

# Monthly Report on Short-term Transactions of Electricity in India

July 2024



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Central Electricity Regulatory Commission  
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## Abbreviations

| <b>Abbreviation</b> | <b>Expanded Version</b>                                   |
|---------------------|---|
| ABSP_ANTP           | Acme Bhiwadi Solar Power Private Limited, Anantpur        |
| ACBIL               | ACB (India) Limited                                       |
| ACP                 | Area Clearing Price                                       |
| ACV                 | Area Clearing Volume                                      |
| ACME_SLR            | ACME Solar Power Project                                  |
| ACME_RUMS           | Acme Rewa Ultra Mega Solar Project                        |
| ADANI_4RE           | Adani Renewable Energy Holding Four Limited               |
| ADANI GREEN         | Adani Green Energy Limited                                |
| ADANIHB_SLR         | Adani Hybrid Energy Jaisalmer One Limited (Solar)         |
| ADANI_SLR 4         | Adani Solar Energy Four Private Limited                   |
| ADANIHB_WIND        | Adani Hybrid Energy Jaisalmer One Limited (Wind)          |
| ADEPT               | Adept Renewable Technologies Private Limited              |
| ADY1_PVGD           | Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park  |
| ADY2_PVGD           | Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park  |
| ADY3_PVGD           | Adyah Solar Energy Pvt Ltd., Block 3 Pavagada Solar Park  |
| ADY6_PVGD           | Adyah Solar Energy Pvt Ltd., Block 6 Pavagada Solar Park  |
| ADY10_PVGD          | Adyah Solar Energy Pvt Ltd., Block 10 Pavagada Solar Park |
| ADY13_PVGD          | Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park |
| AGEMPL BHUJ         | Adani Green Energy (MP) Ltd.,Bhuj                         |
| AHEJOL_S_FTG2       | Adani Hybrid Energy Jaisalmer One Limited (SOLAR)         |
| AHEJOL_W_FTG2       | Adani Hybrid Energy Jaisalmer One Limited (WIND)          |
| AHEJ2L_SOLAR        | Adani Hybrid Energy Jaisalmer Two Limited (Solar)         |
| AHEJ3L_SOLAR        | Adani Hybrid Energy Jaisalmer Three Limited (Solar)       |
| AHEJ4L_SOLAR        | Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Solar   |
| AHEJ4L_WIND         | Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Wind    |
| AHSP_ANTP           | Acme Hisar Solar Power Private Limited,Anantpur           |
| AKS_PVGD            | ACME Kurukshetra Solar Energy Pvt. Ltd                    |
| AKSP_ANTP           | Acme Karnal Solar Power Private Limited,Anantpur          |
| ALFANAR_BHUJ        | Alfanar Group Wind Project, Bhuj, Gujarat                 |
| ALTRA XERGI         | Altra Xergi Power Private Limited                         |
| AMP_GREEN6          | Amp Energy Green Six Private Limited                      |
| AMPLUS_AGES         | Amplus Ages Private Limited                               |
| AMPS Hazira         | Arcelor Mittal Nippon Steel, Hazira                       |
| APTEL               | Appellate Tribunal for Electricity                        |
| ARERJL_SLR          | Adani Renewable Energy Park Rajasthan Ltd.                |
| ARINSUM_RUMS        | Solenergi RewaUltraMega Solar Project                     |
| ARS_PVGD            | ACME REWARI Solar Power Pvt Ltd.                          |
| ARTPP               | Adani Power Limited - Raipur TPP                          |
| ASEJTL_SLR          | Adani Solar Energy Jodhpur Two Ltd.                       |
| AVAADA1_PVGD        | Avaada Solar Energy Private Ltd., Pavagada Project 1      |
| AVAADA2_PVGD        | Avaada Solar Energy Private Ltd., Pavagada Project 2      |
| AVADARJHN_SLR       | Avaada Rjhn Private Limited_Solar                         |
| AYANA_NPKUNTA       | Ayana Power, NP Kunta                                     |
| AZURE_ANTP          | Azure Power,Anantpur                                      |
| AZURE_PVGD          | Azure Power,Pavagada                                      |
| AZURE_SLR           | Azure Power Solar Power Project                           |
| AZURE34_SLR         | Azure Power 34 Pvt. Ltd. Solar Power Project              |
| AZURE43_SLR         | Azure Power Forty Three Private Limited                   |
| BALCO               | Bharat Aluminum Company Limited                           |
| BARC                | Bhabha Atomic Research Centre                             |
| BASOCHHU HEP        | Basochhu Hydropower Plant Bhutan                          |
| BBMB                | Bhakra Beas Management Board                              |

|                  |   |
|------------------|---|
| BETAM_TCN        | Betam Wind Energy Private Limited, Tuticorin            |
| BHADRAVATHI HVDC | Bhadravathi High Voltage Direct Current Link            |
| BRBCL            | Bhartiya Rail Bijlee Company Limited                    |
| CEA              | Central Electricity Authority                           |
| CERC             | Central Electricity Regulatory Commission               |
| CGPL             | Coastal Gujarat Power Limited                           |
| CHUKHA HEP       | Chhukha Hydroelectric Project, Bhutan                   |
| CHUZACHEN HEP    | Chuzachen Hydro Electric Power Project                  |
| CLEAN_SLR        | Clean Solar Power Pvt. Ltd                              |
| CLEANSPL_SLR     | Clean Solar Jodhpur Pvt Ltd                             |
| COASTGEN         | Coastal Energen Private Limited                         |
| DAGACHU          | Dagachhu Hydro Power Corporation                        |
| DAM              | Day Ahead Market  |
| DEVKOOT_SLR      | Devkoot Solar Power Plant, NTPC Green Energy Ltd.       |
| DCPP             | Donga Mahua Captive Power Plant                         |
| DD&DNH           | Daman and Diu & Dadar Nagar Haveli                      |
| DGEN MEGA POWER  | DGEN Mega Power Project                                 |
| DGPCL Bhutan     | Druk Green Power Corporation Ltd., Bhutan               |
| DHARIWAL POWER   | Dhariwal Power Station                                  |
| DIKCHU HEP       | Dikchu Hydro-electric Project, Sikkim                   |
| DOYANG HEP       | DoyangHydro Electric Project                            |
| DSM              | Deviation Settlement Mechanism                          |
| DVC              | Damodar Valley Corporation                              |
| EDEN_SLR         | Eden RE Cite Private limited                            |
| EMCO             | EMCO Energy Limited                                     |
| ESPL_RADHANESDA  | Electro Solaire Private Limited, Radhanesda             |
| ESSAR POWER      | Essar Power Limited                                     |
| FORTUM1_PVGD     | Fortum Finnsurya Energy Private Ltd, Pavagada Project 1 |
| FORTUM2_PVGD     | Fortum Finnsurya Energy Private Ltd, Pavagada Project 2 |
| FRV_ANTP         | Fotowatio Renewable Ventures, Anantapur                 |
| FRV_NPK          | Fotowatio Renewable Ventures, NP Kunta                  |
| GIPCL_RADHANESDA | Gujarat Industries Power Company Ltd, Radhanesda        |
| GIWEL_BHUJ       | Green infra wind energy Limited, Bhuj                   |
| GIWEL_TCN        | Green Infra Wind Energy Limited, Tuticorin              |
| GMR CHHATTISGARH | GMR Chhattisgarh Energy Limited                         |
| GMR KAMALANGA    | GMR Kamalanga Energy Ltd.                               |
| G-DAM            | Green Day Ahead Market                                  |
| GRIAN            | Grian Energy Private Limited                            |
| GSECL P-II       | GSECL Raghnesda Solar Park (Phase-II)                   |
| G-TAM            | Green Term Ahead Market                                 |
| HPX              | Hindustan Power Exchange Limited                        |
| HP-DAM           | High Price Day Ahead Market                             |
| HP-TAM           | High Price Term Ahead Market                            |
| HVDC ALPD        | Alipurduar High Voltage Direct Current Link             |
| HVDC CHAMPA      | Champa-Kurukshetra High Voltage Direct Current Link     |
| HVDC PUS         | Pasauli High Voltage Direct Current Link                |
| HVDC RAIGARH     | Raigarh-Pugalur High Voltage Direct Current Link        |
| IBEUL            | Ind Bharat Energy Utkal Limited                         |
| IEX              | Indian Energy Exchange Limited                          |
| IGSTPS           | Indira Gandhi Super Thermal Power Station Jhajjar       |
| IL&FS            | Infrastructure Leasing & Financial Services Limited     |
| INOX_BHUJ        | INOX Wind Limited, Bhuj, Gujarat                        |
| J&K              | Jammu & Kashmir   |
| JAYPEE NIGRIE    | Jaypee Nigrie Super Thermal Power Project               |

|                  |  |
|------------------|--|
| JHABUA POWER MP  | Jhabua Thermal Power Project                               |
| JINDAL POWER     | Jindal Power Limited                                       |
| JINDAL STAGE-II  | Jindal Power Ltd Stage II                                  |
| JITPL            | Jindal India Thermal Power Ltd.                            |
| JORETHANG        | Jorethang Loop Hydroelectric Power Project                 |
| JSW_RENEW_2      | JSW Renew Energy Two Limited                               |
| KAPP 3&4         | Kakrapar Atomic Power Station Unit 3 & 4                   |
| KARCHAM WANGTOO  | Karcham Wangtoo H.E. Project                               |
| KBUNL            | Kanti Bijlee Utpadan Nigam Limited                         |
| KHURJA STPP      | Khurja Super Thermal Power Plant                           |
| KORBA WEST POWER | Korba West Power Company Limited                           |
| KOTESHWAR        | Koteshwar Hydro Power project                              |
| KREDL_PVGD       | Karnataka Renewable Energy Development Ltd,Pavagada        |
| KSK MAHANADI     | KSK Mahanadi Power Ltd                                     |
| KSMPL_SLR        | Kilaj Solar (Maharashtra) Private Limited                  |
| KURICHU HEP      | Kurichhu Hydro-electric Power Station, Bhutan              |
| LANKO_AMK        | LancoAmarkantak Power Private Limited                      |
| LANKO BUDHIL     | LancoBudhil Hydro Power Private Limited                    |
| LANKOKONDAPALLY  | Lanco Kondapally Power Private Limited                     |
| LOKTAK           | Loktak Power Project                                       |
| MAHINDRA_RUMS    | Mahindra Rewa Ultra Mega Solar Project                     |
| MAHOBASL         | Mahoba Solar Power Project                                 |
| MALANA           | Malana Hydroelectric Plant                                 |
| MANGDECHU HEP    | Mangdechhu Hydroelectric Project, Mangdechhu River, Bhutan |
| Maruti Coal      | Maruti Clean Coal and Power Limited                        |
| MB POWER         | MB Power Ltd   |
| MEENAKSHI        | Meenakshi Energy Private Limited                           |
| MRPL             | Mahindra Renewables Private Limited                        |
| MSEPL            | Masaya Solar Energy Private Limited                        |
| MSRPL            | Mega Solis Renewables Pvt. Ltd.                            |
| MTPS             | TATA Power Mundra Thermal Power Station                    |
| MTPS II          | Muzaffarpur Thermal Power Station – Stage II               |
| MYTRAH_TCN       | Mytrah Energy (India) Private Limited,Tuticorin            |
| MU               | Million Units  |
| NAPP             | Narora Atomic Power Plant                                  |
| NCR ALLAHABAD    | North Central Railway, Allahabad                           |
| NEEPCO           | North Eastern Electric Power Corporation Limited           |
| NEP              | Nepal  |
| NFL              | National Fertilisers Limited                               |
| NHPC STATIONS    | National Hydro Electric Power Corporation Ltd. Stations    |
| NJPC             | Nathpa Jhakri Hydroelectric Power Station                  |
| NLC              | Neyveli Lignite Corporation Limited                        |
| NLDC             | National Load Dispatch Centre                              |
| NOKHRA_STPP      | Nokhra Solar Power Plant, NTPC Green Energy Ltd.           |
| NPGC             | Nabinagar Power Generating Company (Pvt.) Limited          |
| NREL_DAYAPAR (W) | NREL-Dayapar Wind  |
| NSPCL            | NTPC - SAIL Power Company Private Limited                  |
| NTECLVallur      | NTPC Tamil Nadu Energy Company Limited Vallur              |
| NTPC_ANTP        | NTPC Anantapur   |
| NTPC STATIONS    | National Thermal Power Corporation Ltd. Stations           |
| NTPL             | NLC Tamil Nadu Power Limited                               |
| NVVN             | NTPC Vidyut Vyapar Nigam Limited                           |
| OCF              | Order Carry Forward  |
| ONEVOLT          | Onevolt Energy Private Limited                             |

|                        |   |
|------------------------|---|
| ONGC Platana           | ONGC Tripura Power Company                                      |
| OPGC                   | Odisha Power Generation Corporation                             |
| ORANGE_TCN             | Orange Renewable Power Pvt. Ltd,Tuticorin                       |
| OSTRO                  | Ostro Energy Private Limited                                    |
| OTC                    | Over The Counter  |
| PARAM_PVGD             | Parampujya Solar Energy Private Ltd                             |
| PARE HEP               | Pare hydroelectric project, Arunachal Pradesh                   |
| PXIL                   | Power Exchange India Limited                                    |
| RAMPUR HEP             | Rampur Hydro Electric Power Project                             |
| RANGIT HEP             | Rangit Hydroelectric power project                              |
| RANGANADI HEP          | Ranganadi Hydro Electric Power Project, Arunachal Pradesh       |
| RAP-B                  | Rajasthan Atomic Power Plant-B                                  |
| RAP-C                  | Rajasthan Atomic Power Plant-C                                  |
| RAPP 7&8               | Rajasthan Atomic Project 7&8                                    |
| REC                    | Renewable Energy Certificate                                    |
| REGL                   | Raigarh Energy Generation Limited                               |
| RENEW_BHACHAU          | ReNew Power Limited, Bhachau                                    |
| RENEW_BHUJ             | ReNew Power Limited, Bhuj                                       |
| RENEW_PVGD             | ReNew Wind Energy (TN2) Private Limited                         |
| RENEW_ROSHNI FATEHGARH | Renew Surya Roshni Private Limited-Fatehgarh-III PS             |
| RENEW_SAAVAN           | Renew Surya Aayan Private Limited                               |
| RENEW_SLR_BKN          | Renew Solar Bikaner   |
| RENEW_SOJAS            | Renew Surya Ojas Private Limited-Wind                           |
| RENEW_SPRATAP          | Renew Surya Pratap Private Limited                              |
| RENEW_SR_SLR           | Renew Surya Ravi Private Limited (Solar)                        |
| RENEW_SVIHAAN          | Renew Surya Vihaan Private Limited                              |
| RENEW_ROSHNI           | Renew Surya Roshni Private Limited Koppal PS                    |
| RENEWJH_SLR            | Renew Solar Energy (Jharkhand Three) Private Limited            |
| RENEWURJA_SLR          | ReNew Solar Urja Private Limited                                |
| RGPPL_IR               | Ratnagiri Gas and Power Private Ltd., supply to Indian Railways |
| RGPPL_OTHER            | Ratnagiri Gas and Power Private Limited                         |
| RISING_SLR             | Rising Sun Energy Pvt. Ltd.                                     |
| RLDC                   | Regional Load Dispatch Centre                                   |
| RONGNICHU HEP          | Rongnichu Hydro Electric Power Project                          |
| RPREL                  | Raipur Energen Limited  |
| RSTPS_FSPP             | NTPC Ramagundam STPS- Floating Solar PV Project                 |
| RTC                    | Round The Clock   |
| RTM                    | Real Time Market  |
| SasanUMPP              | Sasan Ultra Mega Power Project                                  |
| SB_SLR                 | Soft Bank Solar   |
| SB6_POKARAN            | SB Energy Six Private Limited, Pokaran                          |
| SBG CLEANTECH_SLR      | SBG Cleantech Ltd   |
| SBG_NPK                | SB Energy Solar Private Limited,NP Kunta                        |
| SBG_PVGD               | SB Energy Solar Private Limited,Pavagada                        |
| SBSR_SLR               | SBSR Power Cleantech Eleven Private Limited                     |
| SEMBCORP               | Sembcorp Gayatri Power Ltd                                      |
| SIMHAPURI              | Simhapuri Energy Private Limited                                |
| SKS Power              | SKS Power Generation Chhattisgarh Limited                       |
| SESPL                  | Srijan Energy Systems Pvt. Ltd.                                 |
| SINGOLI BHATWARI HEP   | Singoli-Bhatwari Hydroelectric Project, Uttarakhand             |
| SKRPL                  | Sitac Kabini Renewables Pvt. Ltd.                               |
| SPRNG_NPKUNTA          | Sprng Energy, NP Kunta  |
| SPRING_PUGALUR         | Spring Solar Power Private Limited, Pugalur                     |
| SUL                    | Sikkim Urja Limited   |



|                   |   |
|-------------------|---|
| TALA HEP          | Tala Hydroelectric Project, Bhutan              |
| TASHIDENG HEP     | Tashiding Hydro Electric Project, Sikkim        |
| TATA_ANTP         | TATA Power Anantapur                            |
| TATA_PVGD         | Tata Power Renewable Energy Ltd                 |
| TATA_SLR          | Tata Solar                                      |
| TAM               | Term Ahead Market                               |
| TEESTA STG3       | Teesta Stage 3 Hydro Power Project              |
| TEHRI             | Tehri Hydro Electric Power Project              |
| TESPL             | Transition Energy Services Private Limited      |
| THAR1_SLR         | Thar Surya Ravi One Pvt Ltd                     |
| THERMAL POWERTECH | Thermal Powertech Corporation India Limited     |
| TPREL_RADHANESDA  | Tata Power Renewable Energy Limited, Radhanesda |
| TPSL              | TP Saurya Limited                               |
| VINDHYACHAL HVDC  | Vindhyachal High Voltage Direct Current Link    |
| WA                | Weighted Average                                |
| YARROW_PVGD       | Yarrow Infra Structure Private Ltd              |

## 1. Introduction

1.1. A well-functioning electricity market requires an effective market monitoring process. The monthly report on short-term transactions of electricity, published by CERC since 2008 as part of its market monitoring process, provides a snapshot of key aspects of short-term transactions of electricity in India. Here, “short-term transactions of electricity” refers to the contracts of less than one year period for electricity transacted (inter-State) - through Trading Licensees, directly by the Distribution Licensees and on Power Exchanges (Indian Energy Exchange Ltd (IEX), Power Exchange India Ltd (PXIL) and Hindustan Power Exchange Ltd (HPX)). “DSM Volume” includes the volume recorded under Deviation Settlement Mechanism. The main objectives of the report are: (i) to analyse the volume and price of the short-term transactions of electricity; (ii) to assess the competition among the market players; (iii) to analyse the effect of congestion on the volume of electricity transacted through power exchanges; (iv) to provide information on volume and price of Renewable Energy Certificates (RECs) transacted through power exchanges; and (v) to disseminate all other relevant market information. The analysis of short-term transactions of electricity and DSM volume during the month of **July 2024** is presented in the following sections.

## 2. Volume of Short-term Transactions of Electricity and DSM

2.1. During July 2024, total electricity generation, excluding generation from renewable and captive power plants in India, was 134849.67 MU (Table-1). Of the total electricity generation, 17.33% was transacted through short-term and DSM, comprising of 8.17% through bilateral<sup>1</sup> (through Traders and Term-Ahead contracts on power exchanges, and directly between entities), followed by 6.95% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)}, and 2.20% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions and DSM volume (23371.54 MU), 47.16% was transacted through bilateral (i.e. through Traders, Term-Ahead contracts on power exchanges and directly between companies), followed by 40.13% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM}, and 12.72% through DSM (Table-1 & Figure-2).

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<sup>1</sup> With change in the regime on implementation of GNA Regulations from 1<sup>st</sup> October 2023, the volume reported here is not strictly comparable to the volumes in previous months. Some discrepancies were identified by CERC in the data provided by NLDC which prompted further validation. The volume herein is computed after verification with the volumes reported by the Trading Licensees and the Power Exchanges, and are subject to further revision. The Commission has directed NLDC, vide letter dated 05.01.2024, to make necessary provisions to differentiate the type of transactions under GNA and T-GNA at the earliest. In the interim, some of the tables in the monthly reports have been temporarily discontinued.

The daily volume of power exchange transactions is shown in Table-28. Figure-4 shows the daily volume trend for power exchange transactions and DSM volume.

2.3. Of the total volume of electricity transacted through power exchanges, 53.09% of the volume was transacted in DAM (including G-DAM & HP-DAM), followed by 29.35% in RTM and 17.56% in Term Ahead Market (TAM) (including G-TAM & HP-TAM) (Figure-3).

2.4. The share of electricity traded by each trading licensee is given in Table-2 & Figure-5 shows the share of top 5 trading licensees. The volume of electricity transacted by the trading licensees includes bilateral transactions and transactions undertaken through power exchanges. There were 60 trading licensees as of July 2024. Of which, 39 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Adani Enterprises Ltd., Tata Power Trading Company (P) Ltd. and Manikaran Power Ltd., had a share of 80.79% in the total volume of electricity traded by all the licensees.

2.5. Herfindahl-Hirschman Index (HHI), a commonly accepted index to calculate market concentration, has been used to measure competition among trading licensees. An increase in the HHI generally indicates a decrease in competition and an increase in market concentration, and vice versa. The HHI below 0.15 indicates non-concentration, HHI between 0.15 and 0.25 indicates moderate concentration, and HHI above 0.25 indicates high concentration. The HHI has been computed based on the volume of electricity traded (inter-State & intra-State) by inter-State trading licensees, and it was 0.1773 for the month of July 2024, which indicates moderate concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX was 5070.64 MU, while no electricity was transacted in the DAM of PXIL and HPX. The volume of total buy bids and sell bids was 8502.14 MU and 9762.04 MU, respectively in IEX; the same was 1.60 MU and 72.51 MU in PXIL, respectively. While the sell bids volume in HPX was 36.41 MU, no buy bids were received at HPX.

2.7. Of the total volume of electricity transacted in the DAM of IEX, the volume sold by the neighbouring countries of India was 420.53 MU, while no volume was purchased by the neighbouring countries, under the Cross Border Trade of electricity through power exchange (Table-35(a)). No Cross Border transaction of electricity was undertaken through PXIL and HPX.

2.8. The volume of electricity transacted in the G-DAM of IEX was 968.48 MU, while no electricity was transacted in the G-DAM of PXIL and HPX. The volume of total buy bids and sell bids was 3034.85 MU and 1425.71 MU, respectively, in IEX. No bids were received in PXIL and HPX.

