

## National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र GRID CONTROLLER OF INDIA LIMITED ग्रिड कंटोलर ऑफ इंडिया लिमिटेड

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Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 02<sup>nd</sup> August 2023

Τo,

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   Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
- कार्यकारी निदेशक, ऊ. क्षे. भा. प्रे. के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016
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- 3. कार्यकारी निदेशक, प .क्षे .भा .प्रे .के., एफ3-, एम आई डी सी क्षेत्र , अंधेरी, मुंबई –400093 Executive Director, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
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- 5. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के.,29 , रेस कोर्स क्रॉस रोड, बंगलुरु –560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 01.08.2023.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 01-अगस्त-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ की वेबसाइट पर उप्लब्ध है |

As per article 5.5.1 of the Indian Electricity Grid Code, the daily report pertaining power supply position of All India Power System for the date 01<sup>st</sup> August 2023, is available at the NLDC website.

धन्यवाद,

# ग्रिड कंट्रलर ऑफ इंडिया लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Date of Reporting: 02-Aug-2023

#### Report for previous day

A. Power Supply Position at All India and Regional level

|   | NR     | WR    | SR     | ER    | NER   | TOTAL  |
|---|--------|-------|--------|-------|-------|--------|
| Demand Met during Evening Peak hrs(MW) (at 20:00 hrs; from RLDCs) | 75526  | 53919 | 48089  | 24819 | 3393  | 205746 |
| Peak Shortage (MW)  | 175    | 0     | 0      | 0     | 26    | 201    |
| Energy Met (MU)   | 1684   | 1257  | 1104   | 584   | 70    | 4700   |
| Hydro Gen (MU)  | 445    | 73    | 76     | 133   | 32    | 759    |
| Wind Gen (MU)   | 50     | 253   | 283    | -     | -     | 587    |
| Solar Gen (MU)*   | 131.47 | 38.36 | 105.90 | 1.36  | 1.26  | 278    |
| Energy Shortage (MU)  | 0.66   | 0.00  | 0.00   | 0.39  | 0.60  | 1.65   |
| Maximum Demand Met During the Day (MW)<br>(From NLDC SCADA)       | 76438  | 56283 | 51185  | 28282 | 3392  | 206579 |
| Time Of Maximum Demand Met  | 22:30  | 19:33 | 10:29  | 00:01 | 19:03 | 19:53  |

B. Frequency Profile (%) Region All India FVI < 49.7 49.7 - 49.8 49.8 - 49.9 < 49.9 49.9 - 50.05 > 50.05 0.030 0.00 2.59 74.60 22.81 0.24

