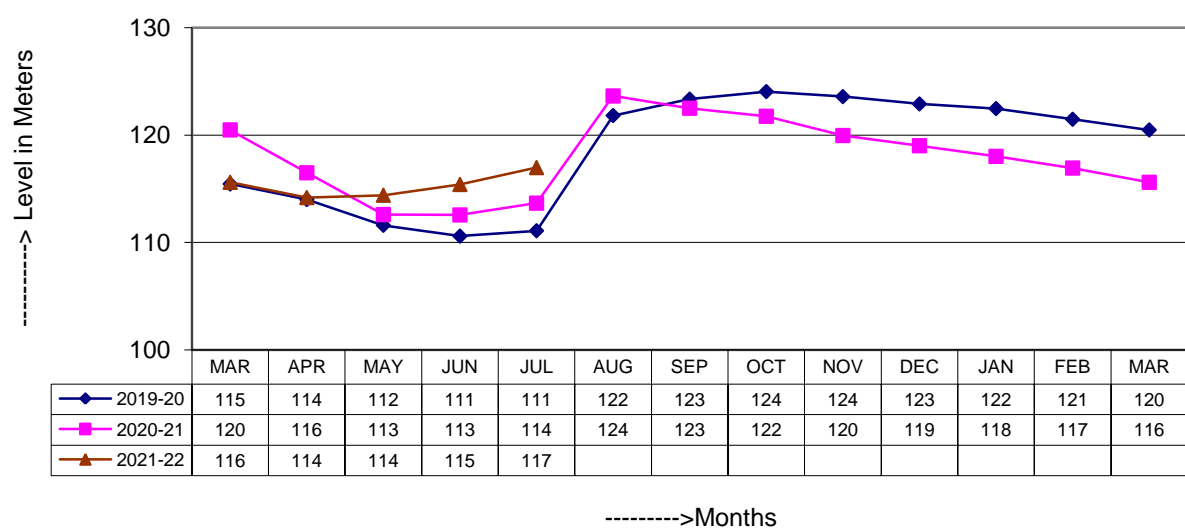
Maximum Demand met : 25145 MW  
Minimum Demand met: 15535 MW