2.9. The volume of electricity transacted in the HP-DAM of IEX was 0.20 MU, while no electricity was transacted in the HP-DAM of PXIL and HPX. The volume of total buy bids and sell bids was 0.50 MU and 2602.89 MU, respectively, in IEX. No bids were received in PXIL and HPX.

2.10. The volume of electricity transacted in the RTM of IEX, PXIL and HPX was 3333.89 MU, 0.98 MU and 3.73 MU, respectively. The volume of total buy bids and sell bids was 6705.96 MU and 6395.80 MU, respectively in IEX, 3.98 MU and 2.62 MU in PXIL, & 16.98 MU and 5.95 MU, respectively in HPX. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

2.11. Of the total volume of electricity transacted in the RTM of IEX, the volume sold by the neighbouring countries of India was 28.79 MU, while no volume was purchased, under the Cross Border Trade of electricity through power exchange (Table-35(b)). No Cross Border transaction of electricity was undertaken through PXIL and HPX.

2.12. The volume of electricity transacted in the TAM of IEX, PXIL and HPX was 711.81 MU, 727.12 MU and 401.68 MU, respectively (Table-9, Table-10 & Table-11). The volume of electricity transacted in the Green Term Ahead Market (G-TAM) of IEX, PXIL and HPX was 17.57 MU, 8.42 MU and 113.26 MU, respectively (Table-12, Table-13 & Table-14).

2.13. The volume of electricity transacted in the HP-TAM of IEX and PXIL was 2.21 MU and 16.06 MU, respectively. No electricity was transacted in HP-TAM of HPX (Table-15, Table-16 & Table-17).

### 3. Price of Short-term Transactions of Electricity and DSM charges

3.1. **Price of electricity transacted through Traders:** The minimum, maximum and weighted average sale prices for the electricity transacted through traders were ₹2.73/kWh, ₹10.00/kWh and ₹6.60/kWh, respectively (Table-3). The weighted average sale prices were also computed for the electricity transacted during Round the Clock (RTC), Peak and Off-peak periods separately, and the sale prices were ₹6.49/kWh, ₹9.08/kWh and ₹7.93/kWh, respectively (Table-4).

3.2. **Price of electricity transacted through Power Exchanges:** The minimum, maximum and weighted average prices for the electricity transacted in the DAM of IEX were ₹0.50/kWh, ₹10.00/kWh and ₹4.55/kWh, respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹1.01/kWh, ₹10.00/kWh and ₹4.29/kWh, respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the HP-DAM of IEX were ₹15.00/kWh, ₹15.00/kWh and ₹15.00/kWh, respectively (Table-7). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.30/kWh, ₹10.00/kWh and ₹4.30/kWh, respectively. These prices in the RTM of PXIL were ₹10.00/kWh, ₹10.00/kWh and ₹10.00/kWh respectively. The minimum, maximum and weighted average prices for the electricity transacted in the RTM of HPX were ₹0.00/kWh, ₹10.00/kWh and ₹9.93/kWh, respectively (Table-8). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹7.40/kWh, ₹7.85/kWh and ₹7.80/kWh, respectively (Table-9, Table-10 and Table-11). The weighted average price of electricity transacted in the G-TAM of IEX, PXIL and HPX was ₹6.34/kWh, ₹4.49/kWh and ₹4.43/kWh, respectively (Table-12, Table-13 and Table-14). The weighted average price of electricity transacted in the HP-TAM of IEX and PXIL was ₹15.00/kWh and ₹15.00/kWh, respectively (Table-15 and Table-16). No electricity was transacted in DAM, G-DAM & HP-DAM of PXIL; and in DAM, G-DAM, HP-DAM & HP-TAM of HPX.

3.3. **DSM Charges:** The minimum, maximum and average charge under DSM was ₹0.60/kWh, ₹10.25/kWh and ₹5.42/kWh, respectively (Table-31).

3.4. The comparison of weighted average prices of electricity transacted through trading licensees and power exchanges (collective transactions) is shown in Figure-6. The daily prices of electricity transacted through various segments at power exchanges and their comparison are

shown in Table-29(a), (b), (c) & (d) and Figure-7. The daily volume and charges under DSM are shown in Table-31.

#### **4. Trading Margin**

4.1. As per the CERC (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations 2020, the trading licensees are allowed to charge a trading margin of not less than 0 paise/kWh and upto 7 paise/kWh. The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.019/kWh.

#### **5. Volume of Short-term Transactions of Electricity (Regional Entity<sup>2</sup>-Wise)**

5.1. Of the total DAM transactions at power exchanges, the top 5 regional entities/states sold 31.59% of the volume, and these were Karnataka, Nepal, Jindal Power Ltd Stage II, Uttar Pradesh and Delhi. The HHI for sellers in DAM was 0.0360, which indicates non-concentration of market (Table-18). The top 5 regional entities/states purchased 68.28% of the volume, and these were Telangana, Gujarat, Punjab, Rajasthan and West Bengal. The HHI for buyers in DAM was 0.1856, which indicates moderate concentration of market (Table-19).

5.2. Of the total G-DAM transactions at power exchanges, the top 5 regional entities/states sold 46.55% of the volume, and these were Karnataka, Adani Renewable Energy Holding Four Ltd., Renew Surya Ojas Private Limited-Wind, Himachal Pradesh and Maharashtra. The HHI for sellers in G-DAM was 0.0684, which indicates non-concentration of market (Table-20). The top 5 regional entities/states purchased 75.10% of the volume, and these were Punjab, Bihar, Odisha, Maharashtra and Arcelor Mittal Nippon Steel Hazira. The HHI for buyers in G-DAM was 0.2408, which indicates moderate concentration of market (Table-21).

5.3. The total volume of HP-DAM transactions at power exchanges was sold by only 1 regional entities/states and it was Torrent Power 1147.5 MW Sugan CCPP Kamrej. The HHI for sellers in HP-DAM was 1.00, which indicates high concentration of market (Table-22). The total volume of HP-DAM transactions at power exchanges was purchased by only 1 regional entities/states and it was West Bengal. The HHI for buyers in HP-DAM was 1.00, which indicates high concentration of market (Table-23).

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<sup>2</sup> In case of a State, the entities which are “selling” also include generators connected to State Grid and the entities which are “buying” also include open access consumers.

5.4. Of the total RTM transactions at power exchanges, the top 5 regional entities/states sold 37.02% of the volume, and these were Tamil Nadu, Karnataka, Bihar, Delhi and Odisha. The HHI for sellers in RTM was 0.0435, which indicates non-concentration of market (Table-24). The top 5 regional entities/states purchased 58.55% of the volume, and these were Punjab, Rajasthan, Telangana, West Bengal and Uttar Pradesh. The HHI for buyers in RTM was 0.0880, which indicates non-concentration of market (Table-25).

5.5. The total volume of net transactions through power exchanges (Regional entity-wise), is shown in Table-26 & 30. The top 5 electricity selling regional entities/states of power exchange transactions were Karnataka, Nepal, Jindal Power Ltd Stage II, Delhi and Essar Power Limited. The top 5 electricity purchasing regional entities/states of power exchange transactions were Telangana, Punjab, Rajasthan, Gujarat and West Bengal.

5.6. Of the total under-drawal/ over-injection volume under DSM in July 2024, the top 5 regional entities/states accounted for 23.67% of the volume, and these were Gujarat, Maharashtra, Jammu & Kashmir, Tamil Nadu and Punjab (Table-32). The top 5 regional entities/states under DSM accounted for 22.17% of the total over-drawal/ under-injection volume, and these were NTPC Stations (Northern Region), Rajasthan, Tamil Nadu, NTPC Stations (Western Region) and NTPC Stations (Eastern Region) (Table-33).

## **6. Congestion<sup>3</sup> on Inter-State Transmission Corridor for Day-Ahead Market and Real Time Market on Power Exchanges**

6.1. Power exchanges use a price discovery mechanism in which the aggregate demand and supply are matched to arrive at an unconstrained market price and volume. This process assumes that there is no congestion in the inter-State transmission system between different regions. However, in reality, the system operator (NLDC), in coordination with RLDCs, limits the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”<sup>4</sup>.

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<sup>3</sup> “Congestion” means a situation where the demand for transmission capacity exceeds the available transfer capability

<sup>4</sup> “Market Splitting” is a mechanism adopted by Power Exchanges, where the market is split in the event of transmission congestion, into predetermined (by NLDC) bid areas or zones, which are cleared individually at their respective area prices such that the energy balance in every bid area is reached based upon the demand and supply in individual bid areas and using the available transmission corridor

6.2. The volume of electricity that could not be cleared due to congestion & other reasons and could not be transacted through power exchanges is the difference between unconstrained cleared volume and actual cleared volume. During the month of July 2024, congestion was experienced in DAM, G-DAM & RTM of IEX, in RTM of PXIL and RTM of HPX.

6.3. The volume of electricity that could not be cleared due to congestion in DAM, G-DAM & RTM of IEX was 0.74%, 1.49% and 2.22% respectively, of the unconstrained cleared volume. The volume of electricity that could not be cleared due to congestion in RTM of PXIL and HPX was 20.73% and 37.33% respectively, of the unconstrained cleared volume. In terms of time, congestion occurred was 14.72% in DAM, 7.59% in G-DAM, 18.68% in RTM of IEX, 0.20% in PXIL and 1.51% in RTM of HPX during the month. (Table-27).

## **7. Volume and Price of Renewable Energy Certificates (RECs)**

7.1. The concept of Renewable Energy Certificates (RECs) seeks to address the mismatch between the availability of renewable energy and the requirement of the obligated entities to meet their renewable purchase obligation by purchasing green attributes of renewable energy remotely located in the form of RECs. The REC mechanism is a market-based instrument to promote renewable sources of energy and the development of the electricity market.

7.2. One REC is equivalent to 1 MWh electricity injected into the grid from renewable energy sources. The REC is exchanged only in the power exchanges approved by CERC within the band of a floor price and forbearance (ceiling) price as notified by CERC from time to time. The first REC trading was held on power exchanges in May 2011.

7.3. The categorisation of RECs has been dispensed with on introduction of the concept of multiplier under the CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022, brought into effect from 05.12.2022. Accordingly, the power exchanges deactivated the Solar and Non-Solar REC contract for trading w.e.f. December 2022. A new contract named “REC” has been made available for

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*capacity between various bid areas simultaneously. As a result of this market splitting the price of electricity in the importing region, where demand for electricity is more than supply, becomes relatively higher than the price of electricity in the exporting region.*



trading on the power exchanges. Further, RECs can also be exchanged through trading licensees as per the REC Regulations 2022.

7.4. The details of REC transactions for the month of July 2024 are shown in Table-34. The market clearing volume of RECs transacted on IEX, PXIL and HPX was 3150109, 2176332 and 1400, respectively. The weighted average market clearing price of these RECs was ₹122/MWh in IEX, ₹122/MWh in PXIL and ₹140/MWh in HPX.

7.5. The gap between the volume of buy and sell bids of RECs placed through power exchanges shows the variation in demand for the RECs. The ratio of buy bids to sell bids was 0.51, 0.38 and 0.0005 in IEX, PXIL and HPX, respectively.

7.6. The volume of RECs transacted through Trading Licensees in July 2024 was 44460. The weighted average trade price for the RECs transacted through traders was ₹150/MWh.

## **8. Inferences:**

- a) The percentage of short-term transactions of electricity and DSM volume to total electricity generation was 17.33%.
- b) Of the total short-term transactions and DSM volume (23371.54 MU), 47.16% was transacted through bilateral (i.e. through Traders, Term-Ahead contracts on power exchanges and directly between entities), followed by 40.13% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM}, and 12.72% through DSM.
- c) Of the total volume of electricity transacted through power exchanges, 53.09% of the volume was transacted in DAM (including G-DAM & HP-DAM), followed by 29.35% in RTM and 17.56% in Term Ahead Market (TAM) (including G-TAM & HP-TAM).
- d) The top 5 trading licensees had a share of 80.79% in the total volume traded by all the trading licensees.
- e) The Herfindahl Hirschman Index computed for the volume of electricity traded by trading licensees was 0.1773, indicating moderate concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹6.60/kWh.

- g) The weighted average price of electricity transacted in DAM of IEX was ₹4.55/kWh, while no electricity was transacted in DAM of PXIL and HPX. The weighted average price of electricity transacted in G-DAM of IEX was ₹4.29/kWh, while no electricity was transacted in G-DAM of PXIL and HPX. The weighted average price of electricity transacted in HP-DAM of IEX was ₹15.00/kWh, while no electricity was transacted in HP-DAM of PXIL and HPX. The weighted average price of electricity transacted in RTM of IEX, PXIL and HPX was ₹4.30/kWh, ₹10.00/kWh and ₹9.93/kWh, respectively.
- h) The weighted average price of electricity transacted in TAM of IEX, PXIL and HPX was ₹7.40/kWh, ₹7.85/kWh and ₹7.80/kWh, respectively. The weighted average price of electricity transacted in G-TAM of IEX, PXIL and HPX was ₹6.34/kWh, ₹4.49/kWh and ₹4.43/kWh, respectively. The weighted average price of electricity transacted in HP-TAM of IEX and PXIL was ₹15.00/kWh and ₹15.00/kWh, respectively.
- i) The average charge under DSM was ₹5.42/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.019/kWh.
- k) The top 5 electricity selling regional entities/states of power exchange transactions were Karnataka, Nepal, Jindal Power Ltd Stage II, Delhi and Essar Power Limited. The top 5 electricity purchasing regional entities/states of power exchange transactions were Telangana, Punjab, Rajasthan, Gujarat and West Bengal.
- l) The top 5 under-drawing/ over-injecting regional entities/states under DSM were Gujarat, Maharashtra, Jammu & Kashmir, Tamil Nadu and Punjab. The top 5 over-drawing/ under-injecting regional entities/states under DSM were NTPC Stations (Northern Region), Rajasthan, Tamil Nadu, NTPC Stations (Western Region) and NTPC Stations (Eastern Region).
- m) During the month of July 2024, congestion was experienced in DAM, G-DAM & RTM of IEX, in RTM of PXIL, and in RTM of HPX. The volume of electricity that could not be cleared due to congestion in DAM, G-DAM & RTM of IEX was 0.74%, 1.49% and 2.22% respectively, of the unconstrained cleared volume. The volume of electricity that could not

be cleared due to congestion in RTM of PXIL and HPX was 20.73% and 37.33% respectively, of the unconstrained cleared volume.

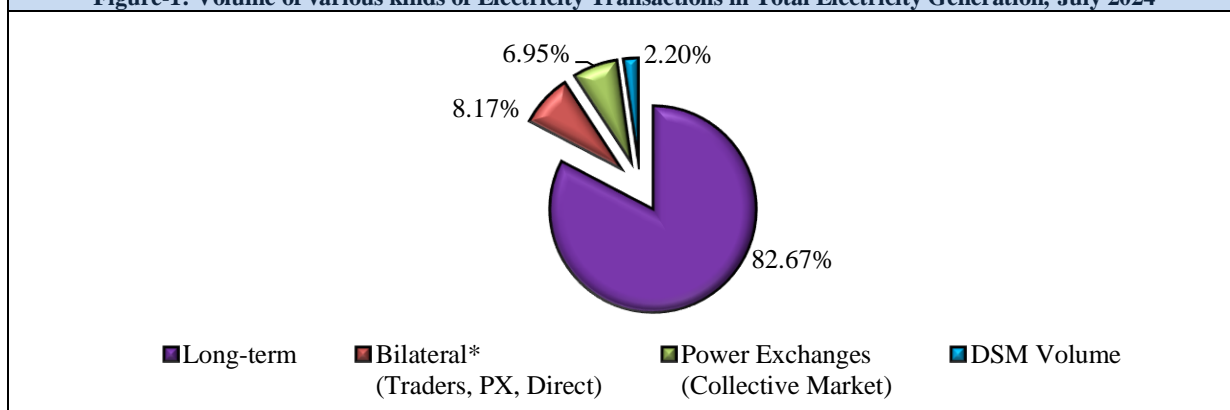
- n) The market clearing volume of RECs transacted on IEX, PXIL and HPX was 3150109, 2176332 and 1400, respectively. The weighted average market clearing price of these RECs was ₹122/MWh in IEX, ₹122/MWh in PXIL and ₹140/MWh in HPX. The volume of RECs transacted through Trading Licensees in July 2024 was 44460. The weighted average trade price for the RECs transacted through traders was ₹150/MWh.

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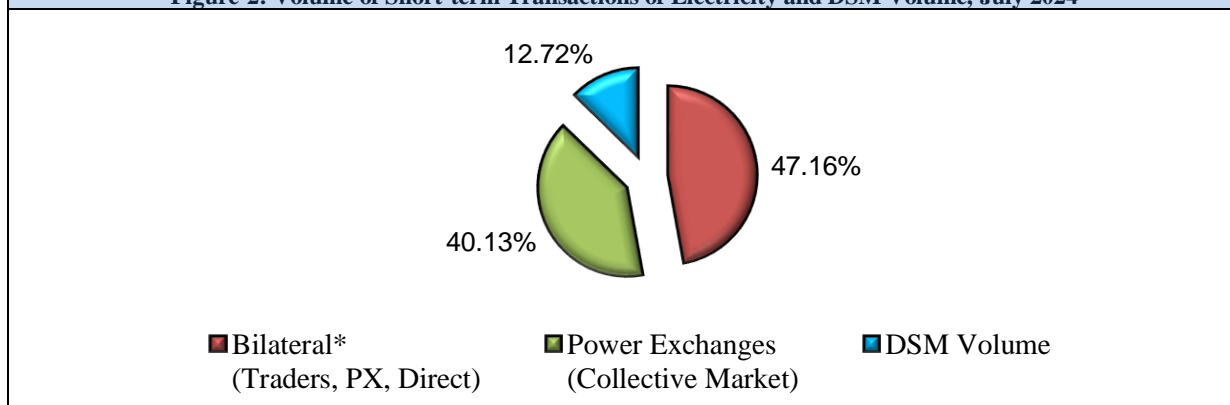
| <b>Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY AND DSM (ALL INDIA), JULY 2024</b> |                                     |                    |  |                              |
|---|-------------------------------------|--------------------|--|------------------------------|
| <b>Sr. No</b>   | <b>Transaction</b>                  | <b>Volume (MU)</b> | <b>% to short-term transactions and DSM Volume</b> | <b>% to Total Generation</b> |
| <b>A</b>  | <b>Short-term transactions</b>      |                    |  |                              |
| 1   | Bilateral* (Traders, PX, Direct)    | <b>11021.06</b>    | <b>47.16</b>                                       | <b>8.17</b>                  |
| 2   | Power Exchanges (Collective Market) | <b>9377.91</b>     | <b>40.13</b>                                       | <b>6.95</b>                  |
|   | (i) IEX                             |                    |  |                              |
|   | (a) DAM                             | 5070.64            | 21.70  | 3.76                         |
|   | (b) RTM                             | 3333.89            | 14.26  | 2.47                         |
|   | (c) GDAM                            | 968.48             | 4.14   | 0.72                         |
|   | (d) HP-DAM                          | 0.20               | 0.001  | 0.0001                       |
|   | (ii) PXIL                           |                    |  |                              |
|   | (a) DAM                             | 0.00               | 0.00   | 0.00                         |
|   | (b) RTM                             | 0.98               | 0.004  | 0.0007                       |
|   | (c) GDAM                            | 0.00               | 0.00   | 0.00                         |
|   | (d) HP-DAM                          | 0.00               | 0.00   | 0.00                         |
|   | (ii) HPX                            |                    |  |                              |
|   | (a) DAM                             | 0.00               | 0.00   | 0.00                         |
|   | (b) RTM                             | 3.73               | 0.02   | 0.003                        |
|   | (c) GDAM                            | 0.00               | 0.00   | 0.00                         |
|   | (d) HP-DAM                          | 0.00               | 0.00   | 0.00                         |
| <b>B</b>  | <b>Through DSM</b>                  | <b>2972.57</b>     | <b>12.72</b>                                       | <b>2.20</b>                  |
| <b>Total Short-term transactions and DSM</b>  |                                     | <b>23371.54</b>    | <b>-</b>   | <b>17.33</b>                 |
| <b>Total Generation</b>   |                                     | <b>134849.67</b>   | <b>-</b>   | <b>-</b>                     |

Source: NLDC

**Figure-1: Volume of various kinds of Electricity Transactions in Total Electricity Generation, July 2024**

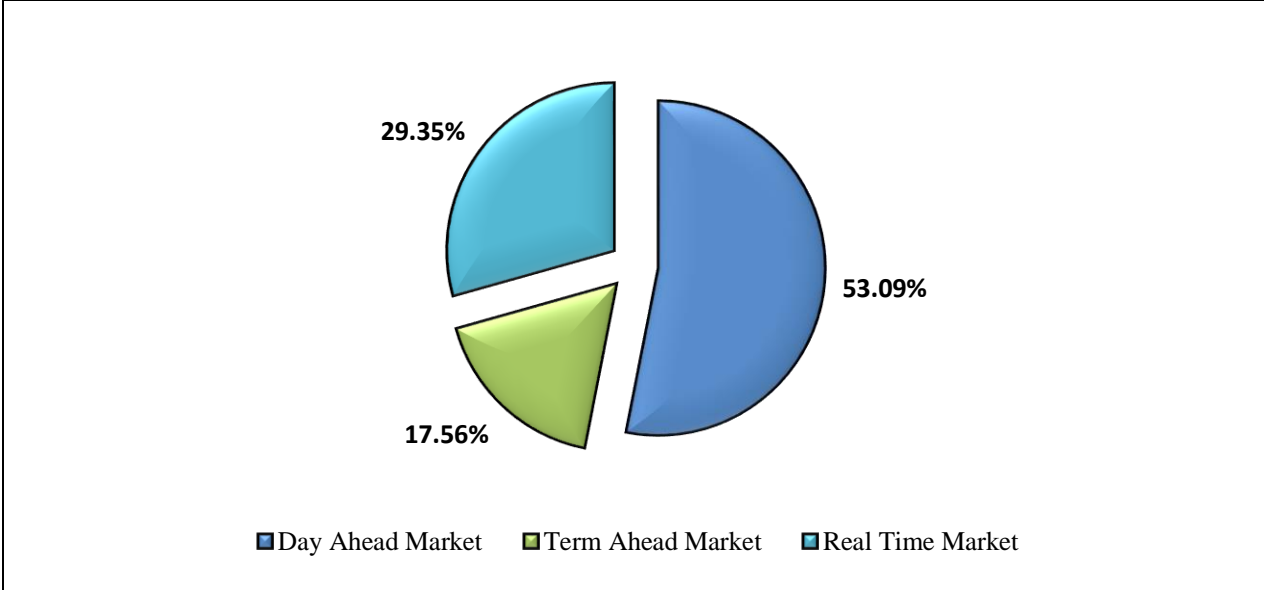


**Figure-2: Volume of Short-term Transactions of Electricity and DSM Volume, July 2024**

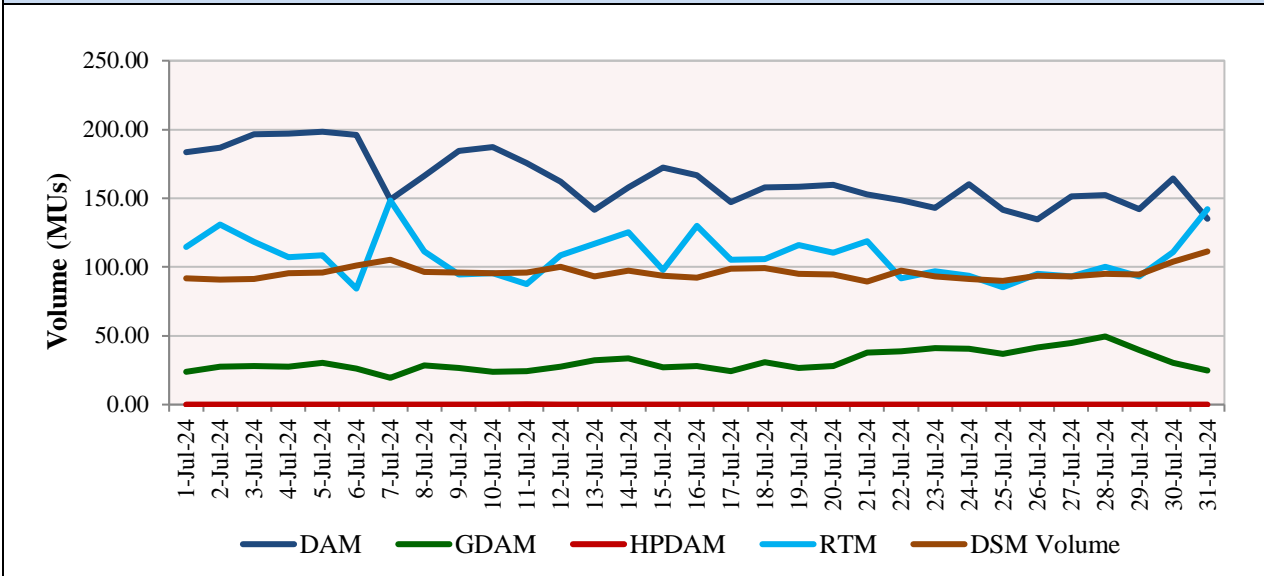


\* With change in the regime on implementation of GNA Regulations from 1<sup>st</sup> October 2023, the volume reported here is not strictly comparable to the volumes in previous months. Some discrepancies were identified by CERC in the data provided by NLDC which prompted further validation. The volume herein is computed after verification with the volumes reported by the Trading Licensees and the Power Exchanges, and may be subject to further revision. The Commission has directed NLDC, vide letter dated 05.01.2024, to make necessary provisions to differentiate the type of transactions under GNA and T-GNA at the earliest.