C. Power Supply Position in States

| I ower Supply I        | ostuori in puntes    | Max.Demand              | Shortage during        | Energy Met | Drawal           | OD(+)/UD(-) | Max OD | Energy        |
|------------------------|----------------------|-------------------------|------------------------|------------|------------------|-------------|--------|---------------|
| Region                 | States               | Met during the day (MW) | maximum<br>Demand (MW) | (MU)       | Schedule<br>(MU) | (MU)        | (MW)   | Shortage (MU) |
|                        | Punjab               | 15123                   | 0                      | 327.3      | 190.4            | -0.2        | 126    | 0.00          |
|                        | Haryana              | 11756                   | 0                      | 246.7      | 193.3            | -1.6        | 100    | 0.00          |
|                        | Rajasthan            | 12466                   | 0                      | 279.1      | 74.6             | -4.7        | 333    | 0.00          |
|                        | Delhi                | 6736                    | 0                      | 136.0      | 123.9            | -2.0        | 106    | 0.00          |
| NR                     | UP                   | 27299                   | 0                      | 546.0      | 267.5            | -1.4        | 352    | 0.12          |
|                        | Uttarakhand          | 2244                    | 0                      | 49.2       | 22.3             | 0.5         | 124    | 0.15          |
|                        | HP                   | 1710                    | 0                      | 36.4       | 0.6              | -0.3        | 50     | 0.00          |
|                        | J&K(UT) & Ladakh(UT) | 2518                    | 0                      | 52.6       | 27.6             | 0.4         | 229    | 0.39          |
|                        | Chandigarh           | 400                     | 0                      | 7.6        | 7.4              | 0.2         | 51     | 0.00          |
|                        | Railways_NR ISTS     | 157                     | 0                      | 3.2        | 3.5              | -0.3        | 10     | 0.00          |
|                        | Chhattisgarh         | 4841                    | 0                      | 108.7      | 52.8             | -1.8        | 224    | 0.00          |
|                        | Gujarat              | 15425                   | 0                      | 346.8      | 138.0            | -5.3        | 850    | 0.00          |
|                        | MP                   | 11527                   | 0                      | 248.8      | 125.0            | -4.1        | 337    | 0.00          |
| WR                     | Maharashtra          | 22067                   | 0                      | 480.1      | 166.7            | -6.4        | 662    | 0.00          |
|                        | Goa                  | 612                     | 0                      | 12.8       | 12.8             | -0.1        | 47     | 0.00          |
|                        | DNHDDPDCL            | 1258                    | 0                      | 29.5       | 29.5             | 0.0         | 38     | 0.00          |
|                        | AMNSIL               | 874                     | 0                      | 18.2       | 8.0              | 0.1         | 287    | 0.00          |
|                        | BALCO                | 519                     | 0                      | 12.4       | 12.5             | -0.1        | 29     | 0.00          |
|                        | Andhra Pradesh       | 9880                    | 0                      | 208.8      | 59.2             | -0.5        | 724    | 0.00          |
|                        | Telangana            | 10957                   | 0                      | 211.2      | 96.8             | -2.1        | 640    | 0.00          |
| $\mathbf{SR}$          | Karnataka            | 11054                   | 0                      | 201.4      | 50.8             | -3.3        | 397    | 0.00          |
|                        | Kerala               | 3990                    | 0                      | 80.7       | 61.4             | 1.7         | 248    | 0.00          |
|                        | Tamil Nadu           | 18252                   | 0                      | 391.9      | 164.9            | -2.8        | 459    | 0.00          |
|                        | Puducherry           | 481                     | 0                      | 10.5       | 10.1             | -0.3        | 33     | 0.00          |
|                        | Bihar                | 7178                    | 0                      | 148.3      | 144.4            | -2.4        | 302    | 0.39          |
|                        | DVC                  | 3390                    | 0                      | 74.5       | -35.5            | -0.2        | 297    | 0.00          |
|                        | Jharkhand            | 1559                    | 0                      | 36.9       | 31.8             | 0.3         | 105    | 0.00          |
| $\mathbf{E}\mathbf{R}$ | Odisha               | 5904                    | 0                      | 114.0      | 54.8             | -3.9        | 345    | 0.00          |
|                        | West Bengal          | 9887                    | 0                      | 209.2      | 88.5             | -4.5        | 287    | 0.00          |
|                        | Sikkim               | 83                      | 0                      | 1.3        | 1.2              | 0.1         | 34     | 0.00          |
|                        | Railways_ER ISTS     | 24                      | 0                      | 0.2        | 0.3              | -0.1        | 10     | 0.00          |
|                        | Arunachal Pradesh    | 170                     | 0                      | 3.0        | 2.7              | 0.0         | 59     | 0.00          |
|                        | Assam                | 2389                    | 0                      | 48.1       | 40.8             | 0.4         | 178    | 0.00          |
|                        | Manipur              | 185                     | 0                      | 2.6        | 2.8              | -0.2        | 24     | 0.00          |
| NER                    | Meghalaya            | 311                     | 12                     | 5.3        | 1.4              | -0.1        | 67     | 0.60          |
|                        | Mizoram              | 113                     | 0                      | 1.8        | 1.7              | -0.2        | 10     | 0.00          |
|                        | Nagaland             | 158                     | 0                      | 2.9        | 2.4              | -0.1        | 32     | 0.00          |
|                        | Tripura              | 285                     | 0                      | 6.0        | 5.5              | 0.4         | 74     | 0.00          |

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve)

|               | Bhutan | Nepal | Bangladesh | Godda -> Bangladesh |
|---------------|--------|-------|------------|---------------------|
| Actual (MU)   | 44.0   | 5.1   | -24.8      | -20.6               |
| Day Peak (MW) | 1990.0 | 315.0 | -1075.0    | -1203.6             |

E. Import/Export by Regions (in MU) - Import(+ve)/Export(-ve); OD(+)/UD(-)

|               | NR    | WR     | SR   | ER    | NER  | TOTAL |
|---------------|-------|--------|------|-------|------|-------|
| Schedule(MU)  | 323.5 | -317.6 | 61.3 | -66.0 | -1.2 | 0.0   |
| Actual(MU)    | 300.4 | -320.5 | 74.8 | -56.5 | 1.6  | -0.1  |
| O/D/LI/D(MLI) | -23.1 | -2 Q   | 13.6 | 0.5   | 2.8  | -0.1  |