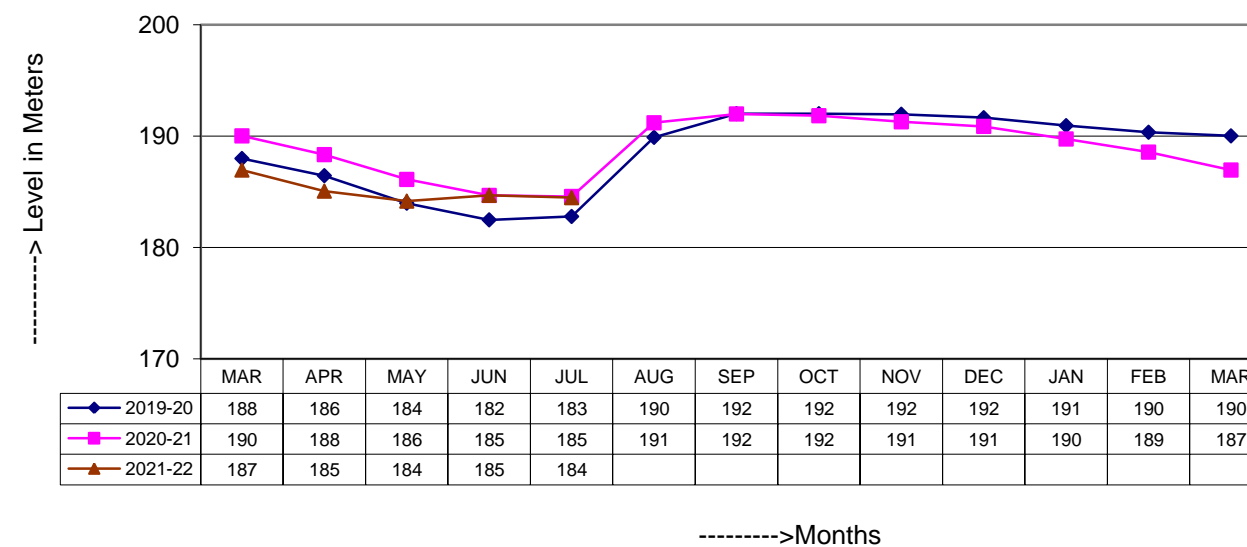


WATER LEVEL IN MAJOR RESERVOIRS ON LAST DATE OF MONTH

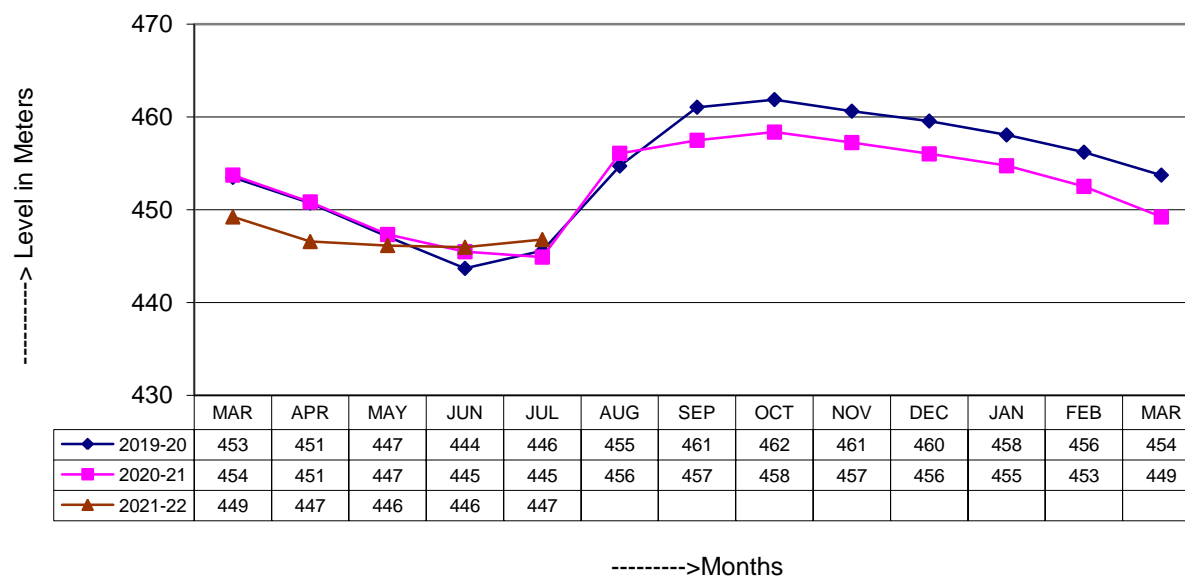
RENGALI RESERVOIR LEVEL



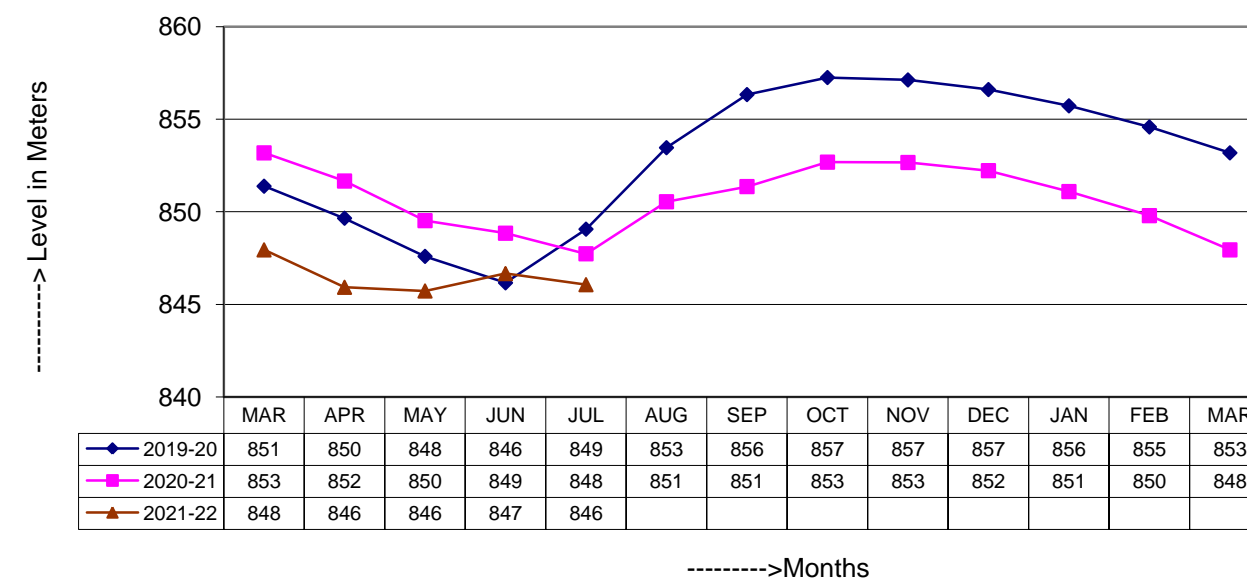