**Figure-3: Volume transacted in different markets segments on Power Exchanges, July 2024**



**Figure-4: Volume of Transactions on Power Exchanges and DSM Volume, July 2024 (Day-wise)**

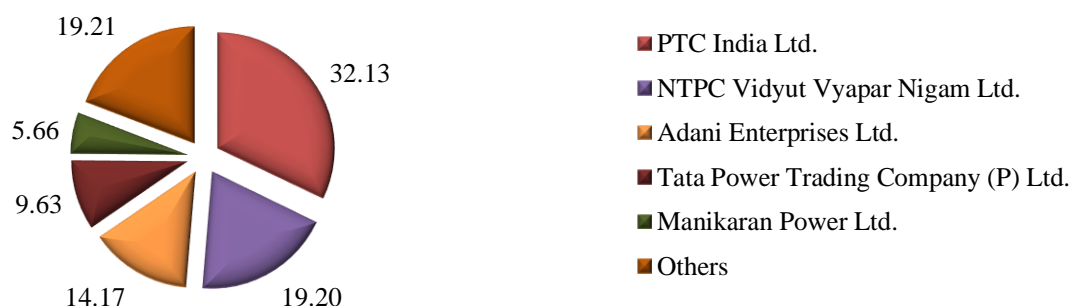


**Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, JULY 2024**

| Sr. No                                  | Name of the Trading Licensee                       | % Share in total Volume traded by Trading Licensees |
|---|--|---|
| 1                                       | PTC India Ltd.                                     | 32.13   |
| 2                                       | NTPC Vidyut Vyapar Nigam Ltd.                      | 19.20   |
| 3                                       | Adani Enterprises Ltd.                             | 14.17   |
| 4                                       | Tata Power Trading Company (P) Ltd.                | 9.63  |
| 5                                       | Manikaran Power Ltd.                               | 5.66  |
| 6                                       | Arunachal Pradesh Power Corporation (P) Ltd        | 5.14  |
| 7                                       | JSW Power Trading Company Ltd                      | 2.54  |
| 8                                       | GMR Energy Trading Ltd.                            | 2.51  |
| 9                                       | Instinct Infra & Power Ltd.                        | 1.32  |
| 10                                      | Greenko Energies Pvt Ltd                           | 1.27  |
| 11                                      | Statkraft Markets Pvt. Ltd.                        | 1.01  |
| 12                                      | Kreate Energy (I) Pvt. Ltd.                        | 0.92  |
| 13                                      | Shree Cement Ltd.                                  | 0.73  |
| 14                                      | Adarsh Stainless Pvt. Ltd.                         | 0.66  |
| 15                                      | RPG Power Trading Company Ltd.                     | 0.52  |
| 16                                      | Altilium Energie Private Limited                   | 0.35  |
| 17                                      | Kundan International Pvt. Ltd.                     | 0.31  |
| 18                                      | Ambitious Power Trading Company Ltd.               | 0.26  |
| 19                                      | Energyedge Power Trading Pvt. Ltd.                 | 0.23  |
| 20                                      | Saranyu Power Trading Private Limited              | 0.21  |
| 21                                      | Ideal Energy Solution Pvt. Ltd.                    | 0.16  |
| 22                                      | Abja Power Private Limited                         | 0.16  |
| 23                                      | Refex Industries Ltd.                              | 0.15  |
| 24                                      | Refex Energy Limited                               | 0.11  |
| 25                                      | NLC India Ltd.                                     | 0.11  |
| 26                                      | SJVN Ltd.  | 0.09  |
| 27                                      | Powerfull Energy Trading Pvt. Ltd.                 | 0.07  |
| 28                                      | Instant Ventures Pvt. Ltd.                         | 0.06  |
| 29                                      | Elsa Consultancy                                   | 0.05  |
| 30                                      | Customized Energy Solutions India (P) Ltd.         | 0.05  |
| 31                                      | Shubheksha Advisors Pvt. Ltd.                      | 0.05  |
| 32                                      | Gita Power & Infrastructure Private Limited        | 0.04  |
| 33                                      | Saini Power Transactor                             | 0.04  |
| 34                                      | NEFA Power Trading Pvt. Ltd.                       | 0.04  |
| 35                                      | Phillip Commodities India (P) Ltd.                 | 0.03  |
| 36                                      | REL Power Trading LLP                              | 0.02  |
| 37                                      | Shell Energy Marketing and Trading India Pvt. Ltd. | 0.002   |
| 38                                      | Renesis Solar Pvt. Ltd.                            | 0.002   |
| 39                                      | Renurja Power LLP                                  | 0.0003  |
| <b>TOTAL</b>                            |  | <b>100.00%</b>                                      |
| <b>Top 5 trading licensees</b>          |  | <b>80.79%</b>                                       |
| <b>Herfindahl-Hirschman Index (HHI)</b> |  | <b>0.1773</b>                                       |

Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges.

Source: Information submitted by trading licensees

**Figure 5: Percentage Share of Electricity Transacted by Trading Licensees, July 2024**

**Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, JULY 2024**

| Sr.No | Item             | Sale Price of Traders (₹/kWh) |
|-------|------------------|-------------------------------|
| 1     | Minimum          | 2.73                          |
| 2     | Maximum          | 10.00                         |
| 3     | Weighted Average | 6.60                          |

Source: Information submitted by trading licensees

**Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), JULY 2024**

| Sr.No | Period of Trade | Sale Price of Traders (₹/kWh) |
|-------|-----------------|-------------------------------|
| 1     | RTC             | 6.49                          |
| 2     | PEAK            | 9.08                          |
| 3     | OFF PEAK        | 7.93                          |

Source: Information submitted by trading licensees

**Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET, JULY 2024**

| Sr.No | ACP              | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
|-------|------------------|----------------------|-----------------------|----------------------|
| 1     | Minimum          | 0.50                 | -                     | -                    |
| 2     | Maximum          | 10.00                | -                     | -                    |
| 3     | Weighted Average | 4.55                 | -                     | -                    |

Source: IEX, PXIL and HPX

**Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET, JULY 2024**

| Sr.No | ACP              | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
|-------|------------------|----------------------|-----------------------|----------------------|
| 1     | Minimum          | 1.01                 | -                     | -                    |
| 2     | Maximum          | 10.00                | -                     | -                    |
| 3     | Weighted Average | 4.29                 | -                     | -                    |

Source: IEX, PXIL and HPX

**Table-7: PRICE OF ELECTRICITY TRANSACTED IN HIGH PRICE DAY AHEAD MARKET, JULY 2024**

| Sr.No | ACP              | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
|-------|------------------|----------------------|-----------------------|----------------------|
| 1     | Minimum          | 15.00                | -                     | -                    |
| 2     | Maximum          | 15.00                | -                     | -                    |
| 3     | Weighted Average | 15.00                | -                     | -                    |

Source: IEX, PXIL and HPX

**Table-8: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET, JULY 2024**

| Sr.No | ACP              | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
|-------|------------------|----------------------|-----------------------|----------------------|
| 1     | Minimum          | 0.30                 | 10.00                 | 0.00                 |
| 2     | Maximum          | 10.00                | 10.00                 | 10.00                |
| 3     | Weighted Average | 4.30                 | 10.00                 | 9.93                 |

Source: IEX, PXIL and HPX

Note: The Minimum ACP in RTM on HPX was Rs. 0.00/kWh on account of congestion in seller (export)side. The quantum that could be cleared after considering congestion was offered by the seller was at Rs. 0.00/kWh (Sell Bid). In the particular block, the ACP for Buyer bid area was Rs. 10/kWh (Upstream) while the ACP for Seller bid area was Rs. 0/kWh (Downstream). The difference of the Upstream and Downstream price constitutes the Congestion revenue. The particular case does not represent typical market conditions.

**Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, JULY 2024**

| Sr.No | Term ahead contracts            | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|-------|---------------------------------|------------------------------|--------------------------------|
| 1     | Intra-Day Contracts             | 18.85                        | 10.00                          |
| 2     | Day Ahead Contingency Contracts | 355.03                       | 8.48                           |
| 3     | Daily Contracts                 | 205.37                       | 5.86                           |
| 4     | Monthly Contracts               | 57.74                        | 5.90                           |
| 5     | Any Day Single Sided Contracts  | 74.81                        | 7.03                           |
|       | <b>Total</b>                    | <b>711.81</b>                | <b>7.40</b>                    |

Source: IEX

**Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, JULY 2024**

| Sr.No | Term ahead contracts            | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|-------|---------------------------------|------------------------------|--------------------------------|
| 1     | Intra-Day Contracts             | 63.14                        | 9.86                           |
| 2     | Day Ahead Contingency Contracts | 410.60                       | 8.23                           |
| 3     | Daily Contracts                 | 119.62                       | 7.71                           |
| 4     | Monthly Contracts               | 59.78                        | 5.90                           |
| 5     | Any Day Single Sided Contracts  | 73.97                        | 5.84                           |
|       | <b>Total</b>                    | <b>727.12</b>                | <b>7.85</b>                    |

Source: PXIL

**Table-11: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, JULY 2024**

| Sr.No | Term ahead contracts            | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|-------|---------------------------------|------------------------------|--------------------------------|
| 1     | Intra-Day Contracts             | 19.78                        | 10.00                          |
| 2     | Day Ahead Contingency Contracts | 204.27                       | 8.91                           |
| 3     | Daily Contracts                 | 17.85                        | 9.01                           |
| 4     | Any Day Single Sided Contracts  | 159.78                       | 5.98                           |
|       | <b>Total</b>                    | <b>401.68</b>                | <b>7.80</b>                    |

Source: HPX

**Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TAM OF IEX, JULY 2024**

| Sr. No | Green Term ahead contracts      | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|--------|---------------------------------|------------------------------|--------------------------------|
| 1      | Day Ahead Contingency Contracts | 9.39                         | 6.33                           |
| 2      | Daily Contracts                 | 8.18                         | 6.35                           |
|        | <b>Total</b>                    | <b>17.57</b>                 | <b>6.34</b>                    |

Source: IEX

**Table-13: VOLUME AND PRICE OF ELECTRICITY IN GREEN TAM OF PXIL, JULY 2024**

| Sr. No | Green Term ahead contracts      | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|--------|---------------------------------|------------------------------|--------------------------------|
| 1      | Day Ahead Contingency Contracts | 8.42                         | 4.49                           |
|        | <b>Total</b>                    | <b>8.42</b>                  | <b>4.49</b>                    |

Source: PXIL

**Table-14: VOLUME AND PRICE OF ELECTRICITY IN GREEN TAM OF HPX, JULY 2024**

| Sr. No | Green Term ahead contracts      | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|--------|---------------------------------|------------------------------|--------------------------------|
| 1      | Day Ahead Contingency Contracts | 105.66                       | 4.51                           |
| 2      | Daily Contracts                 | 7.60                         | 3.34                           |
|        | <b>Total</b>                    | <b>113.26</b>                | <b>4.43</b>                    |

Source: HPX

**Table-15: VOLUME AND PRICE OF ELECTRICITY IN HIGH PRICE TAM OF IEX, JULY 2024**

| Sr. No | High Price Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|--------|---------------------------------|------------------------------|--------------------------------|
| 1      | Intra-Day Contracts             | 1.11                         | 15.00                          |
| 2      | Day Ahead Contingency Contracts | 1.10                         | 15.00                          |
|        | <b>Total</b>                    | <b>2.21</b>                  | <b>15.00</b>                   |

Source: IEX

**Table-16: VOLUME AND PRICE OF ELECTRICITY IN HIGH PRICE TAM OF PXIL, JULY 2024**

| Sr. No | High Price Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|--------|---------------------------------|------------------------------|--------------------------------|
| 1      | Intra-Day Contracts             | 15.05                        | 15.00                          |
| 2      | Day Ahead Contingency Contracts | 1.01                         | 15.00                          |
|        | <b>Total</b>                    | <b>16.06</b>                 | <b>15.00</b>                   |

Source: PXIL

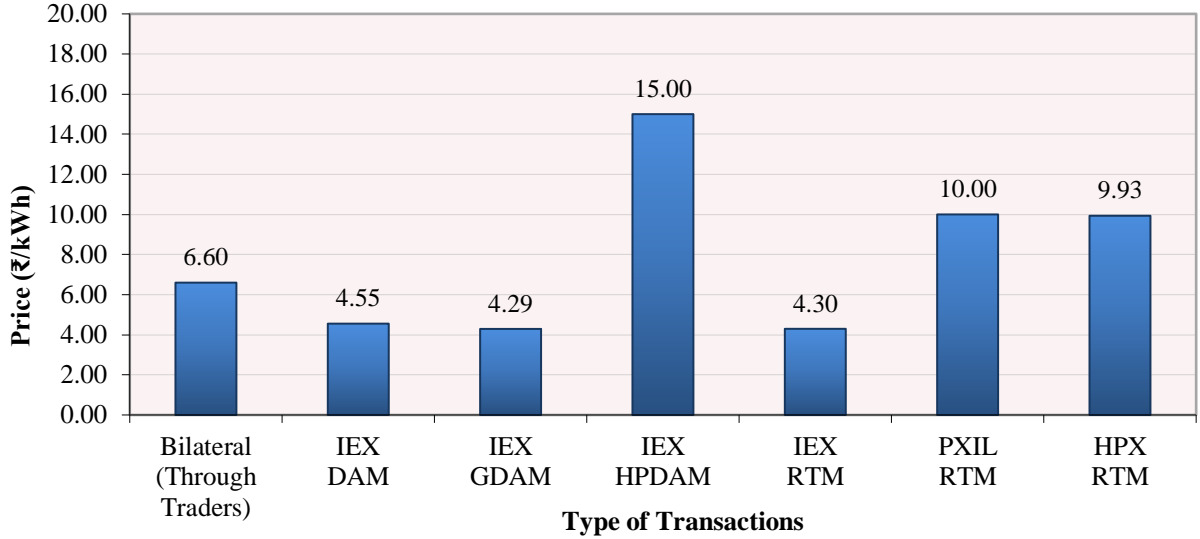
**Table-17: VOLUME AND PRICE OF ELECTRICITY IN HIGH PRICE TAM OF HPX, JULY 2024**

| Sr. No | High Price Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
|--------|---------------------------------|------------------------------|--------------------------------|
|        | No trade                        | 0.00                         | -                              |
|        | <b>Total</b>                    | <b>0.00</b>                  | <b>-</b>                       |

Source: HPX

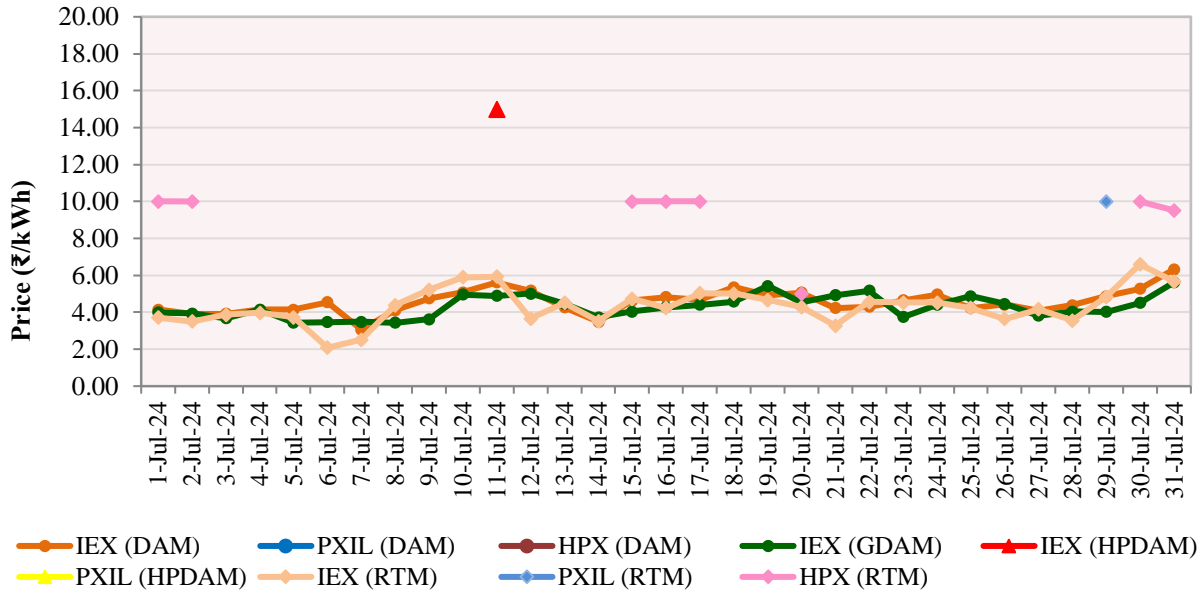


**Figure-6: Weighted Average Price of Short-term Transactions of Electricity, July 2024**



*Note: No electricity was transacted in DAM of PXIL & HPX, G-DAM of PXIL & HPX, and in HP-DAM of PXIL & HPX during July 2024*

**Figure-7: Weighted Average Price of Short-term Transactions of Electricity, July 2024 (Day-wise)**



*Note: No electricity was transacted in DAM of PXIL & HPX, G-DAM of PXIL & HPX, and in HP-DAM of PXIL & HPX during July 2024*