F. Generation Outage(MW)

| 1. Generation Gutage(11111) |      |       |       |      |     |       |         |
|-----------------------------|------|-------|-------|------|-----|-------|---------|
|                             | NR   | WR    | SR    | ER   | NER | TOTAL | % Share |
| Central Sector              | 3173 | 10739 | 5848  | 3385 | 271 | 23416 | 40      |
| State Sector                | 5900 | 16626 | 10038 | 3090 | 178 | 35831 | 60      |
| Total                       | 9072 | 27364 | 15886 | 6475 | 449 | 59247 | 100     |

G. Sourcewise generation (Gross) (MU)

|   | NR    | WR    | SR    | ER    | NER   | All India | % Share |
|---|-------|-------|-------|-------|-------|-----------|---------|
| Coal  | 752   | 1222  | 481   | 567   | 13    | 3035      | 61      |
| Lignite   | 27    | 10    | 56    | 0     | 0     | 93        | 2       |
| Hydro   | 445   | 73    | 76    | 133   | 32    | 759       | 15      |
| Nuclear   | 29    | 50    | 64    | 0     | 0     | 143       | 3       |
| Gas, Naptha & Diesel  | 32    | 21    | 6     | 0     | 29    | 88        | 2       |
| RES (Wind, Solar, Biomass & Others)                                     | 187   | 292   | 411   | 3     | 1     | 895       | 18      |
| Total   | 1472  | 1669  | 1095  | 702   | 74    | 5013      | 100     |
| Share of RES in total generation (%)                                    | 12.73 | 17.53 | 37.58 | 0.36  | 1.69  | 17.86     |         |
| Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%) | 44.96 | 24.90 | 50.36 | 19.26 | 44.42 | 35.85     |         |

H. All India Demand Diversity Factor

| 11. 111 India Demand Diversity I detor |       |  |  |  |  |  |  |
|--|-------|--|--|--|--|--|--|
| Based on Regional Max Demands          | 1.043 |  |  |  |  |  |  |
| Based on State Max Demands             | 1.083 |  |  |  |  |  |  |
| •                                      |       |  |  |  |  |  |  |

I. All India Peak Demand and shortage at Solar and Non-Solar Hour

|              | Max Demand Met(MW) | Time  | Shortage(MW) |
|--------------|--------------------|-------|--------------|
| Solar hr     | 204830             | 15:20 | 26           |
| Non-Solar hr | 206579             | 19:53 | 187          |

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

<sup>\*\*</sup>Note: All generation MU figures are gross
\*\*\*Godda (Jharkhand) -> Bangladesh power exchange is through the radial connection (isolated from Indian Grid)
Solar Hours -> 06:00 to 18:00hrs and rest are Non-Solar Hours  $* Source: RLDCs \ for \ solar \ connected \ to \ ISTS; SLDCs \ for \ embedded \ solar. \ Limited \ visibility \ of \ embedded \ solar \ data.$ 

## INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 02-Aug-2023

| Together   For   |                       | Line Details  | No. of Circuit  | Max Import (MW)  | Max Export (MW)                     | Import (MU)  | Export (MU)                           | NET (MU)   |
|--|-----------------------|---|---|--|-------------------------------------|--|---------------------------------------|--|
| SAME    |                       |   | 2   | 0  | 500                                 | 0.0  | 13.1                                  | -13.1  |
| STATE   STAT | 2 HVDC                | PUSAULI B/B   |   | 0  | 0                                   | 0.0  | 0.0                                   | 0.0  |
| 1  |                       |   |   |  |                                     |  |                                       |  |
| The content of the  |                       | GAYA-BALIA  | 1   |  |                                     |  |                                       |  |
| 1  | 7 400 kV              | PUSAULI -ALLAHABAD  |   | 79   | 51                                  | 0.7  | 0.0                                   | 0.7  |
| 10   |                       |   |   |  |                                     |  |                                       |  |
| 10   | 10 400 kV             | NAUBATPUR-BALIA   |   | 37   | 522                                 | 0.0  | 6.0                                   | -6.0   |
| 14   25   25   25   25   25   25   25   2  |                       | MOTIHARI-GORAKHPUR  |   |  |                                     |  |                                       |  |
| 10   151   |                       | BIHARSHARIFF-VARANASI   | 2   |  |                                     |  |                                       |  |
| 1  | 15 132 kV             | NAGAR UNTARI-RIHAND   | 1   | 0  | 0                                   | 0.0  | 0.0                                   | 0.0  |
| 18   18   18   18   18   18   18   18  |                       |   |   |  |                                     |  |                                       |  |
|  |                       |   | 1   |  | 0                                   | 0.0  | 0.0                                   | 0.0  |
|  | Import/Export of ER   | With WR)  |   |  | ER-NR                               | 5.8  | 57.2                                  | -51.4  |
| 1  | 1 765 kV              | JHARSUGUDA-DHARAMJAIGARH  |   |  |                                     |  |                                       |  |
| 1   100    |                       |   |   |  |                                     |  |                                       |  |
| Page   | 4 400 kV              | JHARSUGUDA-RAIGARH  | 4   | 188  | 243                                 | 0.0  | 1.2                                   | -1.2   |
| 1   10   10   10   10   10   10   10   |                       |   |   |  |                                     |  |                                       |  |
|  | 7 220 kV              |   | 2   | 151  | 0                                   |  |                                       | 0.6  |
|  | Import/Export of ER ( | With SR)  |   |  | ER-WK                               | 45.6   | 3.3                                   | 42.3   |
| SPEAN   MONTEMPRANTEM   2   8   7255   60   411   411   411   415   52 | 1 HVDC                | JEYPORE-GAZUWAKA B/B  |   |  |                                     |  |                                       |  |
|  |                       | TALCHER-KOLAR BIPOLE<br>ANGUL-SRIKAKULAM                        |   |  |                                     |  |                                       |  |
| Import  Export of JER (With NER)   | 4 400 kV              | TALCHER-I/C   |   | 663  | 618                                 | 3.4  | 0.0                                   | 3.4  |
| Imageneral Company   Imagene | 5 220 KV              | DALINELA-UFFER-SILEKKU  | 1   | U  |                                     |  |                                       |  |
| 3   BANY   ALTERIORAR PONCHEGON   2   185   221   0.0   2.7   4.7  |                       |   | T   |  | •                                   |  |                                       |  |
| 2   20   15   0.0   12   1.6   1.6   1.6   1.7 |                       |   |   |  |                                     |  |                                       |  |
| INDIFFERENCE   NEW ANTHOLOGIAL AGEN   2   6   50   123   152   1 |                       |   |   |  | 101                                 | 0.0  | 1.6                                   | -1.6   |
|  | Import/Export of NED  | (With NR)   |   |  | ER-NER                              | 0.0  | 12.7                                  | -12.7  |
| ImportExport of WR (With NR)   |                       |   | 2   | 0  |                                     | 0.0  |                                       |  |
|  | I                     | (W/AL ND)   |   |  | NER-NR                              | 0.0  | 12.2                                  | -12.2  |
| BITTEC   VINDIFFACIBLE   |                       |   | 2   | 0  | 5046                                | 0.0  | 108.2                                 | -108.2   |
| 1  | 2 HVDC                | VINDHYACHAL B/B   |   | 438  | 486                                 | 1.4  |                                       | -5.5   |
| \$\frac{9.85 kV}{2.00 ABATPREORAL}   |                       |   |   |  |                                     |  |                                       |  |
| 78   15   15   15   15   15   15   15   1  |                       |   |   |  |                                     |  |                                       |  |