HIRAKUD RESERVOIR LEVEL



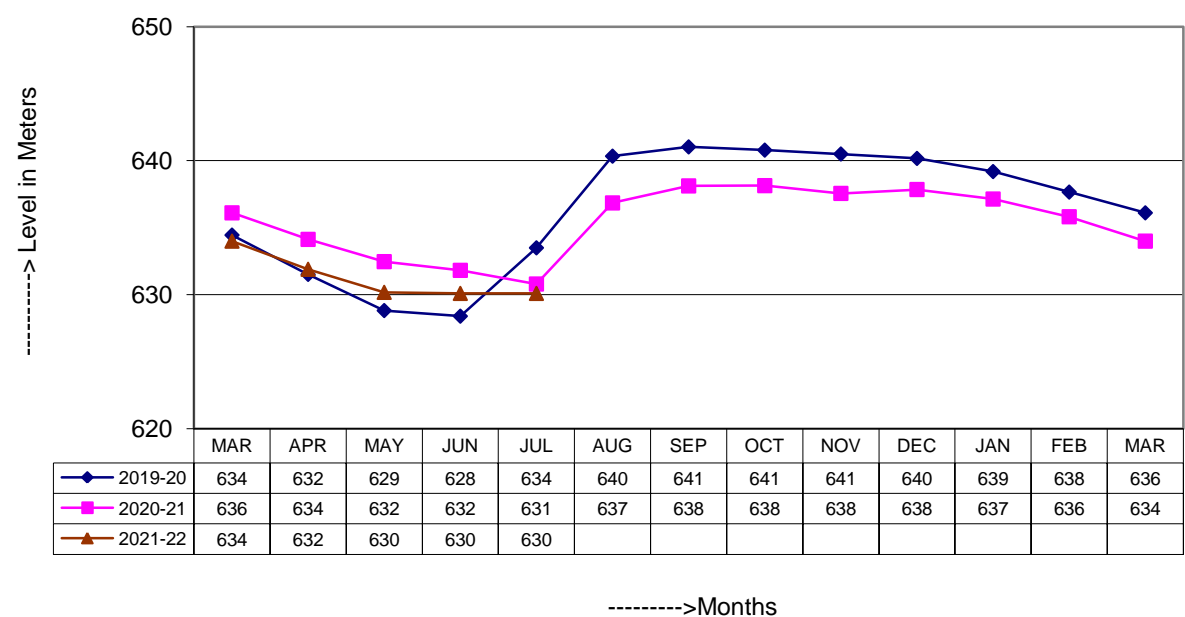
BALIMELA RESERVOIR LEVEL



UPPER KOLAB RESERVOIR LEVEL



INDRAVATI RESERVOIR LEVEL



SUBERNREKHA RESERVOIR LEVEL