**Table-18: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b> | <b>Volume of Sale (MUs)</b> | <b>% of Volume</b> |
|---------------------------|-----------------------------|--------------------|
| KARNATAKA                 | 578.66                      | 11.41              |
| NEPAL(NVVN)               | 332.86                      | 6.56               |
| JINDAL STAGE-II           | 252.89                      | 4.99               |
| UTTAR PRADESH             | 238.06                      | 4.69               |
| DELHI                     | 199.48                      | 3.93               |
| ESSAR POWER               | 198.67                      | 3.92               |
| ODISHA                    | 181.19                      | 3.57               |
| ASSAM                     | 170.15                      | 3.36               |
| NTPC STATIONS-ER          | 154.07                      | 3.04               |
| HIMACHAL PRADESH          | 145.16                      | 2.86               |
| JINDAL POWER              | 140.73                      | 2.78               |
| KARCHAM WANGTOO           | 117.48                      | 2.32               |
| JAYPEE NIGRIE             | 113.90                      | 2.25               |
| DB POWER                  | 106.21                      | 2.09               |
| AD HYDRO                  | 104.52                      | 2.06               |
| ARTPP                     | 100.88                      | 1.99               |
| CHHATTISGARH              | 100.70                      | 1.99               |
| HARYANA                   | 88.93                       | 1.75               |
| GUJARAT                   | 86.59                       | 1.71               |
| ANDHRA PRADESH            | 85.98                       | 1.70               |
| RAIGARH_ADANI             | 79.11                       | 1.56               |
| DCPP                      | 67.25                       | 1.33               |
| NPGC                      | 65.07                       | 1.28               |
| SKS POWER                 | 63.47                       | 1.25               |
| MP                        | 61.00                       | 1.20               |
| RAJASTHAN                 | 57.95                       | 1.14               |
| SEBICORP                  | 57.40                       | 1.13               |
| ADANI_WIND                | 46.41                       | 0.92               |
| MAHARASHTRA               | 44.88                       | 0.89               |
| RENEW_SPRATAP             | 42.98                       | 0.85               |
| RENEW_SOJAS               | 42.12                       | 0.83               |
| BASOCHHU HEP              | 38.58                       | 0.76               |
| SAINJ HEP                 | 38.28                       | 0.75               |
| BIHAR                     | 38.22                       | 0.75               |
| SORANG HEP                | 37.67                       | 0.74               |
| TAMIL NADU                | 36.68                       | 0.72               |
| ACBIL                     | 36.03                       | 0.71               |
| SHREE CEMENT              | 35.45                       | 0.70               |
| IBEUL                     | 33.29                       | 0.66               |
| ASEJTL_SLR                | 32.28                       | 0.64               |
| ADANI_4RE                 | 31.39                       | 0.62               |
| RENEW_SR_SLR              | 30.98                       | 0.61               |
| RKM POWER                 | 28.82                       | 0.57               |
| ADEPT                     | 28.54                       | 0.56               |
| NEP                       | 27.77                       | 0.55               |
| MIZORAM                   | 25.59                       | 0.50               |
| JITPL                     | 22.97                       | 0.45               |
| NTPC STATIONS-NR          | 22.27                       | 0.44               |
| NIKACHHU HEP              | 21.32                       | 0.42               |
| DEVKOOT_SLR               | 20.97                       | 0.41               |
| NTPC STATIONS-SR          | 20.58                       | 0.41               |
| DVC                       | 20.06                       | 0.40               |
| KBUNL                     | 19.86                       | 0.39               |
| MARUTI COAL               | 19.40                       | 0.38               |

|   |                |               |
|---|----------------|---------------|
| ARUNACHAL PRADESH                             | 18.27          | 0.36          |
| ONEVOLT                                       | 17.42          | 0.34          |
| ADANI GREEN_25B (INFIRM)                      | 16.13          | 0.32          |
| WEST BENGAL                                   | 15.35          | 0.30          |
| CHANDIGARH                                    | 14.27          | 0.28          |
| OSTRO Hiriyur                                 | 12.79          | 0.25          |
| BALCO   | 12.49          | 0.25          |
| MEGHALAYA                                     | 11.82          | 0.23          |
| SIMHAPURI                                     | 10.12          | 0.20          |
| BRBCL,NABINAGAR                               | 9.28           | 0.18          |
| ADANI_S_RJ2                                   | 8.96           | 0.18          |
| LANCO BUDHIL                                  | 8.66           | 0.17          |
| GOA   | 8.54           | 0.17          |
| TELANGANA                                     | 7.96           | 0.16          |
| KERALA  | 7.62           | 0.15          |
| NTPC STATIONS-NER                             | 7.18           | 0.14          |
| PONDICHERRY                                   | 7.07           | 0.14          |
| REENERGY5_WIND                                | 6.56           | 0.13          |
| SINGOLI BHATWARI HEP                          | 6.27           | 0.12          |
| ADANIRE_41 (INFIRM)                           | 6.07           | 0.12          |
| IL&FS   | 5.45           | 0.11          |
| NHPC STATIONS                                 | 5.39           | 0.11          |
| MB POWER                                      | 5.10           | 0.10          |
| EMCO  | 4.34           | 0.09          |
| IGSTPS  | 4.05           | 0.08          |
| NAGALAND                                      | 3.98           | 0.08          |
| ADANI_W_KUTCHH4 (INFIRM)                      | 3.95           | 0.08          |
| J & K   | 3.84           | 0.08          |
| ONGC PALATANA                                 | 3.56           | 0.07          |
| TPSL BANDERWALA                               | 3.50           | 0.07          |
| ADANI GREEN_26B (INFIRM)                      | 3.43           | 0.07          |
| ADANIRE_55 (INFIRM)                           | 3.42           | 0.07          |
| UTTARAKHAND                                   | 3.30           | 0.07          |
| ADANI GREEN_25A (INFIRM)                      | 2.80           | 0.06          |
| TESPL   | 2.66           | 0.05          |
| DHARIWAL POWER                                | 2.17           | 0.04          |
| SIKKIM  | 1.62           | 0.03          |
| NLC   | 0.83           | 0.02          |
| NTPC STATIONS-WR                              | 0.68           | 0.01          |
| JHABUA POWER_MP                               | 0.60           | 0.01          |
| DGEN MEGA POWER                               | 0.52           | 0.01          |
| SERENTICA RE1 (INFIRM)                        | 0.20           | 0.004         |
| GMR KAMALANGA                                 | 0.14           | 0.003         |
| NANI VIRANI_W                                 | 0.13           | 0.003         |
| ADANI GREEN_26A (INFIRM)                      | 0.11           | 0.002         |
| COASTGEN                                      | 0.11           | 0.002         |
| MTPS  | 0.11           | 0.002         |
| JHARKHAND                                     | 0.04           | 0.001         |
| NEEPCO STATIONS                               | 0.02           | 0.0003        |
| <b>Total</b>                                  | <b>5070.64</b> | <b>100.00</b> |
| <b>Volume sold by top 5 Regional Entities</b> | <b>1601.95</b> | <b>31.59</b>  |
| <b>Herfindahl-Hirschman Index</b>             |                | <b>0.0360</b> |

Source: NLDC

**Table-19: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2024**

| Name of the Entity                                 | Volume of Purchase (MUs) | % of Volume   |
|--|--------------------------|---------------|
| TELANGANA  | 1985.26                  | 39.15         |
| GUJARAT  | 522.56                   | 10.31         |
| PUNJAB   | 380.15                   | 7.50          |
| RAJASTHAN  | 290.92                   | 5.74          |
| WEST BENGAL  | 283.28                   | 5.59          |
| UTTAR PRADESH                                      | 261.52                   | 5.16          |
| DD&DNH   | 259.10                   | 5.11          |
| TAMIL NADU   | 196.60                   | 3.88          |
| ANDHRA PRADESH                                     | 153.90                   | 3.04          |
| HARYANA  | 114.01                   | 2.25          |
| CHHATTISGARH                                       | 91.38                    | 1.80          |
| KERALA   | 85.48                    | 1.69          |
| UTTARAKHAND  | 85.10                    | 1.68          |
| MAHARASHTRA  | 77.46                    | 1.53          |
| MP   | 46.75                    | 0.92          |
| HIMACHAL PRADESH                                   | 38.10                    | 0.75          |
| KARNATAKA  | 34.77                    | 0.69          |
| ODISHA   | 26.70                    | 0.53          |
| BIHAR  | 22.33                    | 0.44          |
| NCR ALLAHABAD                                      | 21.99                    | 0.43          |
| DELHI  | 18.30                    | 0.36          |
| AMPS Hazira  | 14.11                    | 0.28          |
| GOA  | 14.10                    | 0.28          |
| ASSAM  | 10.98                    | 0.22          |
| SIKKIM   | 10.53                    | 0.21          |
| JHARKHAND  | 9.04                     | 0.18          |
| CHANDIGARH   | 7.10                     | 0.14          |
| TRIPURA  | 4.88                     | 0.10          |
| MEGHALAYA  | 1.66                     | 0.03          |
| DVC  | 1.36                     | 0.03          |
| BALCO  | 0.99                     | 0.02          |
| PONDICHERRY  | 0.14                     | 0.00          |
| JHABUA POWER_MP                                    | 0.09                     | 0.00          |
| <b>TOTAL</b>                                       | <b>5070.64</b>           | <b>100.00</b> |
| <b>Volume purchased by top 5 Regional Entities</b> | <b>3462.17</b>           | <b>68.28</b>  |
| <b>Herfindahl-Hirschman Index</b>                  |                          | <b>0.1856</b> |

Source: NLDC

**Table-20: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b>                     | <b>Volume of Sale (MUs)</b> | <b>% of Volume</b> |
|---|-----------------------------|--------------------|
| KARNATAKA                                     | 176.23                      | 18.20              |
| ADANI_4RE                                     | 90.77                       | 9.37               |
| RENEW_SOJAS                                   | 79.42                       | 8.20               |
| HIMACHAL PRADESH                              | 52.78                       | 5.45               |
| MAHARASHTRA                                   | 51.64                       | 5.33               |
| ASEJTL_SLR                                    | 46.75                       | 4.83               |
| ADANI GREEN_25B (INFIRM)                      | 46.09                       | 4.76               |
| ADANI_WIND                                    | 38.03                       | 3.93               |
| MEGHALAYA                                     | 34.35                       | 3.55               |
| ANDHRA PRADESH                                | 30.97                       | 3.20               |
| TPSL BANDERWALA                               | 30.37                       | 3.14               |
| OSTRO Hiriyur                                 | 24.70                       | 2.55               |
| MP  | 23.81                       | 2.46               |
| RISING_SLR                                    | 21.11                       | 2.18               |
| UTTAR PRADESH                                 | 17.95                       | 1.85               |
| UTTARAKHAND                                   | 17.64                       | 1.82               |
| AYANA_RP3                                     | 17.36                       | 1.79               |
| ADANIRE_41 (INFIRM)                           | 17.31                       | 1.79               |
| J & K   | 15.15                       | 1.56               |
| WEST BENGAL                                   | 14.10                       | 1.46               |
| TESPL   | 12.33                       | 1.27               |
| ADANIRE_55 (INFIRM)                           | 10.35                       | 1.07               |
| SINGOLI BHATWARI HEP                          | 9.64                        | 1.00               |
| ADANI GREEN_26B (INFIRM)                      | 9.52                        | 0.98               |
| AMPLUS_AGES                                   | 9.49                        | 0.98               |
| SIKKIM  | 8.84                        | 0.91               |
| ADANI_W_KUTCHH4 (INFIRM)                      | 8.55                        | 0.88               |
| CONTINNUM PT                                  | 7.70                        | 0.80               |
| RENEW_SR_SLR                                  | 7.65                        | 0.79               |
| RAJASTHAN                                     | 7.45                        | 0.77               |
| JSW_RENEW_2                                   | 6.96                        | 0.72               |
| ADANI GREEN_25A (INFIRM)                      | 6.47                        | 0.67               |
| RENERGY5_WIND                                 | 5.30                        | 0.55               |
| NANI VIRANI_W                                 | 4.14                        | 0.43               |
| DELHI   | 2.41                        | 0.25               |
| NTPC STATIONS-SR                              | 2.29                        | 0.24               |
| SERENTICA RE1 (INFIRM)                        | 1.26                        | 0.13               |
| SORANG HEP                                    | 1.20                        | 0.12               |
| ADANI GREEN_26A (INFIRM)                      | 0.37                        | 0.04               |
| <b>Total</b>                                  | <b>968.48</b>               | <b>100.00</b>      |
| <b>Volume sold by top 5 Regional Entities</b> | <b>450.85</b>               | <b>46.55</b>       |
| <b>Herfindahl-Hirschman Index</b>             |                             | <b>0.0684</b>      |

Source: NLDC

**Table-21: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b>                          | <b>Volume of Purchase (MUs)</b> | <b>% of Volume</b> |
|--|---------------------------------|--------------------|
| PUNJAB   | 448.10                          | 46.27              |
| BIHAR  | 80.62                           | 8.32               |
| ODISHA   | 74.35                           | 7.68               |
| MAHARASHTRA  | 62.16                           | 6.42               |
| AMPS Hazira  | 62.13                           | 6.42               |
| JHARKHAND  | 34.01                           | 3.51               |
| TAMIL NADU   | 33.71                           | 3.48               |
| DVC  | 31.98                           | 3.30               |
| GUJARAT  | 19.41                           | 2.00               |
| NCR ALLAHABAD                                      | 19.26                           | 1.99               |
| KARNATAKA  | 18.22                           | 1.88               |
| CHHATTISGARH                                       | 16.61                           | 1.71               |
| HARYANA  | 12.06                           | 1.25               |
| UTTAR PRADESH                                      | 11.89                           | 1.23               |
| TELANGANA  | 11.30                           | 1.17               |
| KERALA   | 9.65                            | 1.00               |
| ANDHRA PRADESH                                     | 9.23                            | 0.95               |
| DELHI  | 6.45                            | 0.67               |
| MP   | 5.35                            | 0.55               |
| BALCO  | 1.87                            | 0.19               |
| DD&DNH   | 0.10                            | 0.01               |
| GOA  | 0.01                            | 0.001              |
| <b>TOTAL</b>                                       | <b>968.48</b>                   | <b>100.00</b>      |
| <b>Volume purchased by top 5 Regional Entities</b> | <b>727.36</b>                   | <b>75.10</b>       |
| <b>Herfindahl-Hirschman Index</b>                  |                                 | <b>0.2408</b>      |

Source: NLDC

**Table-22: VOLUME OF ELECTRICITY SOLD IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b>                                 | <b>Volume of Sale (MUs)</b> | <b>% of Volume</b> |
|---|-----------------------------|--------------------|
| GUJARAT<br>(Torrent Power 1147.5 MW Sugen CCPP<br>Kamrej) | 0.20                        | 100.00             |
| <b>TOTAL</b>  | <b>0.20</b>                 | <b>100.00</b>      |
| <b>Volume sold by top 5 Regional Entities</b>             | <b>0.20</b>                 | <b>100.00</b>      |
| <b>Herfindahl-Hirschman Index</b>                         |                             | <b>1.0000</b>      |

Source: NLDC & IEX

**Table-23: VOLUME OF ELECTRICITY PURCHASED IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b>                          | <b>Volume of Purchase (MUs)</b> | <b>% of Volume</b> |
|--|---------------------------------|--------------------|
| WEST BENGAL  | 0.20                            | 100.00             |
| <b>TOTAL</b>                                       | <b>0.20</b>                     | <b>100.00</b>      |
| <b>Volume purchased by top 5 Regional Entities</b> | <b>0.20</b>                     | <b>100.00</b>      |
| <b>Herfindahl-Hirschman Index</b>                  |                                 | <b>1.0000</b>      |

Source: NLDC

**Table-24: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b> | <b>Volume of Sale (MUs)</b> | <b>% of Volume</b> |
|---------------------------|-----------------------------|--------------------|
| TAMIL NADU                | 419.44                      | 12.56              |
| KARNATAKA                 | 280.27                      | 8.39               |
| BIHAR                     | 204.31                      | 6.12               |
| DELHI                     | 167.63                      | 5.02               |
| ODISHA                    | 164.38                      | 4.92               |
| HARYANA                   | 154.82                      | 4.64               |
| ANDHRA PRADESH            | 137.54                      | 4.12               |
| UTTAR PRADESH             | 117.25                      | 3.51               |
| MP                        | 102.74                      | 3.08               |
| CHHATTISGARH              | 102.24                      | 3.06               |
| NTPC STATIONS-WR          | 89.00                       | 2.67               |
| HIMACHAL PRADESH          | 83.30                       | 2.50               |
| TELANGANA                 | 73.36                       | 2.20               |
| NTPC STATIONS-NR          | 57.71                       | 1.73               |
| MAHARASHTRA               | 56.45                       | 1.69               |
| NTPC STATIONS-ER          | 54.10                       | 1.62               |
| ASSAM                     | 53.49                       | 1.60               |
| WEST BENGAL               | 44.22                       | 1.32               |
| GUJARAT                   | 42.95                       | 1.29               |
| RENEW_SOJAS               | 41.24                       | 1.24               |
| NTPC STATIONS-SR          | 40.25                       | 1.21               |
| RAJASTHAN                 | 38.91                       | 1.17               |
| J & K                     | 32.92                       | 0.99               |
| JHARKHAND                 | 32.41                       | 0.97               |
| PUNJAB                    | 30.37                       | 0.91               |
| ARUNACHAL PRADESH         | 28.62                       | 0.86               |
| UTTARAKHAND               | 27.95                       | 0.84               |
| MTPS                      | 27.09                       | 0.81               |
| ADANI_4RE                 | 26.79                       | 0.80               |
| DVC                       | 25.14                       | 0.75               |
| TESPL                     | 24.74                       | 0.74               |
| SEMBCORP                  | 22.54                       | 0.68               |
| NEPAL(NVVN)               | 21.26                       | 0.64               |
| ADANI GREEN_25B (INFIRM)  | 21.18                       | 0.63               |
| NLC                       | 20.89                       | 0.63               |
| ESSAR POWER               | 20.46                       | 0.61               |
| ARTPP                     | 19.22                       | 0.58               |
| JINDAL STAGE-II           | 18.87                       | 0.57               |
| KERALA                    | 18.20                       | 0.54               |
| SKS POWER                 | 17.61                       | 0.53               |
| RENEW_ROSHNI              | 16.80                       | 0.50               |
| ADHUNIK POWER LTD         | 16.50                       | 0.49               |
| SERENTICA RE1 (INFIRM)    | 16.12                       | 0.48               |
| RKM POWER                 | 15.62                       | 0.47               |
| BALCO                     | 14.96                       | 0.45               |
| MEENAKSHI                 | 14.87                       | 0.45               |
| NPGC                      | 13.65                       | 0.41               |
| PONDICHERRY               | 12.21                       | 0.37               |
| MANIPUR                   | 10.85                       | 0.32               |
| NREL_DAYAPAR (W)          | 10.15                       | 0.30               |
| AD HYDRO                  | 9.87                        | 0.30               |
| ADANI_WIND                | 9.76                        | 0.29               |
| DB POWER                  | 8.67                        | 0.26               |
| SORANG HEP                | 8.55                        | 0.26               |
| OSTRO Hiriyur             | 8.37                        | 0.25               |
| ADANIRE_41 (INFIRM)       | 8.31                        | 0.25               |
| SASAN UMPP                | 8.11                        | 0.24               |
| SHREE CEMENT              | 7.34                        | 0.22               |
| KARCHAM WANGTOO           | 6.96                        | 0.21               |
| NEP                       | 6.82                        | 0.20               |



|   |                |               |
|---|----------------|---------------|
| RAIGARH_ADANI                                 | 6.79           | 0.20          |
| RENEW_SR_SLR                                  | 6.70           | 0.20          |
| DCPP  | 6.66           | 0.20          |
| TRIPURA                                       | 6.50           | 0.19          |
| NETCL VALLUR                                  | 5.99           | 0.18          |
| DEVKOOT_SLR                                   | 5.93           | 0.18          |
| NTPC STATIONS-NER                             | 5.88           | 0.18          |
| ACBIL   | 5.81           | 0.17          |
| MB POWER                                      | 5.69           | 0.17          |
| SIKKIM  | 5.67           | 0.17          |
| ASEJTL_SLR                                    | 5.00           | 0.15          |
| NEEPCO STATIONS                               | 4.75           | 0.14          |
| JINDAL POWER                                  | 4.72           | 0.14          |
| NOKHRA_STPP                                   | 4.69           | 0.14          |
| GRIAN   | 4.68           | 0.14          |
| ONGC PALATANA                                 | 4.64           | 0.14          |
| IGSTPS  | 4.50           | 0.13          |
| SERENTICA RE4                                 | 4.35           | 0.13          |
| RAPP 7&8                                      | 4.13           | 0.12          |
| AMP_GREEN6                                    | 3.70           | 0.11          |
| TPSL BANDERWALA                               | 3.18           | 0.10          |
| TRN ENERGY                                    | 2.84           | 0.09          |
| GOA   | 2.64           | 0.08          |
| NAGALAND                                      | 2.59           | 0.08          |
| MAITHON POWER LTD                             | 2.47           | 0.07          |
| SIMHAPURI                                     | 2.35           | 0.07          |
| AYANA_RP3                                     | 2.08           | 0.06          |
| ADANIRE_55 (INFIRM)                           | 2.06           | 0.06          |
| JITPL   | 1.96           | 0.06          |
| CHANDIGARH                                    | 1.92           | 0.06          |
| MARUTI COAL                                   | 1.87           | 0.06          |
| JORETHANG                                     | 1.61           | 0.05          |
| SINGOLI BHATWARI HEP                          | 1.59           | 0.05          |
| ALTRA XERGI                                   | 1.43           | 0.04          |
| BRBCL,NABINAGAR                               | 1.41           | 0.04          |
| DGEN MEGA POWER                               | 1.38           | 0.04          |
| SAINJ HEP                                     | 1.37           | 0.04          |
| DD&DNH  | 1.26           | 0.04          |
| MEGHALAYA                                     | 1.17           | 0.04          |
| AMPLUS_AGES                                   | 1.13           | 0.03          |
| LANCO BUDHIL                                  | 0.94           | 0.03          |
| DHARIWAL POWER                                | 0.93           | 0.03          |
| IBEUL   | 0.86           | 0.03          |
| TASHIDENG HEP                                 | 0.73           | 0.02          |
| RENEW_SPRATAP                                 | 0.58           | 0.02          |
| BASOCHHU HEP                                  | 0.58           | 0.02          |
| JHABUA POWER_MP                               | 0.51           | 0.02          |
| IL&FS   | 0.46           | 0.01          |
| EMCO  | 0.35           | 0.01          |
| REENERGY5_WIND                                | 0.29           | 0.01          |
| JAYPEE NIGRIE                                 | 0.20           | 0.01          |
| NANI VIRANI_W                                 | 0.15           | 0.004         |
| CHUZACHEN HEP                                 | 0.13           | 0.004         |
| NIKACHHU HEP                                  | 0.13           | 0.004         |
| ADANI GREEN_25A (INFIRM)                      | 0.11           | 0.003         |
| MIZORAM                                       | 0.09           | 0.003         |
| GMR KAMALANGA                                 | 0.06           | 0.002         |
| ADANI_W_KUTCHH4 (INFIRM)                      | 0.003          | 0.0001        |
| <b>Total</b>                                  | <b>3338.59</b> | <b>100.00</b> |
| <b>Volume sold by top 5 Regional Entities</b> | <b>1236.03</b> | <b>37.02</b>  |
| <b>Herfindahl-Hirschman Index</b>             |                | <b>0.0435</b> |