| 9  | 7 765 kV              | GWALIOR-ORAI  | 1   | 742  | 0                                   | 11.5   | 0.0                                   | 11.5   |
| B  |                       |   | •   |  |                                     |  |                                       |  |
| 12   499 KV   FERD. SHIFMMAL   | 10 765 kV             | VINDHYACHAL-VARANASI  |   | 0  | 3207                                | 0.0  | 56.1                                  | -56.1  |
| 1   4004V   VINDIYACHAL-HIHAND   1   492   0   20.4   0.0   20.4     14   4004V   RAPP-SILIPATURE   2   3.62   588   2.4   3.8     15   2264V   BARMURARANTR   1   0   0   0.0   0.0     15   2264V   BARMURARANTR   1   0   0   0.0   0.0     16   2264V   BARMURARANTR   1   0   0   0   0.0     17   2264V   MALANTERARANTA   1   74   1   0.1     18   2264V   MERICANARANTR   1   22   0   0.0   0.0     19   1314V   CMALIORANARANTA   1   74   1   0.1     19   1314V   CMALIORANARANTA   1   74   1   0.1     19   1314V   CMALIORANARANTA   1   74   1   0.0   0.0   0.0     10   1314V   CMALIORANARANTA   1   74   1   0.0   0.0   0.0     19   1314V   CMALIORANARANTA   1   74   1   0.0   0.0   0.0   0.0     10   1314V   CMALIORANARANTA   1   74   1   0.0   0.0   0.0   0.0     10   1314V   CMALIORANARANTA   1   74   1   0.0   0.0   0.0   0.0     10   1314V   CMALIORANARANTA   1   74   1   0.0   0.0   0.0   0.0     10   1314V   CMALIORANARA   CMALIORANAR |                       | ZERDA-KANKROLI<br>ZERDA -BHINMAL                                | 1   |  |                                     |  |                                       |  |
| 15   2204 V   BIANFURANONIK  | 13 400 kV             | VINDHYACHAL -RIHAND   |   | 949  | 0                                   | 20.4   |                                       | 20.4   |
| 16   2294 V   MERICONARIA   1  |                       |   | 1   |  |                                     |  |                                       |  |
| 18   229 kV   MAJANFIRA (RAIVA   1   22   0   0.0   0.0   0.0   0.0     9   132 kV   GWALIORS WAYMANDHOPR   1   0   0   0   0.0   0.0   0.0     10   132 kV   GWALIORS WAYMANDHOPR   1   0   0   0   0.0   0.0   0.0     10   132 kV   GWALIORS WAYMANDHOPR   1   0   0   0.0   0.0   0.0     10   10   10   0   0   0.0   0.0   0.0     10   10   10   10   0   0   0.0   0.0     10   10   10   10   10   10   10  |                       | BHANPURA-MORAK  | 1   |  | 30                                  |  |                                       |  |
| 1828   | 18 220 kV             | MALANPUR-AURAIYA  | 1   |  |                                     | 0.0  | 0.0                                   | 0.0  |
| Import/Export of WR (With SR)  |                       |   |   |  |                                     |  |                                       |  |
| HVDC   BHADRAWATERB   -   0   1004   3.1   8.5   5.5   |                       |   |   | , and the second |                                     |  | 288.4                                 |  |
| 2  |                       |   | _   | 0  | 1004                                | 3.1  | 8.5                                   | -5.5   |
| 4   765 kV   WARDHA-NIZAMBAD   2   45   2497   0.0   28.6   -28.6   -28.6  | 2 HVDC                | RAIGARH-PUGALUR   | 2   | 0  | 3501                                | 0.0  | 29.3                                  | -29.3  |
| S  |                       |   |   |  |                                     |  |                                       |  |
| 7   220 kV   PONDA-AMBEWADI  | 5 400 kV              | KOLHAPUR-KUDGI  | 2   | 1496   | 0                                   | 25.2   | 0.0                                   | 25.2   |
| NEPAL     NEPAL   NE | 7 220 kV              | PONDA-AMBEWADI  | 11  |  | 0                                   | 0.0  | 0.0                                   | 0.0  |
| INTERNATIONAL EXCHANGES  |                       |   | 1   |  | 105                                 | 2.1  |                                       | 2.1  |
| State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MU)   |                       | YEY   | TEDMATIONAL ES  | CHANCEC  | WK-5K                               | 30.0   | /1./                                  | - 17 8   |
| Max (MW)   Min (MW)   Avg (MW)   MID   |                       | IN  |   |  |                                     |  | ¥ 44                                  |  |
| BHUTAN   ER  | State                 | Dogion  |   |  | Merr (MNA)                          | Min (MIXI)   | •                                     | +ve)/Export(-ve)   |
| BHUTAN   ER  | State                 | Region  | Line  | Name   | Max (MW)                            | Min (MW)   | •                                     | +ve)/Export(-ve)<br>Energy Exchange  |
| BHUTAN   ER  | State                 |   | Line 400kV MANGDECHHU-ALIPURDUAR RECEIPT  | Name<br>ALIPURDUAR 1,2&3 i.e.<br>C (from MANGDECHU   |                                     | ` '  | Avg (MW)                              | +ve)/Export(-ve)<br>Energy Exchange<br>(MU)  |
| BHUTAN ER MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)  NER 132kV GELEPHU-SALAKATI 29 15 23 0.56  NER 132kV MOTANGA-RANGIA 64 31 50 1.20  NER 132kV MOTANGA-RANGIA 64 31 50 0.53  NEPAL ER NEPAL IMPORT (FROM BIHAR) 0 0 0 0 0.00  ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60   | State                 |   | Line 400kV MANGDECHHU-ALIPURDUAR RECEIPT  | Name<br>ALIPURDUAR 1,2&3 i.e.<br>C (from MANGDECHU   |                                     | ` '  | Avg (MW)                              | +ve)/Export(-ve)<br>Energy Exchange<br>(MU)  |