Source: NLDC

**Table-25: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JULY 2024**

| <b>Name of the Entity</b>                          | <b>Volume of Purchase (MUs)</b> | <b>% of Volume</b> |
|--|---------------------------------|--------------------|
| PUNJAB   | 604.97                          | 18.12              |
| RAJASTHAN  | 489.19                          | 14.65              |
| TELANGANA  | 365.77                          | 10.96              |
| WEST BENGAL  | 259.54                          | 7.77               |
| UTTAR PRADESH                                      | 235.16                          | 7.04               |
| MAHARASHTRA  | 129.31                          | 3.87               |
| TAMIL NADU   | 124.32                          | 3.72               |
| KERALA   | 121.24                          | 3.63               |
| BIHAR  | 115.60                          | 3.46               |
| GUJARAT  | 95.92                           | 2.87               |
| HIMACHAL PRADESH                                   | 92.31                           | 2.76               |
| HARYANA  | 91.54                           | 2.74               |
| ANDHRA PRADESH                                     | 87.17                           | 2.61               |
| DELHI  | 79.21                           | 2.37               |
| ASSAM  | 72.70                           | 2.18               |
| MP   | 62.27                           | 1.87               |
| UTTARAKHAND  | 61.25                           | 1.83               |
| ODISHA   | 47.18                           | 1.41               |
| CHHATTISGARH                                       | 32.60                           | 0.98               |
| DVC  | 31.58                           | 0.95               |
| JHARKHAND  | 24.99                           | 0.75               |
| DD&DNH   | 19.28                           | 0.58               |
| TRIPURA  | 15.62                           | 0.47               |
| KARNATAKA  | 10.45                           | 0.31               |
| AMPS Hazira  | 9.10                            | 0.27               |
| LANKO KONDAPALLI                                   | 8.13                            | 0.24               |
| ESSAR POWER  | 7.78                            | 0.23               |
| MANIPUR  | 6.34                            | 0.19               |
| SKS POWER  | 5.32                            | 0.16               |
| BALCO  | 4.36                            | 0.13               |
| NCR ALLAHABAD                                      | 4.22                            | 0.13               |
| MB POWER   | 3.58                            | 0.11               |
| MEGHALAYA  | 3.56                            | 0.11               |
| GOA  | 3.55                            | 0.11               |
| RAIGARH_ADANI                                      | 2.70                            | 0.08               |
| DCPP   | 2.70                            | 0.08               |
| CHANDIGARH   | 1.64                            | 0.05               |
| NTPC STATIONS-WR                                   | 1.22                            | 0.04               |
| JHABUA POWER_MP                                    | 1.11                            | 0.03               |
| SIKKIM   | 1.07                            | 0.03               |
| SAINJ HEP  | 0.88                            | 0.03               |
| RGPPL_IR   | 0.60                            | 0.02               |
| J & K  | 0.57                            | 0.02               |
| ACBIL  | 0.51                            | 0.02               |
| PONDICHERRY  | 0.44                            | 0.01               |
| JINDAL POWER                                       | 0.05                            | 0.002              |
| ARUNACHAL PRADESH                                  | 0.02                            | 0.001              |
| <b>TOTAL</b>                                       | <b>3338.59</b>                  | <b>100.00</b>      |
| <b>Volume purchased by top 5 Regional Entities</b> | <b>1954.62</b>                  | <b>58.55</b>       |
| <b>Herfindahl-Hirschman Index</b>                  |                                 | <b>0.0880</b>      |

Source: NLDC

**Table-26: TOTAL VOLUME OF NET TRANSACTIONS THROUGH POWER EXCHANGES (REGIONAL ENTITY-WISE), JULY 2024**

| S. No. | Name of the Entity       | Total volume of net transactions through Power Exchanges* |
|--------|--------------------------|---|
| 1      | TELANGANA                | 2281.01   |
| 2      | PUNJAB                   | 1402.85   |
| 3      | RAJASTHAN                | 675.80  |
| 4      | GUJARAT                  | 508.15  |
| 5      | WEST BENGAL              | 469.34  |
| 6      | DD&DNH                   | 277.22  |
| 7      | KERALA                   | 190.54  |
| 8      | UTTAR PRADESH            | 135.31  |
| 9      | MAHARASHTRA              | 115.95  |
| 10     | UTTARAKHAND              | 97.46   |
| 11     | AMPS Hazira              | 85.34   |
| 12     | NCR ALLAHABAD            | 45.47   |
| 13     | JHARKHAND                | 35.58   |
| 14     | DVC                      | 19.72   |
| 15     | TRIPURA                  | 13.99   |
| 16     | LANKO KONDAPALLI         | 8.13  |
| 17     | GOA                      | 6.48  |
| 18     | RGPPL_IR                 | 0.60  |
| 19     | JHABUA POWER_MP          | 0.09  |
| 20     | COASTGEN                 | -0.11   |
| 21     | CHUZACHEN HEP            | -0.13   |
| 22     | GMR KAMALANGA            | -0.20   |
| 23     | ADANI GREEN_26A (INFIRM) | -0.49   |
| 24     | TASHIDENG HEP            | -0.73   |
| 25     | ALTRA XERGI              | -1.43   |
| 26     | JORETHANG                | -1.61   |
| 27     | DGEN MEGA POWER          | -1.90   |
| 28     | MAITHON POWER LTD        | -2.47   |
| 29     | TRN ENERGY               | -2.84   |
| 30     | DHARIWAL POWER           | -3.10   |
| 31     | AMP_GREEN6               | -3.70   |
| 32     | RAPP 7&8                 | -4.13   |
| 33     | ANDHRA PRADESH           | -4.19   |
| 34     | SERENTICA RE4            | -4.35   |
| 35     | NANI VIRANI_W            | -4.42   |
| 36     | MANIPUR                  | -4.50   |
| 37     | SIKKIM                   | -4.53   |
| 38     | GRIAN                    | -4.68   |
| 39     | NOKHRA_STPP              | -4.69   |
| 40     | EMCO                     | -4.70   |
| 41     | NEEPCO STATIONS          | -4.77   |
| 42     | NHPC STATIONS            | -5.39   |
| 43     | IL&FS                    | -5.91   |
| 44     | NETCL VALLUR             | -5.99   |
| 45     | NAGALAND                 | -6.57   |
| 46     | JSW_RENEW_2              | -6.96   |
| 47     | MB POWER                 | -7.20   |
| 48     | CHANDIGARH               | -7.45   |
| 49     | CONTINNUM PT             | -7.70   |
| 50     | SASAN UMPP               | -8.11   |
| 51     | ONGC PALATANA            | -8.19   |
| 52     | IGSTPS                   | -8.55   |
| 53     | ADANI_S_RJ2              | -8.96   |
| 54     | ADANI GREEN_25A (INFIRM) | -9.38   |
| 55     | LANKO BUDHIL             | -9.59   |

|     |                          |        |
|-----|--------------------------|--------|
| 56  | NREL_DAYAPAR (W)         | -10.15 |
| 57  | AMPLUS_AGES              | -10.62 |
| 58  | BRBCL,NABINAGAR          | -10.69 |
| 59  | RENERGY5_WIND            | -12.16 |
| 60  | SIMHAPURI                | -12.47 |
| 61  | ADANI_W_KUTCHH4 (INFIRM) | -12.50 |
| 62  | ADANI GREEN_26B (INFIRM) | -12.95 |
| 63  | NTPC STATIONS-NER        | -13.06 |
| 64  | MEENAKSHI                | -14.87 |
| 65  | ADANIRE_55 (INFIRM)      | -15.82 |
| 66  | ADHUNIK POWER LTD        | -16.50 |
| 67  | RENEW_ROSHNI             | -16.80 |
| 68  | ONEVOLT                  | -17.42 |
| 69  | SINGOLI BHATWARI HEP     | -17.50 |
| 70  | SERENTICA RE1 (INFIRM)   | -17.58 |
| 71  | PONDICHERRY              | -18.70 |
| 72  | AYANA_RP3                | -19.45 |
| 73  | KBUNL                    | -19.86 |
| 74  | BALCO                    | -20.24 |
| 75  | RISING_SLR               | -21.11 |
| 76  | MARUTI COAL              | -21.28 |
| 77  | NIKACHHU HEP             | -21.45 |
| 78  | NLC                      | -21.72 |
| 79  | BIHAR                    | -23.98 |
| 80  | JITPL                    | -24.93 |
| 81  | MIZORAM                  | -25.68 |
| 82  | HARYANA                  | -26.14 |
| 83  | DEVKOOT_SLR              | -26.90 |
| 84  | MTPS                     | -27.20 |
| 85  | ADEPT                    | -28.54 |
| 86  | ADANIRE_41 (INFIRM)      | -31.69 |
| 87  | IBEUL                    | -34.15 |
| 88  | NEP                      | -34.59 |
| 89  | TPSL BANDERWALA          | -37.06 |
| 90  | SAINJ HEP                | -38.76 |
| 91  | BASOCHHU HEP             | -39.16 |
| 92  | TESPL                    | -39.73 |
| 93  | ACBIL                    | -41.34 |
| 94  | MEGHALAYA                | -42.13 |
| 95  | SHREE CEMENT             | -42.79 |
| 96  | RENEW_SPRATAP            | -43.56 |
| 97  | RKM POWER                | -44.45 |
| 98  | RENEW_SR_SLR             | -45.33 |
| 99  | OSTRO Hiriyur            | -45.86 |
| 100 | ARUNACHAL PRADESH        | -46.86 |
| 101 | SORANG HEP               | -47.42 |
| 102 | J & K                    | -51.34 |
| 103 | CHHATTISGARH             | -62.35 |
| 104 | NTPC STATIONS-SR         | -63.12 |
| 105 | DCPP                     | -71.21 |
| 106 | MP                       | -73.18 |
| 107 | SKS POWER                | -75.76 |
| 108 | NPGC                     | -78.73 |
| 109 | SEMBCORP                 | -79.94 |
| 110 | NTPC STATIONS-NR         | -79.98 |
| 111 | RAIGARH_ADANI            | -83.21 |
| 112 | ADANI GREEN_25B (INFIRM) | -83.40 |
| 113 | ASEJTL_SLR               | -84.03 |
| 114 | NTPC STATIONS-WR         | -88.46 |
| 115 | ADANI_WIND               | -94.21 |

|   |                  |         |
|---|------------------|---------|
| 116   | TAMIL NADU       | -101.48 |
| 117   | JAYPEE NIGRIE    | -114.10 |
| 118   | AD HYDRO         | -114.39 |
| 119   | DB POWER         | -114.88 |
| 120   | ARTPP            | -120.10 |
| 121   | KARCHAM WANGTOO  | -124.44 |
| 122   | ASSAM            | -139.97 |
| 123   | JINDAL POWER     | -145.40 |
| 124   | ADANI_4RE        | -148.95 |
| 125   | HIMACHAL PRADESH | -150.83 |
| 126   | RENEW_SOJAS      | -162.78 |
| 127   | ODISHA           | -197.34 |
| 128   | NTPC STATIONS-ER | -208.17 |
| 129   | ESSAR POWER      | -211.34 |
| 130   | DELHI            | -265.55 |
| 131   | JINDAL STAGE-II  | -271.76 |
| 132   | NEPAL(NVVN)      | -354.13 |
| 133   | KARNATAKA        | -971.72 |
| * Total net includes net of transactions of electricity through various segments on power exchanges |                  |         |
| (-) indicates sale and (+) indicates purchase   |                  |         |

**Table-27: DETAILS OF CONGESTION IN POWER EXCHANGES, JULY 2024**

|   | Details of Congestion   | Day Ahead Market |       |       | Green Day Ahead Market |       |       | High Price Day Ahead Market |       |       | Real Time Market |        |        |
|---|---|------------------|-------|-------|------------------------|-------|-------|-----------------------------|-------|-------|------------------|--------|--------|
|   |   | IEX              | PXIL  | HPX   | IEX                    | PXIL  | HPX   | IEX                         | PXIL  | HPX   | IEX              | PXIL   | HPX    |
| 1 | Unconstrained Cleared Volume (MUs)  | 5108.28          | 0.00  | 0.00  | 983.14                 | 0.00  | 0.00  | 0.20                        | 0.00  | 0.00  | 3409.63          | 1.23   | 5.95   |
| 2 | Actual Cleared Volume and hence scheduled (MUs)   | 5070.64          | 0.00  | 0.00  | 968.48                 | 0.00  | 0.00  | 0.20                        | 0.00  | 0.00  | 3333.89          | 0.98   | 3.73   |
| 3 | Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) *                                 | 37.65            | 0.00  | 0.00  | 14.66                  | 0.00  | 0.00  | 0.00                        | 0.00  | 0.00  | 75.74            | 0.26   | 2.22   |
| 4 | Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs)                | 0.00             | 0.00  | 0.00  | 0.00                   | 0.00  | 0.00  | 0.00                        | 0.00  | 0.00  | 0.00             | 0.00   | 0.00   |
| 5 | Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume  | 0.74%            | 0.00% | 0.00% | 1.49%                  | 0.00% | 0.00% | 0.00%                       | 0.00% | 0.00% | 2.22%            | 20.73% | 37.33% |
| 6 | Percentage of the time congestion occurred during the month (Number of hours congestion occurred/ Total number of hours in the month) | 14.72%           | 0.00% | 0.00% | 7.59%                  | 0.00% | 0.00% | 0.00%                       | 0.00% | 0.00% | 18.68%           | 0.20%  | 1.51%  |
| 7 | Congestion occurrence (%) time block wise   |                  |       |       |                        |       |       |                             |       |       |                  |        |        |
|   | 0.00 - 6.00 hours   | 52.05%           | 0.00% | 0.00% | 41.59%                 | 0.00% | 0.00% | 0.00%                       | 0.00% | 0.00% | 52.88%           | 33.33% | 22.22% |
|   | 6.00 - 12.00 hours  | 6.39%            | 0.00% | 0.00% | 16.37%                 | 0.00% | 0.00% | 0.00%                       | 0.00% | 0.00% | 8.63%            | 0.00%  | 0.00%  |
|   | 12.00 - 18.00 hours   | 30.14%           | 0.00% | 0.00% | 33.19%                 | 0.00% | 0.00% | 0.00%                       | 0.00% | 0.00% | 5.40%            | 0.00%  | 0.00%  |
|   | 18.00 - 24.00 hours   | 11.42%           | 0.00% | 0.00% | 8.85%                  | 0.00% | 0.00% | 0.00%                       | 0.00% | 0.00% | 33.09%           | 66.67% | 77.78% |

\* This power would have been scheduled had there been no congestion

Source: IEX, PXIL, HPX & NLDC

**Table-28: VOLUME OF TRANSACTIONS THROUGH POWER EXCHANGES (DAY-WISE) (MUs), JULY 2024**

| Date         | Day Ahead Market <sup>#</sup> |             |             | Green Day Ahead Market <sup>#</sup> |             |             | High Price DAM <sup>#</sup> |             |             | Real Time Market <sup>#</sup> |             |             | Total Electricity Generation (MU) * |
|--------------|-------------------------------|-------------|-------------|-------------------------------------|-------------|-------------|-----------------------------|-------------|-------------|-------------------------------|-------------|-------------|-------------------------------------|
|              | IEX                           | PXIL        | HPX         | IEX                                 | PXIL        | HPX         | IEX                         | PXIL        | HPX         | IEX                           | PXIL        | HPX         |                                     |
| 1-Jul-24     | 183.67                        | 0.00        | 0.00        | 23.60                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 113.83                        | 0.00        | 0.53        | 4182.87                             |
| 2-Jul-24     | 186.64                        | 0.00        | 0.00        | 27.40                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 130.85                        | 0.00        | 0.25        | 4070.39                             |
| 3-Jul-24     | 196.37                        | 0.00        | 0.00        | 27.79                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 118.38                        | 0.00        | 0.00        | 4070.04                             |
| 4-Jul-24     | 196.89                        | 0.00        | 0.00        | 27.53                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 107.09                        | 0.00        | 0.00        | 4170.67                             |
| 5-Jul-24     | 198.35                        | 0.00        | 0.00        | 30.21                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 108.41                        | 0.00        | 0.00        | 4692.09                             |
| 6-Jul-24     | 196.18                        | 0.00        | 0.00        | 26.32                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 84.31                         | 0.00        | 0.00        | 3871.87                             |
| 7-Jul-24     | 149.13                        | 0.00        | 0.00        | 19.47                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 148.40                        | 0.00        | 0.00        | 3881.37                             |
| 8-Jul-24     | 166.05                        | 0.00        | 0.00        | 28.66                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 111.23                        | 0.00        | 0.00        | 4380.96                             |
| 9-Jul-24     | 184.61                        | 0.00        | 0.00        | 26.41                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 94.59                         | 0.00        | 0.00        | 4513.68                             |
| 10-Jul-24    | 187.43                        | 0.00        | 0.00        | 23.86                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 95.33                         | 0.00        | 0.00        | 4549.51                             |
| 11-Jul-24    | 175.36                        | 0.00        | 0.00        | 24.51                               | 0.00        | 0.00        | 0.20                        | 0.00        | 0.00        | 87.70                         | 0.00        | 0.00        | 4513.07                             |
| 12-Jul-24    | 162.21                        | 0.00        | 0.00        | 27.57                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 108.59                        | 0.00        | 0.00        | 4277.47                             |
| 13-Jul-24    | 141.56                        | 0.00        | 0.00        | 32.34                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 117.07                        | 0.00        | 0.00        | 4230.39                             |
| 14-Jul-24    | 157.83                        | 0.00        | 0.00        | 33.38                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 125.29                        | 0.00        | 0.00        | 4207.55                             |
| 15-Jul-24    | 172.50                        | 0.00        | 0.00        | 27.16                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 97.06                         | 0.00        | 0.65        | 4522.85                             |
| 16-Jul-24    | 166.80                        | 0.00        | 0.00        | 27.91                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 128.41                        | 0.00        | 1.50        | 4495.28                             |
| 17-Jul-24    | 147.30                        | 0.00        | 0.00        | 24.29                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 105.45                        | 0.00        | 0.04        | 4532.26                             |
| 18-Jul-24    | 157.81                        | 0.00        | 0.00        | 30.58                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 105.59                        | 0.00        | 0.00        | 4517.07                             |
| 19-Jul-24    | 158.21                        | 0.00        | 0.00        | 26.66                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 116.13                        | 0.00        | 0.00        | 4430.32                             |
| 20-Jul-24    | 159.60                        | 0.00        | 0.00        | 27.90                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 110.62                        | 0.00        | 0.00        | 4504.19                             |
| 21-Jul-24    | 152.93                        | 0.00        | 0.00        | 37.98                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 118.91                        | 0.00        | 0.00        | 4323.76                             |
| 22-Jul-24    | 148.49                        | 0.00        | 0.00        | 38.56                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 91.82                         | 0.00        | 0.00        | 4432.50                             |
| 23-Jul-24    | 142.85                        | 0.00        | 0.00        | 40.82                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 97.11                         | 0.00        | 0.00        | 4370.09                             |
| 24-Jul-24    | 160.13                        | 0.00        | 0.00        | 40.70                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 93.75                         | 0.00        | 0.00        | 4261.65                             |
| 25-Jul-24    | 141.62                        | 0.00        | 0.00        | 36.66                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 85.19                         | 0.00        | 0.00        | 4235.49                             |
| 26-Jul-24    | 134.63                        | 0.00        | 0.00        | 41.53                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 95.00                         | 0.00        | 0.00        | 4218.14                             |
| 27-Jul-24    | 151.54                        | 0.00        | 0.00        | 44.56                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 93.27                         | 0.00        | 0.00        | 4264.14                             |
| 28-Jul-24    | 152.43                        | 0.00        | 0.00        | 49.52                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 100.10                        | 0.00        | 0.00        | 4295.80                             |
| 29-Jul-24    | 141.87                        | 0.00        | 0.00        | 39.51                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 92.16                         | 0.98        | 0.00        | 4581.69                             |
| 30-Jul-24    | 164.43                        | 0.00        | 0.00        | 30.27                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 110.60                        | 0.00        | 0.25        | 4687.10                             |
| 31-Jul-24    | 135.21                        | 0.00        | 0.00        | 24.84                               | 0.00        | 0.00        | 0.00                        | 0.00        | 0.00        | 141.64                        | 0.00        | 0.51        | 4565.41                             |
| <b>Total</b> | <b>5070.64</b>                | <b>0.00</b> | <b>0.00</b> | <b>968.48</b>                       | <b>0.00</b> | <b>0.00</b> | <b>0.20</b>                 | <b>0.00</b> | <b>0.00</b> | <b>3333.89</b>                | <b>0.98</b> | <b>3.73</b> | <b>134849.67</b>                    |

Source: NLDC

\* As available on CEA Website. Gross Electricity Generation excluding electricity generation from renewables and captive power plants.

<sup>#</sup> Scheduled volume of all the bid areas.

**Note:** With change in the regime on implementation of GNA Regulations from 1<sup>st</sup> October 2023, the volume reported here is not strictly comparable to the volumes in previous months. Some discrepancies were identified by CERC in the data provided by NLDC which prompted further validation. The volume herein is computed after verification with the volumes reported by the Trading Licensees and the Power Exchanges, and are subject to further revision. The Commission has directed NLDC, vide letter dated 05.01.2024, to make necessary provisions to differentiate the type of transactions under GNA and T-GNA at the earliest. In the interim, the columns for daily volume of bilateral transactions have been omitted from this table.

**Table-29(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JULY 2024**

| Market Segment | Day Ahead Market of IEX |                          |             | Day Ahead Market of PXIL |             |           | Day Ahead Market of HPX |             |           |
|----------------|-------------------------|--------------------------|-------------|--------------------------|-------------|-----------|-------------------------|-------------|-----------|
| Date           | Minimum ACP             | Maximum ACP              | WA Price*   | Minimum ACP              | Maximum ACP | WA Price* | Minimum ACP             | Maximum ACP | WA Price* |
| 1-Jul-24       | 2.00                    | 10.00                    | 4.15        | -                        | -           | -         | -                       | -           | -         |
| 2-Jul-24       | 1.50                    | 10.00                    | 3.91        | -                        | -           | -         | -                       | -           | -         |
| 3-Jul-24       | 1.50                    | 10.00                    | 3.91        | -                        | -           | -         | -                       | -           | -         |
| 4-Jul-24       | 1.50                    | 10.00                    | 4.14        | -                        | -           | -         | -                       | -           | -         |
| 5-Jul-24       | 2.00                    | 10.00                    | 4.14        | -                        | -           | -         | -                       | -           | -         |
| 6-Jul-24       | 1.58                    | 10.00                    | 4.54        | -                        | -           | -         | -                       | -           | -         |
| 7-Jul-24       | 0.90                    | 7.30                     | 3.06        | -                        | -           | -         | -                       | -           | -         |
| 8-Jul-24       | 1.20                    | 10.00                    | 4.11        | -                        | -           | -         | -                       | -           | -         |
| 9-Jul-24       | 1.33                    | 10.00                    | 4.74        | -                        | -           | -         | -                       | -           | -         |
| 10-Jul-24      | 2.01                    | 10.00                    | 5.08        | -                        | -           | -         | -                       | -           | -         |
| 11-Jul-24      | 2.50                    | 10.00                    | 5.61        | -                        | -           | -         | -                       | -           | -         |
| 12-Jul-24      | 2.92                    | 10.00                    | 5.17        | -                        | -           | -         | -                       | -           | -         |
| 13-Jul-24      | 1.50                    | 10.00                    | 4.27        | -                        | -           | -         | -                       | -           | -         |
| 14-Jul-24      | 1.00                    | 10.00                    | 3.49        | -                        | -           | -         | -                       | -           | -         |
| 15-Jul-24      | 2.62                    | 10.00                    | 4.63        | -                        | -           | -         | -                       | -           | -         |
| 16-Jul-24      | 3.10                    | 10.00                    | 4.83        | -                        | -           | -         | -                       | -           | -         |
| 17-Jul-24      | 1.87                    | 10.00                    | 4.66        | -                        | -           | -         | -                       | -           | -         |
| 18-Jul-24      | 3.37                    | 10.00                    | 5.36        | -                        | -           | -         | -                       | -           | -         |
| 19-Jul-24      | 2.00                    | 10.00                    | 4.91        | -                        | -           | -         | -                       | -           | -         |
| 20-Jul-24      | 1.50                    | 10.00                    | 5.07        | -                        | -           | -         | -                       | -           | -         |
| 21-Jul-24      | 0.50                    | 10.00                    | 4.23        | -                        | -           | -         | -                       | -           | -         |
| 22-Jul-24      | 1.00                    | 10.00                    | 4.29        | -                        | -           | -         | -                       | -           | -         |
| 23-Jul-24      | 1.00                    | 10.00                    | 4.65        | -                        | -           | -         | -                       | -           | -         |
| 24-Jul-24      | 2.00                    | 10.00                    | 4.96        | -                        | -           | -         | -                       | -           | -         |
| 25-Jul-24      | 1.85                    | 10.00                    | 4.22        | -                        | -           | -         | -                       | -           | -         |
| 26-Jul-24      | 1.50                    | 10.00                    | 4.43        | -                        | -           | -         | -                       | -           | -         |
| 27-Jul-24      | 1.00                    | 10.00                    | 4.07        | -                        | -           | -         | -                       | -           | -         |
| 28-Jul-24      | 0.60                    | 10.00                    | 4.40        | -                        | -           | -         | -                       | -           | -         |
| 29-Jul-24      | 2.00                    | 10.00                    | 4.87        | -                        | -           | -         | -                       | -           | -         |
| 30-Jul-24      | 2.09                    | 10.00                    | 5.27        | -                        | -           | -         | -                       | -           | -         |
| 31-Jul-24      | 2.88                    | 10.00                    | 6.33        | -                        | -           | -         | -                       | -           | -         |
|                | <b>0.50<sup>#</sup></b> | <b>10.00<sup>#</sup></b> | <b>4.55</b> | -                        | -           | -         | -                       | -           | -         |

Source: IEX, PXIL and HPX

\* Weighted average price computed based on Area Clearing Volume (ACV) and Area Clearing Price (ACP) for each hour of the day. Here, ACV and ACP represent the scheduled volume and weighted average price of all the bid areas of power exchanges.

# Maximum/Minimum in the month



**Table-29(b): PRICE OF GREEN DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh),  
JULY 2024**

| Market Segment | Green Day Ahead Market of IEX |                          |                         | Green Day Ahead Market of PXIL |             |                         | Green Day Ahead Market of HPX |             |                         |
|----------------|-------------------------------|--------------------------|-------------------------|--------------------------------|-------------|-------------------------|-------------------------------|-------------|-------------------------|
|                | Minimum ACP                   | Maximum ACP              | Weighted Average Price* | Minimum ACP                    | Maximum ACP | Weighted Average Price* | Minimum ACP                   | Maximum ACP | Weighted Average Price* |
| 1-Jul-24       | 2.00                          | 10.00                    | 3.99                    | -                              | -           | -                       | -                             | -           | -                       |
| 2-Jul-24       | 2.00                          | 10.00                    | 3.93                    | -                              | -           | -                       | -                             | -           | -                       |
| 3-Jul-24       | 2.00                          | 10.00                    | 3.67                    | -                              | -           | -                       | -                             | -           | -                       |
| 4-Jul-24       | 1.90                          | 10.00                    | 4.14                    | -                              | -           | -                       | -                             | -           | -                       |
| 5-Jul-24       | 1.90                          | 10.00                    | 3.43                    | -                              | -           | -                       | -                             | -           | -                       |
| 6-Jul-24       | 2.25                          | 10.00                    | 3.46                    | -                              | -           | -                       | -                             | -           | -                       |
| 7-Jul-24       | 1.80                          | 9.99                     | 3.48                    | -                              | -           | -                       | -                             | -           | -                       |
| 8-Jul-24       | 2.00                          | 10.00                    | 3.43                    | -                              | -           | -                       | -                             | -           | -                       |
| 9-Jul-24       | 2.00                          | 10.00                    | 3.62                    | -                              | -           | -                       | -                             | -           | -                       |
| 10-Jul-24      | 1.80                          | 10.00                    | 4.97                    | -                              | -           | -                       | -                             | -           | -                       |
| 11-Jul-24      | 2.80                          | 10.00                    | 4.90                    | -                              | -           | -                       | -                             | -           | -                       |
| 12-Jul-24      | 3.60                          | 10.00                    | 5.01                    | -                              | -           | -                       | -                             | -           | -                       |
| 13-Jul-24      | 3.00                          | 10.00                    | 4.45                    | -                              | -           | -                       | -                             | -           | -                       |
| 14-Jul-24      | 2.00                          | 10.00                    | 3.73                    | -                              | -           | -                       | -                             | -           | -                       |
| 15-Jul-24      | 1.85                          | 10.00                    | 4.04                    | -                              | -           | -                       | -                             | -           | -                       |
| 16-Jul-24      | 2.55                          | 10.00                    | 4.27                    | -                              | -           | -                       | -                             | -           | -                       |
| 17-Jul-24      | 2.95                          | 10.00                    | 4.40                    | -                              | -           | -                       | -                             | -           | -                       |
| 18-Jul-24      | 2.35                          | 10.00                    | 4.58                    | -                              | -           | -                       | -                             | -           | -                       |
| 19-Jul-24      | 3.30                          | 10.00                    | 5.43                    | -                              | -           | -                       | -                             | -           | -                       |
| 20-Jul-24      | 2.50                          | 10.00                    | 4.54                    | -                              | -           | -                       | -                             | -           | -                       |
| 21-Jul-24      | 1.95                          | 10.00                    | 4.93                    | -                              | -           | -                       | -                             | -           | -                       |
| 22-Jul-24      | 1.80                          | 10.00                    | 5.16                    | -                              | -           | -                       | -                             | -           | -                       |
| 23-Jul-24      | 1.01                          | 10.00                    | 3.75                    | -                              | -           | -                       | -                             | -           | -                       |
| 24-Jul-24      | 1.50                          | 10.00                    | 4.41                    | -                              | -           | -                       | -                             | -           | -                       |
| 25-Jul-24      | 2.50                          | 10.00                    | 4.87                    | -                              | -           | -                       | -                             | -           | -                       |
| 26-Jul-24      | 2.18                          | 10.00                    | 4.46                    | -                              | -           | -                       | -                             | -           | -                       |
| 27-Jul-24      | 1.85                          | 10.00                    | 3.82                    | -                              | -           | -                       | -                             | -           | -                       |
| 28-Jul-24      | 1.50                          | 10.00                    | 4.05                    | -                              | -           | -                       | -                             | -           | -                       |
| 29-Jul-24      | 1.90                          | 10.00                    | 4.03                    | -                              | -           | -                       | -                             | -           | -                       |
| 30-Jul-24      | 2.50                          | 10.00                    | 4.50                    | -                              | -           | -                       | -                             | -           | -                       |
| 31-Jul-24      | 3.34                          | 10.00                    | 5.61                    | -                              | -           | -                       | -                             | -           | -                       |
|                | <b>1.01<sup>#</sup></b>       | <b>10.00<sup>#</sup></b> | <b>4.29</b>             | -                              | -           | -                       | -                             | -           | -                       |

Source: IEX, PXIL and HPX

\* Weighted average price computed based on Area Clearing Volume (ACV) and Area Clearing Price (ACP) for each hour of the day. Here, ACV and ACP represent the scheduled volume and weighted average price of all the bid areas of power exchanges.

<sup>#</sup> Maximum/Minimum in the month

| <b>Table-29(c): PRICE OF REAL TIME TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JULY 2024</b> |                                |                          |                                |                                 |                          |                                |                                |                          |                                |
|--|--------------------------------|--------------------------|--------------------------------|---------------------------------|--------------------------|--------------------------------|--------------------------------|--------------------------|--------------------------------|
| <b>Market Segment</b>  | <b>Real Time Market of IEX</b> |                          |                                | <b>Real Time Market of PXIL</b> |                          |                                | <b>Real Time Market of HPX</b> |                          |                                |
| <b>Date</b>  | <b>Minimum ACP</b>             | <b>Maximum ACP</b>       | <b>Weighted Average Price*</b> | <b>Minimum ACP</b>              | <b>Maximum ACP</b>       | <b>Weighted Average Price*</b> | <b>Minimum ACP</b>             | <b>Maximum ACP</b>       | <b>Weighted Average Price*</b> |
| 1-Jul-24   | 1.40                           | 10.00                    | 3.71                           | -                               | -                        | -                              | 10.00                          | 10.00                    | 10.00                          |
| 2-Jul-24   | 0.70                           | 10.00                    | 3.50                           | -                               | -                        | -                              | 10.00                          | 10.00                    | 10.00                          |
| 3-Jul-24   | 1.68                           | 10.00                    | 3.86                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 4-Jul-24   | 0.52                           | 10.00                    | 3.96                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 5-Jul-24   | 1.40                           | 10.00                    | 3.73                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 6-Jul-24   | 0.40                           | 4.74                     | 2.08                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 7-Jul-24   | 0.92                           | 5.39                     | 2.52                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 8-Jul-24   | 2.81                           | 10.00                    | 4.38                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 9-Jul-24   | 2.60                           | 10.00                    | 5.22                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 10-Jul-24  | 3.06                           | 10.00                    | 5.89                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 11-Jul-24  | 2.80                           | 10.00                    | 5.92                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 12-Jul-24  | 1.20                           | 10.00                    | 3.66                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 13-Jul-24  | 1.29                           | 10.00                    | 4.51                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 14-Jul-24  | 1.73                           | 10.00                    | 3.52                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 15-Jul-24  | 2.12                           | 10.00                    | 4.74                           | -                               | -                        | -                              | 10.00                          | 10.00                    | 10.00                          |
| 16-Jul-24  | 0.70                           | 10.00                    | 4.23                           | -                               | -                        | -                              | 10.00                          | 10.00                    | 10.00                          |
| 17-Jul-24  | 2.00                           | 10.00                    | 5.03                           | -                               | -                        | -                              | 10.00                          | 10.00                    | 10.00                          |
| 18-Jul-24  | 1.50                           | 10.00                    | 5.01                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 19-Jul-24  | 0.60                           | 10.00                    | 4.66                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 20-Jul-24  | 0.70                           | 10.00                    | 4.27                           | -                               | -                        | -                              | 0.00                           | 10.00                    | 5.00                           |
| 21-Jul-24  | 0.30                           | 10.00                    | 3.27                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 22-Jul-24  | 1.84                           | 10.00                    | 4.56                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 23-Jul-24  | 1.79                           | 10.00                    | 4.52                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 24-Jul-24  | 1.00                           | 10.00                    | 4.53                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 25-Jul-24  | 1.93                           | 10.00                    | 4.24                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 26-Jul-24  | 1.10                           | 10.00                    | 3.64                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 27-Jul-24  | 0.50                           | 10.00                    | 4.17                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 28-Jul-24  | 0.50                           | 10.00                    | 3.55                           | -                               | -                        | -                              | -                              | -                        | -                              |
| 29-Jul-24  | 2.01                           | 10.00                    | 4.83                           | 10.00                           | 10.00                    | 10.00                          | -                              | -                        | -                              |
| 30-Jul-24  | 2.27                           | 10.00                    | 6.60                           | -                               | -                        | -                              | 10.00                          | 10.00                    | 10.00                          |
| 31-Jul-24  | 1.50                           | 10.00                    | 5.68                           | -                               | -                        | -                              | 2.21                           | 10.00                    | 9.52                           |
|  | <b>0.30<sup>#</sup></b>        | <b>10.00<sup>#</sup></b> | <b>4.30</b>                    | <b>10.00<sup>#</sup></b>        | <b>10.00<sup>#</sup></b> | <b>10.00</b>                   | <b>0.00<sup>#</sup></b>        | <b>10.00<sup>#</sup></b> | <b>9.93</b>                    |

Source: IEX, PXIL and HPX

\* Weighted average price computed based on Area Clearing Volume (ACV) and Area Clearing Price (ACP) for each hour of the day. Here, ACV and ACP represent the scheduled volume and weighted average price of all the bid areas of power exchanges.

# Maximum/Minimum in the month

Note: The Minimum ACP in RTM on HPX was Rs. 0.00/kWh on account of congestion in seller (export)side. The quantum that could be cleared after considering congestion was offered by the seller was at Rs. 0.00/kWh (Sell Bid). In the particular block, the ACP for Buyer bid area was Rs. 10/kWh (Upstream) while the ACP for Seller bid area was Rs. 0/kWh (Downstream). The difference of the Upstream and Downstream price constitutes the Congestion revenue. The particular case does not represent typical market conditions.

**Table-29(d): PRICE OF HIGH PRICE DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh),  
JULY 2024**

| Market Segment | High Price Day Ahead Market of IEX |                          |                        | High Price Day Ahead Market of PXIL |             |                        | High Price Day Ahead Market of HPX |             |                        |
|----------------|------------------------------------|--------------------------|------------------------|-------------------------------------|-------------|------------------------|------------------------------------|-------------|------------------------|
|                | Minimum ACP                        | Maximum ACP              | Weighted Average Price | Minimum ACP                         | Maximum ACP | Weighted Average Price | Minimum ACP                        | Maximum ACP | Weighted Average Price |
| 1-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 2-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 3-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 4-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 5-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 6-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 7-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 8-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 9-Jul-24       | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 10-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 11-Jul-24      | 15.00                              | 15.00                    | 15.00                  | -                                   | -           | -                      | -                                  | -           | -                      |
| 12-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 13-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 14-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 15-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 16-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 17-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 18-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 19-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 20-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 21-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 22-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 23-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 24-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 25-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 26-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 27-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 28-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 29-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 30-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
| 31-Jul-24      | -                                  | -                        | -                      | -                                   | -           | -                      | -                                  | -           | -                      |
|                | <b>15.00<sup>#</sup></b>           | <b>15.00<sup>#</sup></b> | <b>15.00</b>           | -                                   | -           | -                      | -                                  | -           | -                      |

Source: IEX, PXIL and HPX

# Maximum/Minimum in the month

**Table-30: VOLUME OF TRANSACTIONS THROUGH POWER EXCHANGES (REGIONAL ENTITY\*-WISE) (MUs), JULY 2024**

| Name of the Entity | Through DAM |          | Through GDAM |          | Through HP-DAM |          | Through RTM |          | Total Net*** |
|--------------------|-------------|----------|--------------|----------|----------------|----------|-------------|----------|--------------|
|                    | Sale        | Purchase | Sale         | Purchase | Sale           | Purchase | Sale        | Purchase |              |
| PUNJAB             | 0.00        | 380.15   | 0.00         | 448.10   | 0.00           | 0.00     | 30.37       | 604.97   | 1402.85      |
| HARYANA            | 88.93       | 114.01   | 0.00         | 12.06    | 0.00           | 0.00     | 154.82      | 91.54    | -26.14       |
| RAJASTHAN          | 57.95       | 290.92   | 7.45         | 0.00     | 0.00           | 0.00     | 38.91       | 489.19   | 675.80       |
| DELHI              | 199.48      | 18.30    | 2.41         | 6.45     | 0.00           | 0.00     | 167.63      | 79.21    | -265.55      |
| UTTAR PRADESH      | 238.06      | 261.52   | 17.95        | 11.89    | 0.00           | 0.00     | 117.25      | 235.16   | 135.31       |
| UTTARAKHAND        | 3.30        | 85.10    | 17.64        | 0.00     | 0.00           | 0.00     | 27.95       | 61.25    | 97.46        |
| HP                 | 145.16      | 38.10    | 52.78        | 0.00     | 0.00           | 0.00     | 83.30       | 92.31    | -150.83      |
| J & K              | 3.84        | 0.00     | 15.15        | 0.00     | 0.00           | 0.00     | 32.92       | 0.57     | -51.34       |
| CHANDIGARH         | 14.27       | 7.10     | 0.00         | 0.00     | 0.00           | 0.00     | 1.92        | 1.64     | -7.45        |
| MP                 | 61.00       | 46.75    | 23.81        | 5.35     | 0.00           | 0.00     | 102.74      | 62.27    | -73.18       |
| MAHARASHTRA        | 44.88       | 77.46    | 51.64        | 62.16    | 0.00           | 0.00     | 56.45       | 129.31   | 115.95       |
| GUJARAT            | 86.59       | 522.56   | 0.00         | 19.41    | 0.200          | 0.00     | 42.95       | 95.92    | 508.15       |
| CHHATTISGARH       | 100.70      | 91.38    | 0.00         | 16.61    | 0.00           | 0.00     | 102.24      | 32.60    | -62.35       |
| GOA                | 8.54        | 14.10    | 0.00         | 0.01     | 0.00           | 0.00     | 2.64        | 3.55     | 6.48         |
| DD&DNH             | 0.00        | 259.10   | 0.00         | 0.10     | 0.00           | 0.00     | 1.26        | 19.28    | 277.22       |
| ANDHRA P           | 85.98       | 153.90   | 30.97        | 9.23     | 0.00           | 0.00     | 137.54      | 87.17    | -4.19        |
| KARNATAKA          | 578.66      | 34.77    | 176.23       | 18.22    | 0.00           | 0.00     | 280.27      | 10.45    | -971.72      |
| KERALA             | 7.62        | 85.48    | 0.00         | 9.65     | 0.00           | 0.00     | 18.20       | 121.24   | 190.54       |
| TAMIL NADU         | 36.68       | 196.60   | 0.00         | 33.71    | 0.00           | 0.00     | 419.44      | 124.32   | -101.48      |
| PONDICHERRY        | 7.07        | 0.14     | 0.00         | 0.00     | 0.00           | 0.00     | 12.21       | 0.44     | -18.70       |
| TELANGANA          | 7.96        | 1985.26  | 0.00         | 11.30    | 0.00           | 0.00     | 73.36       | 365.77   | 2281.01      |
| WEST BENGAL        | 15.35       | 283.28   | 14.10        | 0.00     | 0.00           | 0.20     | 44.22       | 259.54   | 469.34       |
| ODISHA             | 181.19      | 26.70    | 0.00         | 74.35    | 0.00           | 0.00     | 164.38      | 47.18    | -197.34      |
| BIHAR              | 38.22       | 22.33    | 0.00         | 80.62    | 0.00           | 0.00     | 204.31      | 115.60   | -23.98       |
| JHARKHAND          | 0.04        | 9.04     | 0.00         | 34.01    | 0.00           | 0.00     | 32.41       | 24.99    | 35.58        |
| SIKKIM             | 1.62        | 10.53    | 8.84         | 0.00     | 0.00           | 0.00     | 5.67        | 1.07     | -4.53        |
| DVC                | 20.06       | 1.36     | 0.00         | 31.98    | 0.00           | 0.00     | 25.14       | 31.58    | 19.72        |
| ARUNACHAL P        | 18.27       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 28.62       | 0.02     | -46.86       |
| ASSAM              | 170.15      | 10.98    | 0.00         | 0.00     | 0.00           | 0.00     | 53.49       | 72.70    | -139.97      |
| MANIPUR            | 0.00        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 10.85       | 6.34     | -4.50        |
| MEGHALAYA          | 11.82       | 1.66     | 34.35        | 0.00     | 0.00           | 0.00     | 1.17        | 3.56     | -42.13       |
| MIZORAM            | 25.59       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 0.09        | 0.00     | -25.68       |
| NAGALAND           | 3.98        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 2.59        | 0.00     | -6.57        |
| TRIPURA            | 0.00        | 4.88     | 0.00         | 0.00     | 0.00           | 0.00     | 6.50        | 15.62    | 13.99        |
| NTPC STATIONS-NR   | 22.27       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 57.71       | 0.00     | -79.98       |
| NHPC STATIONS      | 5.39        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 0.00        | 0.00     | -5.39        |
| NEP                | 27.77       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 6.82        | 0.00     | -34.59       |
| AD HYDRO           | 104.52      | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 9.87        | 0.00     | -114.39      |
| IGSTPS             | 4.05        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 4.50        | 0.00     | -8.55        |
| KARCHAM WANGTOO    | 117.48      | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 6.96        | 0.00     | -124.44      |
| SHREE CEMENT       | 35.45       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 7.34        | 0.00     | -42.79       |
| LANCO BUDHIL       | 8.66        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 0.94        | 0.00     | -9.59        |
| SORANG HEP         | 37.67       | 0.00     | 1.20         | 0.00     | 0.00           | 0.00     | 8.55        | 0.00     | -47.42       |
| SAINJ HEP          | 38.28       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 1.37        | 0.88     | -38.76       |
| ASEJTL_SLR         | 32.28       | 0.00     | 46.75        | 0.00     | 0.00           | 0.00     | 5.00        | 0.00     | -84.03       |
| SINGOLI BHATWARI H | 6.27        | 0.00     | 9.64         | 0.00     | 0.00           | 0.00     | 1.59        | 0.00     | -17.50       |
| NCR ALLAHABAD      | 0.00        | 21.99    | 0.00         | 19.26    | 0.00           | 0.00     | 0.00        | 4.22     | 45.47        |
| RENEW_SR_SLR       | 30.98       | 0.00     | 7.65         | 0.00     | 0.00           | 0.00     | 6.70        | 0.00     | -45.33       |
| DEVKOOT_SLR        | 20.97       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 5.93        | 0.00     | -26.90       |
| NOKHRA_STPP        | 0.00        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 4.69        | 0.00     | -4.69        |
| RAPP 7&8           | 0.00        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 4.13        | 0.00     | -4.13        |
| RISING_SLR         | 0.00        | 0.00     | 21.11        | 0.00     | 0.00           | 0.00     | 0.00        | 0.00     | -21.11       |
| AMP_GREEN6         | 0.00        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 3.70        | 0.00     | -3.70        |
| ALTRA XERGI        | 0.00        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 1.43        | 0.00     | -1.43        |
| ONEVOLT            | 17.42       | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 0.00        | 0.00     | -17.42       |
| GRIAN              | 0.00        | 0.00     | 0.00         | 0.00     | 0.00           | 0.00     | 4.68        | 0.00     | -4.68        |
| AMPLUS_AGES        | 0.00        | 0.00     | 9.49         | 0.00     | 0.00           | 0.00     | 1.13        | 0.00     | -10.62       |