| NER   132kV GELEPHU-SALAKATI   29   15   23   0.56   | State                 | ER  | Line 400kV MANGDECHHU-4 ALIPURDUAR RECEIPT HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI  | Name<br>ALIPURDUAR 1,2&3 i.e.<br>(from MANGDECHU<br>1,2,4 (& 400kV<br>) i.e. BINAGURI  | 622                                 | 565  | Avg (MW) 611                          | +ve)/Export(-ve) Energy Exchange (MU) 14.66  |
| NER   132kV GELEPHU-SALAKATI   29   15   23   0.56     NER   132kV MOTANGA-RANGIA   64   31   50   1.20     NER   132kV MOTANGA-RANGIA   64   31   50   1.20     NR   132kV MAHENDRANAGAR-TANAKPUR(NHPC)   0   0   0   0   0.53     NEPAL   ER   NEPAL IMPORT (FROM BIHAR)   0   0   0   0   0.00     ER   400kV DHALKEBAR-MUZAFFARPUR 1&2   315   114   236   5.66     BANGLADESH   ER   BHERAMARA B/B HVDC (B'DESH)   -930   -794   -908   -21.80     Gloolated from Indian Grid)   400kV GODDA_TPS-RAHANPUR (B'DESH) D/C   -1204   -703   -858   -20.60   | State                 | ER  | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPT HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H   | Name ALIPURDUAR 1,2&3 i.e. ' (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW)  | 622                                 | 565  | Avg (MW) 611                          | +ve)/Export(-ve) Energy Exchange (MU) 14.66  |
| NER   132kV MOTANGA-RANGIA   64   31   50   1.20   |                       | ER<br>ER  | Line 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MV 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPAI MALBASE - BIRPARA) i  | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) RA 1&2 (& 220kV .e. BIRPARA RECEIPT  | 622                                 | 565  | Avg (MW) 611 997                      | +ve)/Export(-ve) Energy Exchange (MU) 14.66  |
| NEPAL ER NEPAL IMPORT (FROM BIHAR) 0 0 0 0 0.00  ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60   |                       | ER<br>ER  | Line 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MV 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPAI MALBASE - BIRPARA) i  | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) RA 1&2 (& 220kV .e. BIRPARA RECEIPT  | 622                                 | 565  | Avg (MW) 611 997                      | +ve)/Export(-ve) Energy Exchange (MU) 14.66  |
| NEPAL ER NEPAL IMPORT (FROM BIHAR) 0 0 0 0 0.00  ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60   |                       | ER<br>ER<br>ER  | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*80MW; 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H MALBASE - BIRPARA) i (from CHUKHA-BIRPA)   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) e. BIRPARA RECEIPT 4MW)  | 622<br>1041<br>181                  | 565<br>0<br>106  | Avg (MW) 611 997 150                  | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60   |
| NEPAL ER NEPAL IMPORT (FROM BIHAR) 0 0 0 0 0.00  ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60  |                       | ER<br>ER<br>ER  | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*80MW; 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H MALBASE - BIRPARA) i (from CHUKHA-BIRPA)   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) e. BIRPARA RECEIPT 4MW)  | 622<br>1041<br>181                  | 565<br>0<br>106  | Avg (MW) 611 997 150 23               | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60   |
| NEPAL ER NEPAL IMPORT (FROM BIHAR) 0 0 0 0 0.00  ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60  |                       | ER ER ER NER  | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW; 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H MALBASE - BIRPARA) i (from CHUKHA-BIRPAI) 132kV GELEPHU-SALAI   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) ER A 1&2 (& 220kV e. BIRPARA RECEIPT 4MW) KATI   | 622<br>1041<br>181<br>29            | 565<br>0<br>106<br>15  | Avg (MW) 611 997 150 23               | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60 0.56                                    |
| ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60  |                       | ER ER ER NER  | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW; 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPA) MALBASE - BIRPARA); (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) AC 1&2 220kV e. BIRPARA RECEIPT 4MW) KATI  | 622<br>1041<br>181<br>29<br>64      | 565<br>0<br>106<br>15  | Avg (MW) 611 997 150 23 50            | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56                                   |
| ER 400kV DHALKEBAR-MUZAFFARPUR 1&2 315 114 236 5.66  ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60  |                       | ER ER ER NER  | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW; 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPA) MALBASE - BIRPARA); (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP 6*170MW) AC 1&2 220kV e. BIRPARA RECEIPT 4MW) KATI  | 622<br>1041<br>181<br>29<br>64      | 565<br>0<br>106<br>15  | Avg (MW) 611 997 150 23 50            | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56                                   |
| ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60   | BHUTAN                | ER ER ER NER NER NR   | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPAI MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG  | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP \$\persupersupersupersupersupersupersupersu   | 622<br>1041<br>181<br>29<br>64      | 565<br>0<br>106<br>15<br>31                                  | Avg (MW) 611 997 150 23 50            | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60 0.56 1.20                               |