|                          |        |       |       |       |      |      |       |      |         |
|--------------------------|--------|-------|-------|-------|------|------|-------|------|---------|
| RENEW_SPRATAP            | 42.98  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.58  | 0.00 | -43.56  |
| ADEPT                    | 28.54  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -28.54  |
| TESPL                    | 2.66   | 0.00  | 12.33 | 0.00  | 0.00 | 0.00 | 24.74 | 0.00 | -39.73  |
| ADANI_S_RJ2              | 8.96   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -8.96   |
| SERENTICA RE4            | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 4.35  | 0.00 | -4.35   |
| AYANA_RP3                | 0.00   | 0.00  | 17.36 | 0.00  | 0.00 | 0.00 | 2.08  | 0.00 | -19.45  |
| TPSL BANDERWALA          | 3.50   | 0.00  | 30.37 | 0.00  | 0.00 | 0.00 | 3.18  | 0.00 | -37.06  |
| NTPC STATIONS-WR         | 0.68   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 89.00 | 1.22 | -88.46  |
| JINDAL POWER             | 140.73 | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 4.72  | 0.05 | -145.40 |
| ACBIL                    | 36.03  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 5.81  | 0.51 | -41.34  |
| BALCO                    | 12.49  | 0.99  | 0.00  | 1.87  | 0.00 | 0.00 | 14.96 | 4.36 | -20.24  |
| DCPP                     | 67.25  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 6.66  | 2.70 | -71.21  |
| EMCO                     | 4.34   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.35  | 0.00 | -4.70   |
| ESSAR POWER              | 198.67 | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 20.46 | 7.78 | -211.34 |
| JINDAL STAGE-II          | 252.89 | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 18.87 | 0.00 | -271.76 |
| DB POWER                 | 106.21 | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 8.67  | 0.00 | -114.88 |
| DHARIWAL POWER           | 2.17   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.93  | 0.00 | -3.10   |
| JAYPEE NIGRIE            | 113.90 | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.20  | 0.00 | -114.10 |
| DGEN MEGA POWER          | 0.52   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 1.38  | 0.00 | -1.90   |
| MB POWER                 | 5.10   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 5.69  | 3.58 | -7.20   |
| MARUTI COAL              | 19.40  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 1.87  | 0.00 | -21.28  |
| JHABUA POWER_MP          | 0.60   | 0.09  | 0.00  | 0.00  | 0.00 | 0.00 | 0.51  | 1.11 | 0.09    |
| SASAN UMPP               | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 8.11  | 0.00 | -8.11   |
| TRN ENERGY               | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 2.84  | 0.00 | -2.84   |
| RKM POWER                | 28.82  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 15.62 | 0.00 | -44.45  |
| SKS POWER                | 63.47  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 17.61 | 5.32 | -75.76  |
| AMPS Hazira              | 0.00   | 14.11 | 0.00  | 62.13 | 0.00 | 0.00 | 0.00  | 9.10 | 85.34   |
| RGPPL_IR                 | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.00  | 0.60 | 0.60    |
| ADANI_WIND               | 46.41  | 0.00  | 38.03 | 0.00  | 0.00 | 0.00 | 9.76  | 0.00 | -94.21  |
| CONTINNUM PT             | 0.00   | 0.00  | 7.70  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -7.70   |
| RENERGY5_WIND            | 6.56   | 0.00  | 5.30  | 0.00  | 0.00 | 0.00 | 0.29  | 0.00 | -12.16  |
| ARTPP                    | 100.88 | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 19.22 | 0.00 | -120.10 |
| MTPS                     | 0.11   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 27.09 | 0.00 | -27.20  |
| RAIGARH_ADANI            | 79.11  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 6.79  | 2.70 | -83.21  |
| NREL_DAYAPAR (W)         | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 10.15 | 0.00 | -10.15  |
| ADANI_4RE                | 31.39  | 0.00  | 90.77 | 0.00  | 0.00 | 0.00 | 26.79 | 0.00 | -148.95 |
| ADANI_W_KUTCHH4 (INFIRM) | 3.95   | 0.00  | 8.55  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -12.50  |
| ADANI GREEN_25B (INFIRM) | 16.13  | 0.00  | 46.09 | 0.00  | 0.00 | 0.00 | 21.18 | 0.00 | -83.40  |
| ADANI GREEN_26B (INFIRM) | 3.43   | 0.00  | 9.52  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -12.95  |
| NANI VIRANI_W            | 0.13   | 0.00  | 4.14  | 0.00  | 0.00 | 0.00 | 0.15  | 0.00 | -4.42   |
| ADANI GREEN_26A (INFIRM) | 0.11   | 0.00  | 0.37  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -0.49   |
| ADANIRE_55 (INFIRM)      | 3.42   | 0.00  | 10.35 | 0.00  | 0.00 | 0.00 | 2.06  | 0.00 | -15.82  |
| ADANI GREEN_25A (INFIRM) | 2.80   | 0.00  | 6.47  | 0.00  | 0.00 | 0.00 | 0.11  | 0.00 | -9.38   |
| ADANIRE_41 (INFIRM)      | 6.07   | 0.00  | 17.31 | 0.00  | 0.00 | 0.00 | 8.31  | 0.00 | -31.69  |
| NTPC STATIONS-SR         | 20.58  | 0.00  | 2.29  | 0.00  | 0.00 | 0.00 | 40.25 | 0.00 | -63.12  |
| LANKO KONDAPALLI         | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.00  | 8.13 | 8.13    |
| SIMHAPURI                | 10.12  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 2.35  | 0.00 | -12.47  |
| MEENAKSHI                | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 14.87 | 0.00 | -14.87  |
| COASTGEN                 | 0.11   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -0.11   |
| IL&FS                    | 5.45   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 0.46  | 0.00 | -5.91   |
| NLC                      | 0.83   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 20.89 | 0.00 | -21.72  |
| SEMBCORP                 | 57.40  | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 22.54 | 0.00 | -79.94  |
| NETCL VALLUR             | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 5.99  | 0.00 | -5.99   |
| OSTRO Hiriyur            | 12.79  | 0.00  | 24.70 | 0.00  | 0.00 | 0.00 | 8.37  | 0.00 | -45.86  |
| JSW_RENEW_2              | 0.00   | 0.00  | 6.96  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00 | -6.96   |
| RENEW_ROSHNI             | 0.00   | 0.00  | 0.00  | 0.00  | 0.00 | 0.00 | 16.80 | 0.00 | -16.80  |

|                           |        |      |       |      |      |      |       |      |         |
|---------------------------|--------|------|-------|------|------|------|-------|------|---------|
| RENEW_SOJAS               | 42.12  | 0.00 | 79.42 | 0.00 | 0.00 | 0.00 | 41.24 | 0.00 | -162.78 |
| SERENTICA REI<br>(INFIRM) | 0.20   | 0.00 | 1.26  | 0.00 | 0.00 | 0.00 | 16.12 | 0.00 | -17.58  |
| NTPC STATIONS-ER          | 154.07 | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 54.10 | 0.00 | -208.17 |
| MAITHON POWER LTD         | 0.00   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 2.47  | 0.00 | -2.47   |
| NPGC                      | 65.07  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 13.65 | 0.00 | -78.73  |
| ADHUNIK POWER LTD         | 0.00   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 16.50 | 0.00 | -16.50  |
| CHUZACHEN HEP             | 0.00   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.13  | 0.00 | -0.13   |
| GMR KAMALANGA             | 0.14   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.06  | 0.00 | -0.20   |
| JITPL                     | 22.97  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 1.96  | 0.00 | -24.93  |
| JORETHANG                 | 0.00   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 1.61  | 0.00 | -1.61   |
| NEPAL(NVVN)               | 332.86 | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 21.26 | 0.00 | -354.13 |
| TASHIDENG HEP             | 0.00   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.73  | 0.00 | -0.73   |
| BRBCL, NABINAGAR          | 9.28   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 1.41  | 0.00 | -10.69  |
| KBUNL                     | 19.86  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | -19.86  |
| BASOCHHU HEP              | 38.58  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.58  | 0.00 | -39.16  |
| IBEUL                     | 33.29  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.86  | 0.00 | -34.15  |
| NIKACHHU HEP              | 21.32  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.13  | 0.00 | -21.45  |
| NTPC STATIONS-NER         | 7.18   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 5.88  | 0.00 | -13.06  |
| NEEPCO STATIONS           | 0.02   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 4.75  | 0.00 | -4.77   |
| ONGC PALATANA             | 3.56   | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 4.64  | 0.00 | -8.19   |

Source: NLDC

\* in case of a state, the entities which are "selling" also include generators connected to state grid and the entities which are "buying" also include open access consumers.

\*\* (-) indicates sale and (+) indicates purchase,

\*\*\* Total net includes net of transactions through various segments on power exchanges

**Table-31: VOLUME AND CHARGES UNDER DSM (DAY-WISE), JULY 2024**

| Date         | Volume (MU)    | All India Grid Charges (₹/kWh) |                          |             |
|--------------|----------------|--------------------------------|--------------------------|-------------|
|              |                | Minimum                        | Maximum                  | Average     |
| 1-Jul-24     | 91.81          | 2.00                           | 10.00                    | 4.15        |
| 2-Jul-24     | 90.70          | 1.50                           | 10.00                    | 4.18        |
| 3-Jul-24     | 91.46          | 1.68                           | 10.00                    | 4.54        |
| 4-Jul-24     | 95.72          | 1.89                           | 10.00                    | 4.54        |
| 5-Jul-24     | 96.19          | 2.01                           | 10.00                    | 4.80        |
| 6-Jul-24     | 100.98         | 1.58                           | 10.00                    | 4.79        |
| 7-Jul-24     | 105.23         | 0.92                           | 7.71                     | 3.13        |
| 8-Jul-24     | 96.58          | 2.81                           | 10.00                    | 5.02        |
| 9-Jul-24     | 95.76          | 2.60                           | 10.00                    | 5.83        |
| 10-Jul-24    | 95.34          | 3.06                           | 10.00                    | 6.94        |
| 11-Jul-24    | 95.91          | 2.87                           | 10.25                    | 6.68        |
| 12-Jul-24    | 99.94          | 2.25                           | 10.00                    | 5.77        |
| 13-Jul-24    | 93.07          | 1.50                           | 10.00                    | 5.21        |
| 14-Jul-24    | 97.53          | 1.73                           | 10.00                    | 4.24        |
| 15-Jul-24    | 93.50          | 2.12                           | 10.00                    | 5.41        |
| 16-Jul-24    | 92.38          | 1.00                           | 10.00                    | 5.98        |
| 17-Jul-24    | 98.97          | 2.00                           | 10.00                    | 5.79        |
| 18-Jul-24    | 99.16          | 1.87                           | 10.00                    | 6.41        |
| 19-Jul-24    | 95.01          | 1.79                           | 10.00                    | 6.12        |
| 20-Jul-24    | 94.62          | 2.05                           | 10.00                    | 6.06        |
| 21-Jul-24    | 89.43          | 0.60                           | 10.00                    | 5.41        |
| 22-Jul-24    | 97.23          | 1.84                           | 10.00                    | 5.39        |
| 23-Jul-24    | 93.40          | 1.84                           | 10.00                    | 5.53        |
| 24-Jul-24    | 91.50          | 1.58                           | 10.00                    | 5.56        |
| 25-Jul-24    | 89.99          | 1.93                           | 10.00                    | 5.14        |
| 26-Jul-24    | 93.75          | 1.50                           | 10.00                    | 5.25        |
| 27-Jul-24    | 93.15          | 1.00                           | 10.00                    | 4.85        |
| 28-Jul-24    | 94.86          | 0.60                           | 10.00                    | 4.71        |
| 29-Jul-24    | 94.41          | 2.01                           | 10.00                    | 5.80        |
| 30-Jul-24    | 103.67         | 2.30                           | 10.00                    | 7.68        |
| 31-Jul-24    | 111.32         | 2.88                           | 10.00                    | 7.21        |
| <b>Total</b> | <b>2972.57</b> | <b>0.60<sup>#</sup></b>        | <b>10.25<sup>#</sup></b> | <b>5.42</b> |

Source: NLDC

<sup>#</sup> Maximum/Minimum in the month

**Table-32: VOLUME OF ELECTRICITY UNDER DRAWAL/ OVER INJECTION (EXPORTED) UNDER DSM, JULY 2024**

| Name of the Entity | Volume of Under drawal/ Over injection (MUs) | % of Volume |
|--------------------|--|-------------|
| GUJARAT            | 149.18                                       | 5.05        |
| MAHARASHTRA        | 148.35                                       | 5.02        |
| J & K              | 147.28                                       | 4.98        |
| TAMIL NADU         | 134.49                                       | 4.55        |
| PUNJAB             | 120.12                                       | 4.07        |
| KARNATAKA          | 97.56  | 3.30        |
| RAJASTHAN          | 94.00  | 3.18        |
| NTPC STATIONS-SR   | 90.72  | 3.07        |
| ANDHRA PRADESH     | 80.88  | 2.74        |
| BIHAR              | 80.76  | 2.73        |
| MP                 | 78.19  | 2.65        |
| HARYANA            | 77.96  | 2.64        |
| NTPC STATIONS-NR   | 74.87  | 2.53        |
| UTTAR PRADESH      | 73.69  | 2.49        |
| TELANGANA          | 64.33  | 2.18        |
| NTPC STATIONS-WR   | 58.80  | 1.99        |
| CHHATTISGARH       | 58.07  | 1.97        |
| DELHI              | 43.40  | 1.47        |
| NHPC STATIONS      | 42.11  | 1.43        |
| ADANI_4RE          | 35.75  | 1.21        |
| NTPC STATIONS-ER   | 32.40  | 1.10        |
| JHARKHAND          | 31.34  | 1.06        |
| NEEPCO STATIONS    | 28.16  | 0.95        |
| UTTARAKHAND        | 24.68  | 0.84        |
| DVC                | 24.40  | 0.83        |
| AH4_WIND           | 22.17  | 0.75        |
| ODISHA             | 20.69  | 0.70        |
| NLC                | 19.33  | 0.65        |
| WEST BENGAL        | 18.73  | 0.63        |
| BBMB               | 17.99  | 0.61        |
| IGSTPS             | 17.52  | 0.59        |
| SASAN UMPP         | 16.97  | 0.57        |
| NJPC               | 16.68  | 0.56        |
| AHEJ4L_SOLAR       | 16.14  | 0.55        |
| JINDAL STAGE-II    | 15.84  | 0.54        |
| AMPS Hazira        | 15.07  | 0.51        |
| GRT_JPL            | 14.06  | 0.48        |
| NEPAL(NVVN)        | 14.01  | 0.47        |
| KREDL_PVGD         | 13.69  | 0.46        |
| RKM POWER          | 13.57  | 0.46        |
| PARAM_PVGD         | 13.48  | 0.46        |
| JSW_RENEW_2        | 13.26  | 0.45        |
| AYANA_NPKUNTA      | 12.81  | 0.43        |
| AHEJ2L_SOLAR       | 12.63  | 0.43        |
| HIMACHAL PRADESH   | 12.13  | 0.41        |
| KAPP 3&4           | 11.04  | 0.37        |
| RAMPUR HEP         | 10.95  | 0.37        |
| OSTRO Hiriyur      | 10.93  | 0.37        |
| FORTUM1_PVGD       | 10.21  | 0.35        |
| KERALA             | 10.04  | 0.34        |
| SALAL HEP          | 9.86   | 0.33        |
| AVAADASN_SLR       | 9.75   | 0.33        |
| AZURE43_SLR        | 9.73   | 0.33        |
| AGEL_PSS 3         | 9.51   | 0.32        |
| SBESS              | 9.48   | 0.32        |
| AGEMPL BHUJ        | 9.47   | 0.32        |
| ASSAM              | 9.42   | 0.32        |
| PONDICHERRY        | 9.36   | 0.32        |
| RENEW_ROSHNI       | 9.34   | 0.32        |



|                        |      |      |
|------------------------|------|------|
| GOA                    | 9.19 | 0.31 |
| AVADARJHN_SLR          | 8.80 | 0.30 |
| GIWEL_BHUJ             | 8.75 | 0.30 |
| ADANI_WIND             | 8.65 | 0.29 |
| ALTRA XERGI            | 7.96 | 0.27 |
| SKRPL                  | 7.84 | 0.27 |
| TATA_PVGD              | 7.80 | 0.26 |
| RENEW_BHUJ             | 7.72 | 0.26 |
| DD&DNH                 | 7.42 | 0.25 |
| MIZORAM                | 7.38 | 0.25 |
| RENEW_ROSHNI FATEHGARH | 7.20 | 0.24 |
| RENEW_SOJAS            | 7.19 | 0.24 |
| RPREL                  | 7.02 | 0.24 |
| MAITHON POWER LTD      | 6.85 | 0.23 |
| JAYPEE NIGRIE          | 6.77 | 0.23 |
| INOX_BHUJ              | 6.71 | 0.23 |
| APRAAVA                | 6.70 | 0.23 |
| BEEMPOW                | 6.66 | 0.23 |
| THAR1_SLR              | 6.61 | 0.22 |
| MEGHALAYA              | 6.52 | 0.22 |
| AYANA_RPI              | 6.48 | 0.22 |
| ESSAR POWER            | 6.42 | 0.22 |
| RAP B                  | 6.32 | 0.21 |
| RENEW_BHACHAU          | 6.16 | 0.21 |
| BALCO                  | 6.03 | 0.20 |
| OSTRO                  | 5.97 | 0.20 |
| AHEJ3L_SOLAR           | 5.88 | 0.20 |
| ASEJTL_SLR             | 5.86 | 0.20 |
| CHANDIGARH             | 5.85 | 0.20 |
| NPGC                   | 5.63 | 0.19 |
| AZURE41_SLR            | 5.63 | 0.19 |
| ADANI_S_RJ2            | 5.56 | 0.19 |
| ACME_SLR               | 5.53 | 0.19 |
| CLEAN_SLR              | 5.46 | 0.18 |
| RENEW_SR_SLR           | 5.42 | 0.18 |
| ADANIHB_WIND           | 5.33 | 0.18 |
| NETCL VALLUR           | 5.32 | 0.18 |
| ALFANAR_BHUJ           | 5.31 | 0.18 |
| ACME_RUMS              | 5.27 | 0.18 |
| NTPL                   | 5.26 | 0.18 |
| ARS_PVGD               | 5.11 | 0.17 |
| EDEN_SLR               | 5.08 | 0.17 |
| AHEJOL_SLR             | 5.03 | 0.17 |
| DGPCL Bhutan           | 4.98 | 0.17 |
| NSPCL                  | 4.95 | 0.17 |
| ESPL_RADHANESDA        | 4.92 | 0.17 |
| ARINSUM_RUMS           | 4.83 | 0.16 |
| MSEPL                  | 4.83 | 0.16 |
| RENEW_SAAYAN           | 4.77 | 0.16 |
| AH3_WIND               | 4.68 | 0.16 |
| AH2_WIND               | 4.67 | 0.16 |
| MAHINDRA_RUMS          | 4.50 | 0.15 |
| RENEWURJA_SLR          | 4.43 | 0.15 |
| MSRPL                  | 4.39 | 0.15 |
| RENEWSB                | 4.36 | 0.15 |
| ARUNACHAL PRADESH      | 4.32 | 0.15 |
| ARERJL_SLR             | 4.31 | 0.15 |
| MSUPL_BHDL2            | 4.29 | 0.15 |
| LANKO_AMK              | 4.26 | 0.14 |
| AZURE_MAPLE_SLR        | 4.25 | 0.14 |
| RENEWSW_SLR            | 4.21 | 0.14 |
| BRBCL,NABINAGAR        | 4.18 | 0.14 |
| AVIKIRAN               | 4.08 | 0.14 |

|                        |      |      |
|------------------------|------|------|
| ABC_BHDL2              | 3.96 | 0.13 |
| RENEW_SLR_BKN          | 3.96 | 0.13 |
| RENEWJH_SLR            | 3.91 | 0.13 |
| TRIPURA                | 3.83 | 0.13 |
| TORRENT SOLARGEN       | 3.81 | 0.13 |
| KOTESHWAR              | 3.76 | 0.13 |
| NTPC STATIONS-NER      | 3.71 | 0.13 |
| MANIPUR                | 3.67 | 0.12 |
| RGPPL                  | 3.65 | 0.12 |
| KARCHAM WANGTOO        | 3.62 | 0.12 |
| NEP                    | 3.60 | 0.12 |
| TATA_SLR               | 3.53 | 0.12 |
| MB POWER               | 3.51 | 0.12 |
| AVAADA SUNSHINE        | 3.49 | 0.12 |
| GSECL P-II             | 3.46 | 0.12 |
| SERENTICA RE4          | 3.45 | 0.12 |
| NETRA WIND             | 3.41 | 0.12 |
| NOKHRA_STPP            | 3.39 | 0.11 |
| AZURE_PVGD             | 3.33 | 0.11 |
| SESPL                  | 3.33 | 0.11 |
| JINDAL POWER           | 3.33 | 0.11 |
| GIWEL_TCN              | 3.29 | 0.11 |
| SIKKIM                 | 3.26 | 0.11 |
| AHEJOL_S_FTG2          | 3.22 | 0.11 |
| TATA_GREEN             | 3.10 | 0.11 |
| NTPC_ANTP              | 3.09 | 0.10 |
| SBG_NPK                | 3.09 | 0.10 |
| RENEW_SPRATAP          | 3.07 | 0.10 |
| DEVKOOT_SLR            | 3.05 | 0.10 |
| SINGOLI BHATWARI HEP   | 3.02 | 0.10 |
| BARC                   | 2.95 | 0.10 |
| NAGALAND               | 2.94 | 0.10 |
| SBG_PVGD               | 2.92 | 0.10 |
| CGPL                   | 2.88 | 0.10 |
| SKS POWER              | 2.88 | 0.10 |
| SPRNG_NPKUNTA          | 2.85 | 0.10 |
| RISING_SLR             | 2.84 | 0.10 |
| ACME HEERGARH          | 2.71 | 0.09 |
| FRV_ANTP               | 2.63 | 0.09 |
| AZURE_SLR              | 2.63 | 0.09 |
| RONGNICHU HEP          | 2.58 | 0.09 |
| ADY1_PVGD              | 2.53 | 0.09 |
| AYANA_RP3              | 2.49 | 0.08 |
| GIPCL_RADHANESDA       | 2.49 | 0.08 |
| SERENTICA RE1 (INFIRM) | 2.35 | 0.08 |
| CLEANSR_SLR            | 2.32 | 0.08 |
| RANGANADI HEP          | 2.24 | 0.08 |
| ORANGE_TCN             | 2.22 | 0.08 |
| RENEW_SVIHAAN          | 2.18 | 0.07 |
| TPREL_RADHANESDA       | 2.18 | 0.07 |
| ONGC PALATANA          | 2.17 | 0.07 |
| SIMHAPURI              | 2.15 | 0.07 |
| TEHRI                  | 2.06 | 0.07 |
| RENEW_PVGD             | 2.04 | 0.07 |
| CHUZACHEN HEP          | 2.02 | 0.07 |
| ADEPT                  | 1.98 | 0.07 |
| MTPS II                | 1.90 | 0.06 |
| DB POWER               | 1.90 | 0.06 |
| AZURE_ANTP             | 1.85 | 0.06 |
| TPSL BANDERWALA        | 1.83 | 0.06 |
| THERMAL POWERTECH      | 1.81 | 0.06 |
| AMPLUS_AGES            | 1.80 | 0.06 |
| KSK MAHANADI           | 1.79 | 0.06 |
| AMP_GREEN6             | 1.78 | 0.06 |