| ER BHERAMARA B/B HVDC (B'DESH) -930 -794 -908 -21.80  BANGLADESH ER (Isolated from Indian Grid) 400kV GODDA_TPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60   | BHUTAN                | ER ER ER NER NER NR   | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPAI MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG  | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP \$\persupersupersupersupersupersupersupersu   | 622<br>1041<br>181<br>29<br>64      | 565<br>0<br>106<br>15<br>31                                  | Avg (MW) 611 997 150 23 50            | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56 1.20                              |
| BANGLADESH  ER (Isolated from Indian Grid)  400kV GODDA_TPS-RAHANPUR (B'DESH) D/C  -1204  -703  -858  -20.60   | BHUTAN                | ER ER ER NER NER NER ER   | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPAI MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP \$\persup{\text{ep}} \text{170MW}) RA 1&2 (& 220kV .e. BIRPARA RECEIPT 4MW) KATI GIA AR-TANAKPUR(NHPC)  | 622<br>1041<br>181<br>29<br>64<br>0 | 565<br>0<br>106<br>15<br>31<br>0                             | Avg (MW) 611 997 150 23 50 0          | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56 1.20 -0.53                        |
| BANGLADESH  ER (Isolated from Indian Grid)  400kV GODDA_TPS-RAHANPUR (B'DESH) D/C  -1204  -703  -858  -20.60   | BHUTAN                | ER ER ER NER NER NER ER   | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPAI MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM   | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV ) i.e. BINAGURI EP \$\persup{\text{ep}} \text{170MW}) RA 1&2 (& 220kV .e. BIRPARA RECEIPT 4MW) KATI GIA AR-TANAKPUR(NHPC)  | 622<br>1041<br>181<br>29<br>64<br>0 | 565<br>0<br>106<br>15<br>31<br>0                             | Avg (MW) 611 997 150 23 50 0          | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56 1.20 -0.53                        |
| BANGLADESH (Isolated from Indian Grid) 400kV GODDA_IPS-RAHANPUR (B'DESH) D/C -1204 -703 -858 -20.60  | BHUTAN                | ER ER ER NER NER NER ER   | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) MALBASE - BINAGURI RECEIPT (from TALA H MALBASE - BIRPARA) i (from CHUKHA-BIRPA) 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM  | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV 1) i.e. BINAGURI EP \$\persupersupersupersupersupersupersupersu  | 622<br>1041<br>181<br>29<br>64<br>0 | 565<br>0<br>106<br>15<br>31<br>0<br>0<br>114                 | Avg (MW) 611 997 150 23 50 0 236      | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56 1.20 -0.53 0.00 5.66              |
| (Isolated from Indian Grid)  | BHUTAN                | ER ER ER NER NER NER ER   | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) MALBASE - BINAGURI RECEIPT (from TALA H MALBASE - BIRPARA) i (from CHUKHA-BIRPA) 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM  | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV 1) i.e. BINAGURI EP \$\persup{\text{ep}} \text{170MW}) RA 1&2 (& 220kV .e. BIRPARA RECEIPT 4MW) KATI GIA AR-TANAKPUR(NHPC) I BIHAR) UZAFFARPUR 1&2   | 622<br>1041<br>181<br>29<br>64<br>0 | 565<br>0<br>106<br>15<br>31<br>0<br>0<br>114                 | Avg (MW) 611 997 150 23 50 0 236      | +ve)/Export(-ve) Energy Exchange (MUI) 14.66 23.93 3.60 0.56 1.20 -0.53 0.00 5.66              |
| NER 132kV COMILLA-SURAJMANI NAGAR 1&2 -145 0 -127 -3.04  | BHUTAN NEPAL          | ER  ER  ER  NER  NER  NER  ER  ER  ER  E                        | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPA MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM 400kV DHALKEBAR-MU BHERAMARA B/B HVDG                      | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV 1) i.e. BINAGURI EP \$\persupersupersupersupersupersupersupersu  | 622 1041 181 29 64 0 0 315          | 565<br>0<br>106<br>15<br>31<br>0<br>0<br>114<br>-794         | Avg (MW) 611 997 150 23 50 0 236 -908 | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60 0.56 1.20 -0.53 0.00 5.66 -21.80        |
|  | BHUTAN NEPAL          | ER  ER  ER  NER  NER  NER  ER  ER  ER  E                        | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPA MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM 400kV DHALKEBAR-MU BHERAMARA B/B HVDG                      | Name ALIPURDUAR 1,2&3 i.e. (from MANGDECHU 1,2,4 (& 400kV 1) i.e. BINAGURI EP \$\persupersupersupersupersupersupersupersu  | 622 1041 181 29 64 0 0 315          | 565<br>0<br>106<br>15<br>31<br>0<br>0<br>114<br>-794         | Avg (MW) 611 997 150 23 50 0 236 -908 | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60 0.56 1.20 -0.53 0.00 5.66 -21.80        |
|  | BHUTAN NEPAL          | ER ER ER NER NER NER ER ER ER ER ER (Isolated from Indian Grid) | Line: 400kV MANGDECHHU- ALIPURDUAR RECEIPI HEP 4*180MW) 400kV TALA-BINAGURI MALBASE - BINAGURI RECEIPT (from TALA H 220kV CHUKHA-BIRPA) MALBASE - BIRPARA) i (from CHUKHA HEP 4*8 132kV GELEPHU-SALAI 132kV MOTANGA-RANG 132kV MAHENDRANAG NEPAL IMPORT (FROM 400kV DHALKEBAR-MU BHERAMARA B/B HVDG 400kV GODDA_TPS-RAI | Name ALIPURDUAR 1,2&3 i.e. C (from MANGDECHU 1,2,4 (& 400kV 1) i.e. BINAGURI EP 9*170MW) RA 1&2 (& 220kV .e. BIRPARA RECEIPT 4MW) KATI GIA AR-TANAKPUR(NHPC) I BIHAR) UZAFFARPUR 1&2 C (B'DESH) HANPUR (B'DESH) D/C  | 622 1041 181 29 64 0 0 315 -930     | 565<br>0<br>106<br>15<br>31<br>0<br>0<br>114<br>-794<br>-703 | Avg (MW) 611 997 150 23 50 0 236 -908 | +ve)/Export(-ve) Energy Exchange (MU) 14.66 23.93 3.60 0.56 1.20 -0.53 0.00 5.66 -21.80 -20.60 |

### CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 02-Aug-2023

**Export From India (in MU)** 

| Export From 1 | iidia (iii 1410) |           |            |      |      |      |      |      |       |
|---------------|------------------|-----------|------------|------|------|------|------|------|-------|
|               |                  |           |            |      | STOA |      |      |      |       |
|               | (ISGS/LTA/MTOA)  |           | COLLECTIVE |      |      |      |      |      |       |
| Country       | PPA              | BILATERAL | IDAM       |      |      | RTM  |      |      | TOTAL |
|               |                  | TOTAL     | IEX        | PXIL | HPX  | IEX  | PXIL | HPX  |       |
| Bhutan        | 0.00             | 0.00      | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  |
| Nepal         | 0.00             | 0.00      | 0.10       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10  |
| Bangladesh    | 21.73            | 0.00      | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.73 |
| Myanmar       | 0.00             | 0.00      | 0.00       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  |
| Total Export  | 21.73            | 0.00      | 0.10       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.83 |
| Total Export  | 21.73            | 0.00      | 0.10       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |       |

Import by India(in MU)

|              |                 |           | STOA |      |       |        |      |      |       |  |  |
|--------------|-----------------|-----------|------|------|-------|--------|------|------|-------|--|--|
|              | (ISGS/LTA/MTOA) |           |      |      | COLLE | ECTIVE |      |      |       |  |  |
| Country      | PPA             | BILATERAL |      | IDAM |       |        | RTM  |      |       |  |  |
|              |                 | TOTAL     | IEX  | PXIL | HPX   | IEX    | PXIL | HPX  |       |  |  |
| Bhutan       | 41.50           | 1.65      | 0.00 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 43.15 |  |  |
| Nepal        | 0.00            | 0.00      | 7.03 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 7.03  |  |  |
| Bangladesh   | 0.00            | 0.00      | 0.00 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 0.00  |  |  |
| Myanmar      | 0.00            | 0.00      | 0.00 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 0.00  |  |  |
| Total Import | 41.50           | 1.65      | 7.03 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 50.18 |  |  |

Net from India(in MU) -ve : Export / +ve : Import

|            |                 |           | STOA |      |       |        |      |      |        |  |
|------------|-----------------|-----------|------|------|-------|--------|------|------|--------|--|
|            | (ISGS/LTA/MTOA) |           |      |      | COLLE | ECTIVE |      |      |        |  |
| Country    | PPA             | BILATERAL | IDAM |      |       | RTM    |      |      | TOTAL  |  |
|            |                 | TOTAL     | IEX  | PXIL | HPX   | IEX    | PXIL | HPX  |        |  |
| Bhutan     | 41.50           | 1.65      | 0.00 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 43.15  |  |
| Nepal      | 0.00            | 0.00      | 6.93 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 6.93   |  |
| Bangladesh | -21.73          | 0.00      | 0.00 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | -21.73 |  |
| Myanmar    | 0.00            | 0.00      | 0.00 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 0.00   |  |
| Total Net  | 19.77           | 1.65      | 6.93 | 0.00 | 0.00  | 0.00   | 0.00 | 0.00 | 28.35  |  |