|   |                |               |
|---|----------------|---------------|
| AD HYDRO  | 1.76           | 0.06          |
| POWERICA  | 1.75           | 0.06          |
| EMCO  | 1.72           | 0.06          |
| BANGLADESH  | 1.69           | 0.06          |
| GRIAN   | 1.69           | 0.06          |
| AVAADA1_PVGD                                      | 1.60           | 0.05          |
| Railways_ER ISTS                                  | 1.57           | 0.05          |
| DCPP  | 1.51           | 0.05          |
| TPSL  | 1.46           | 0.05          |
| TATA_ANTP   | 1.45           | 0.05          |
| RAIL  | 1.40           | 0.05          |
| NAPP  | 1.38           | 0.05          |
| JITPL   | 1.37           | 0.05          |
| TESPL   | 1.35           | 0.05          |
| ACBIL   | 1.30           | 0.04          |
| SJVN GREEN  | 1.28           | 0.04          |
| SAINJ HEP   | 1.26           | 0.04          |
| IL&FS   | 1.25           | 0.04          |
| NFF   | 1.22           | 0.04          |
| TRN ENERGY  | 1.21           | 0.04          |
| ONEVOLT   | 1.16           | 0.04          |
| FORTUM2_PVGD                                      | 1.16           | 0.04          |
| RENEW_SLR   | 1.13           | 0.04          |
| MEENAKSHI   | 1.11           | 0.04          |
| GMR KAMALANGA                                     | 1.01           | 0.03          |
| SORANG HEP  | 0.93           | 0.03          |
| ADHUNIK POWER LTD                                 | 0.92           | 0.03          |
| AKSP_ANTP   | 0.88           | 0.03          |
| AKS_PVGD  | 0.87           | 0.03          |
| ADANI_SLR 4                                       | 0.87           | 0.03          |
| ABSP_ANTP   | 0.84           | 0.03          |
| RSTPS_FSPP  | 0.82           | 0.03          |
| MYTRAH_TCN  | 0.81           | 0.03          |
| AHSP_ANTP   | 0.79           | 0.03          |
| SHREE CEMENT                                      | 0.78           | 0.03          |
| RAP C   | 0.77           | 0.03          |
| FRV_NPK   | 0.74           | 0.03          |
| AVAADA2_PVGD                                      | 0.73           | 0.02          |
| NIKACHHU HEP                                      | 0.72           | 0.02          |
| YARROW_PVGD                                       | 0.69           | 0.02          |
| SEMBCORP  | 0.69           | 0.02          |
| PARE HEP  | 0.65           | 0.02          |
| SRSSFPL   | 0.60           | 0.02          |
| COASTGEN  | 0.55           | 0.02          |
| GSECL_Radhnesda                                   | 0.55           | 0.02          |
| BETAM_TCN   | 0.51           | 0.02          |
| RANGIT HEP  | 0.50           | 0.02          |
| SPRING_PUGALUR                                    | 0.50           | 0.02          |
| LANCO BUDHIL                                      | 0.47           | 0.02          |
| JORETHANG   | 0.43           | 0.01          |
| DOYANG HEP  | 0.40           | 0.01          |
| DHARIWAL POWER                                    | 0.32           | 0.01          |
| SB_SLR  | 0.28           | 0.01          |
| NEA-Bihar   | 0.28           | 0.01          |
| LOKTAK  | 0.24           | 0.01          |
| POWERGRID HVDC                                    | 0.17           | 0.01          |
| HVDC PUS  | 0.17           | 0.006         |
| TASHIDENG HEP                                     | 0.14           | 0.005         |
| DGEN MEGA POWER                                   | 0.10           | 0.003         |
| HVDC ALPD   | 0.09           | 0.003         |
| JHABUA POWER_MP                                   | 0.03           | 0.001         |
| <b>TOTAL</b>                                      | <b>2954.64</b> | <b>100.00</b> |
| <b>Volume Exported by top 5 Regional Entities</b> | <b>699.41</b>  | <b>23.67</b>  |

Source: NLDC

**Table-33: VOLUME OF ELECTRICITY OVER DRAWAL/ UNDER INJECTION (IMPORTED) UNDER DSM, JULY 2024**

| Name of the Entity | Volume of Over drawal/ Under Injection (MUs) | % of Volume |
|--------------------|--|-------------|
| NTPC STATIONS-NR   | 159.78                                       | 5.34        |
| RAJASTHAN          | 149.58                                       | 5.00        |
| TAMIL NADU         | 132.70                                       | 4.44        |
| NTPC STATIONS-WR   | 117.47                                       | 3.93        |
| NTPC STATIONS-ER   | 103.40                                       | 3.46        |
| UTTAR PRADESH      | 97.95  | 3.28        |
| NTPC STATIONS-SR   | 92.13  | 3.08        |
| GUJARAT            | 61.01  | 2.04        |
| HARYANA            | 59.42  | 1.99        |
| TELANGANA          | 56.63  | 1.89        |
| WEST BENGAL        | 51.32  | 1.72        |
| ODISHA             | 48.83  | 1.63        |
| ANDHRA PRADESH     | 47.11  | 1.58        |
| ADANI_4RE          | 46.08  | 1.54        |
| KARNATAKA          | 44.48  | 1.49        |
| MP                 | 40.79  | 1.36        |
| SPRING_PUGALUR     | 40.12  | 1.34        |
| BIHAR              | 39.82  | 1.33        |
| MAHARASHTRA        | 33.89  | 1.13        |
| AGEMPL BHUJ        | 33.02  | 1.10        |
| KERALA             | 31.87  | 1.07        |
| UTTARAKHAND        | 31.38  | 1.05        |
| GIWEL_BHUJ         | 29.48  | 0.99        |
| PUNJAB             | 27.81  | 0.93        |
| DVC                | 27.28  | 0.91        |
| AMPS Hazira        | 26.38  | 0.88        |
| NEPAL(NVVN)        | 25.71  | 0.86        |
| JINDAL POWER       | 24.76  | 0.83        |
| JHARKHAND          | 24.62  | 0.82        |
| DELHI              | 24.42  | 0.82        |
| ADANI_WIND         | 24.11  | 0.81        |
| DGPCL Bhutan       | 23.17  | 0.77        |
| CHHATTISGARH       | 22.87  | 0.76        |
| ASSAM              | 22.22  | 0.74        |
| INOX_BHUJ          | 21.70  | 0.73        |
| AHEJ4L_SOLAR       | 21.64  | 0.72        |
| HIMACHAL PRADESH   | 20.14  | 0.67        |
| RAIL               | 19.25  | 0.64        |
| ADANIHB_WIND       | 18.65  | 0.62        |
| NLC                | 17.80  | 0.60        |
| OSTRO              | 17.52  | 0.59        |
| NPGC               | 16.80  | 0.56        |
| ALFANAR_BHUJ       | 16.03  | 0.54        |
| IGSTPS             | 15.88  | 0.53        |
| SBESS              | 15.87  | 0.53        |
| NIKACHHU HEP       | 15.80  | 0.53        |
| NHPC STATIONS      | 15.66  | 0.52        |
| KREDL_PVGD         | 15.47  | 0.52        |
| AHEJ2L_SOLAR       | 15.26  | 0.51        |
| SKRPL              | 13.79  | 0.46        |
| RENEW_SOJAS        | 13.74  | 0.46        |
| RENEW_BHACHAU      | 13.55  | 0.45        |
| J & K              | 13.23  | 0.44        |
| RENEW_BHUJ         | 13.13  | 0.44        |
| JSW_RENEW_2        | 13.02  | 0.44        |
| NETCL VALLUR       | 12.95  | 0.43        |
| CGPL               | 12.86  | 0.43        |
| AYANA_NPKUNTA      | 12.74  | 0.43        |
| GOA                | 12.39  | 0.41        |
| AVAADASN_SLR       | 12.28  | 0.41        |
| BALCO              | 12.13  | 0.41        |
| MB POWER           | 11.62  | 0.39        |
| CHANDIGARH         | 11.54  | 0.39        |
| AZURE43_SLR        | 11.05  | 0.37        |
| TRIPURA            | 10.65  | 0.36        |

|                        |       |      |
|------------------------|-------|------|
| RENEW_ROSHNI           | 10.13 | 0.34 |
| BEEMPOW                | 10.09 | 0.34 |
| AGEL_PSS 3             | 9.94  | 0.33 |
| NETRA WIND             | 9.76  | 0.33 |
| GRT_JPL                | 9.45  | 0.32 |
| AVADARJHN_SLR          | 9.42  | 0.31 |
| APRAAVA                | 8.54  | 0.29 |
| ADANI_S_RJ2            | 8.26  | 0.28 |
| MSEPL                  | 8.18  | 0.27 |
| FORTUM1_PVGD           | 8.14  | 0.27 |
| AHEJ3L_SOLAR           | 8.06  | 0.27 |
| SESPL                  | 8.03  | 0.27 |
| PARAM_PVGD             | 8.01  | 0.27 |
| ADANI_SEJ1_EXPORT      | 8.01  | 0.27 |
| OSTRO Hiriyur          | 7.95  | 0.27 |
| SHREE CEMENT           | 7.82  | 0.26 |
| AVIKIRAN               | 7.49  | 0.25 |
| RPREL                  | 7.49  | 0.25 |
| TATA_PVGD              | 7.46  | 0.25 |
| ASEJTL_SLR             | 7.42  | 0.25 |
| ARS_PVGD               | 7.41  | 0.25 |
| SPRNG_NPKUNTA          | 7.39  | 0.25 |
| TEHRI                  | 7.17  | 0.24 |
| NTPC STATIONS-NER      | 7.12  | 0.24 |
| SASAN UMPP             | 7.07  | 0.24 |
| ALTRA XERGI            | 6.99  | 0.23 |
| MAHINDRA_RUMS          | 6.98  | 0.23 |
| AVAADA SUNSHINE        | 6.96  | 0.23 |
| AHEJOL_SLR             | 6.94  | 0.23 |
| BRBCL,NABINAGAR        | 6.86  | 0.23 |
| ARINSUM_RUMS           | 6.76  | 0.23 |
| AZURE_PVGD             | 6.72  | 0.22 |
| RENEW_ROSHNI FATEHGARH | 6.66  | 0.22 |
| TESPL                  | 6.62  | 0.22 |
| SBG_NPK                | 6.59  | 0.22 |
| NTPC_ANTP              | 6.57  | 0.22 |
| RENEWSB                | 6.42  | 0.21 |
| GIWEL_TCN              | 6.42  | 0.21 |
| RENEW_SAAYAN           | 6.32  | 0.21 |
| KAPP 3&4               | 6.30  | 0.21 |
| ESSAR POWER            | 6.28  | 0.21 |
| ACME_RUMS              | 6.19  | 0.21 |
| NEP                    | 6.17  | 0.21 |
| JINDAL STAGE-II        | 5.99  | 0.20 |
| TATA_SLR               | 5.98  | 0.20 |
| ABC_BHDL2              | 5.96  | 0.20 |
| RENEWJH_SLR            | 5.79  | 0.19 |
| ACME_SLR               | 5.76  | 0.19 |
| DHARIWAL POWER         | 5.60  | 0.19 |
| ADY1_PVGD              | 5.59  | 0.19 |
| AH4_WIND               | 5.53  | 0.18 |
| THAR1_SLR              | 5.48  | 0.18 |
| AHEJOL_S_FTG2          | 5.35  | 0.18 |
| AZURE_MAPLE_SLR        | 5.31  | 0.18 |
| AYANA_RPI              | 5.28  | 0.18 |
| RENEWSW_SLR            | 5.26  | 0.18 |
| ACME_HEERGARH          | 5.24  | 0.18 |
| DB POWER               | 5.22  | 0.17 |
| RENEW_SPRATAP          | 5.21  | 0.17 |
| RENEW_SR_SLR           | 5.21  | 0.17 |
| NOKHRA STPP            | 5.17  | 0.17 |
| RENEWURJA_SLR          | 5.17  | 0.17 |
| AH3_WIND               | 5.10  | 0.17 |
| NTPL                   | 5.10  | 0.17 |
| RENEW_SLR_BKN          | 5.07  | 0.17 |
| EDEN_SLR               | 5.01  | 0.17 |
| THERMAL POWERTECH      | 4.99  | 0.17 |
| TORRENT SOLARGEN       | 4.98  | 0.17 |
| DD&DNH                 | 4.86  | 0.16 |
| TPSL BANDERWALA        | 4.84  | 0.16 |

|                        |      |      |
|------------------------|------|------|
| RAPP 7&8               | 4.82 | 0.16 |
| ARUNACHAL PRADESH      | 4.78 | 0.16 |
| SERENTICA RE4          | 4.77 | 0.16 |
| RAP B                  | 4.75 | 0.16 |
| SIKKIM                 | 4.66 | 0.16 |
| DEVKOOT_SLR            | 4.60 | 0.15 |
| ORANGE_TCN             | 4.50 | 0.15 |
| CLEAN_SLR              | 4.48 | 0.15 |
| MSUPL_BHDL2            | 4.39 | 0.15 |
| PONDICHERRY            | 4.36 | 0.15 |
| KHURJA STPP            | 4.36 | 0.15 |
| KARCHAM WANGTOO        | 4.27 | 0.14 |
| ADEPT                  | 4.25 | 0.14 |
| TATA_GREEN             | 4.20 | 0.14 |
| ESPL_RADHANESDA        | 4.09 | 0.14 |
| AZURE41_SLR            | 4.05 | 0.14 |
| RENEW_PVGD             | 4.01 | 0.13 |
| JITPL                  | 3.91 | 0.13 |
| ONEVOLT                | 3.87 | 0.13 |
| AVAADA1_PVGD           | 3.85 | 0.13 |
| RISING_SLR             | 3.77 | 0.13 |
| MSRPL                  | 3.74 | 0.13 |
| SBG_PVGD               | 3.74 | 0.12 |
| NEEPCO STATIONS        | 3.71 | 0.12 |
| SEMBICORP              | 3.60 | 0.12 |
| GRIAN                  | 3.55 | 0.12 |
| AMPLUS_AGES            | 3.40 | 0.11 |
| SERENTICA RE1 (INFIRM) | 3.32 | 0.11 |
| AMP_GREEN6             | 3.22 | 0.11 |
| BANGLADESH             | 3.19 | 0.11 |
| SINGOLI BHATWARI HEP   | 3.12 | 0.10 |
| MTPS II                | 3.07 | 0.10 |
| TPREL_RADHANESDA       | 2.86 | 0.10 |
| FRV_ANTP               | 2.85 | 0.10 |
| MANIPUR                | 2.78 | 0.09 |
| CLEANSPL_SLR           | 2.77 | 0.09 |
| SORANG HEP             | 2.76 | 0.09 |
| AZURE_SLR              | 2.68 | 0.09 |
| FORTUM2_PVGD           | 2.65 | 0.09 |
| MAITHON POWER LTD      | 2.60 | 0.09 |
| COASTGEN               | 2.57 | 0.09 |
| MEGHALAYA              | 2.57 | 0.09 |
| SKS POWER              | 2.55 | 0.09 |
| ARERJL_SLR             | 2.55 | 0.09 |
| AZURE_ANTP             | 2.53 | 0.08 |
| ACBIL                  | 2.53 | 0.08 |
| JHABUA POWER_MP        | 2.52 | 0.08 |
| GIPCL_RADHANESDA       | 2.48 | 0.08 |
| DGEN MEGA POWER        | 2.44 | 0.08 |
| POWERICA               | 2.21 | 0.07 |
| TPSL                   | 2.14 | 0.07 |
| NSPCL                  | 2.13 | 0.07 |
| AD HYDRO               | 1.98 | 0.07 |
| RGPPL                  | 1.95 | 0.07 |
| RENEW_SVIHAAN          | 1.91 | 0.06 |
| SIMHAPURI              | 1.87 | 0.06 |
| TATA_ANTP              | 1.87 | 0.06 |
| ADHUNIK POWER LTD      | 1.84 | 0.06 |
| SJVN GREEN             | 1.81 | 0.06 |
| RSTPS_FSPP             | 1.80 | 0.06 |
| DCPP                   | 1.76 | 0.06 |
| NAPP                   | 1.75 | 0.06 |
| SRSSFPL                | 1.75 | 0.06 |
| BBMB                   | 1.45 | 0.05 |
| YARROW_PVGD            | 1.36 | 0.05 |
| AVAADA2_PVGD           | 1.35 | 0.05 |
| Railways_ER ISTS       | 1.32 | 0.04 |
| ABSP_ANTP              | 1.31 | 0.04 |
| AHSP_ANTP              | 1.31 | 0.04 |
| AKS_PVGD               | 1.28 | 0.04 |

|   |                |               |
|---|----------------|---------------|
| FRV_NPK   | 1.25           | 0.04          |
| KOTESHWAR   | 1.22           | 0.04          |
| MEENAKSHI   | 1.21           | 0.04          |
| EMCO  | 1.21           | 0.04          |
| MYTRAH_TCN  | 1.19           | 0.04          |
| BETAM_TCN   | 1.17           | 0.04          |
| RKM POWER   | 1.17           | 0.04          |
| AKSP_ANTP   | 1.10           | 0.04          |
| RENEW_SLR   | 1.08           | 0.04          |
| GMR KAMALANGA                                     | 1.05           | 0.04          |
| CHUZACHEN HEP                                     | 1.01           | 0.03          |
| JAYPEE NIGRIE                                     | 0.94           | 0.03          |
| RONGNICHU HEP                                     | 0.91           | 0.03          |
| ADANI_SLR 4                                       | 0.87           | 0.03          |
| RANGANADI HEP                                     | 0.83           | 0.03          |
| MIZORAM   | 0.82           | 0.03          |
| LANKO_AMK   | 0.76           | 0.03          |
| TRN ENERGY  | 0.74           | 0.02          |
| ONGC PALATANA                                     | 0.69           | 0.02          |
| NAGALAND  | 0.69           | 0.02          |
| RAP C   | 0.67           | 0.02          |
| NEA-Bihar   | 0.63           | 0.02          |
| NJPC  | 0.62           | 0.02          |
| GSECL P-II  | 0.61           | 0.02          |
| LANKO KONDAPALLI                                  | 0.52           | 0.02          |
| RANGIT HEP  | 0.50           | 0.02          |
| JORETHANG   | 0.49           | 0.02          |
| SAINJ HEP   | 0.47           | 0.02          |
| TASHIDENG HEP                                     | 0.42           | 0.01          |
| KSK MAHANADI                                      | 0.38           | 0.01          |
| GSECL_Radhnesda                                   | 0.35           | 0.01          |
| IL&FS   | 0.28           | 0.01          |
| RAMPUR HEP  | 0.26           | 0.01          |
| PARE HEP  | 0.26           | 0.01          |
| DOYANG HEP  | 0.22           | 0.01          |
| POWERGRID HVDC                                    | 0.15           | 0.01          |
| LOKTAK  | 0.06           | 0.002         |
| LANCO BUDHIL                                      | 0.02           | 0.0006        |
| HVDC ALPD   | 0.02           | 0.0006        |
| NFF   | 0.01           | 0.0005        |
| HVDC PUS  | 0.001          | 0.00004       |
| <b>TOTAL</b>                                      | <b>2990.51</b> | <b>100.00</b> |
| <b>Volume Imported by top 5 Regional Entities</b> | <b>662.92</b>  | <b>22.17</b>  |

Source: NLDC

**Table-34: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES AND THROUGH TRADERS (BILATERAL), JULY 2024**

| Sr. No | Details of REC Transactions         | Through Power Exchange |         |         | Bilateral through Traders |
|--------|-------------------------------------|------------------------|---------|---------|---------------------------|
|        |                                     | IEX                    | PXIL    | HPX     |                           |
| 1      | Volume of Buy Bid                   | 3150109                | 2176332 | 1400.00 | -                         |
| 2      | Volume of Sell Bid                  | 6180666                | 5787717 | 2988663 | -                         |
| 3      | Ratio of Buy Bid to Sell Bid Volume | 0.51                   | 0.38    | 0.0005  | -                         |
| 4      | Traded Volume (MWh)                 | 3150109                | 2176332 | 1400.00 | 44460                     |
| 5      | Weighted Average Price (₹/MWh)      | 122.24                 | 121.55  | 140.00  | 149.79                    |

Source: Power Exchanges & Grid-India REC Report

Note: 1 REC = 1 MWh

Under the CERC REC Regulations 2022, the categorization of RECs has been dispensed with and exchange of RECs through trading licensees has also been allowed

**Table-35(a): VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, JULY 2024**

| Sr. No. | Neighbouring Country | Volume (MU)   |             |                | Weighted Average Price (₹/kWh) |          |
|---------|----------------------|---------------|-------------|----------------|--------------------------------|----------|
|         |                      | Sale          | Purchase    | Net*           | Sale                           | Purchase |
| 1       | Nepal                | 360.64        | 0.00        | -360.64        | 5.01                           | -        |
| 2       | Bhutan               | 59.89         | 0.00        | -59.89         | 5.39                           | -        |
|         | <b>Total</b>         | <b>420.53</b> | <b>0.00</b> | <b>-420.53</b> | -                              | -        |

Source: IEX

\* Net indicates difference of volume purchased and sold by the respective neighbouring country

Note: No Cross Border transactions were recorded in DAM at PXIL and HPX

**Table-35(b): VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH REAL TIME MARKET AT IEX, JULY 2024**

| Sr. No. | Neighbouring Country | Volume (MU)  |             |               | Weighted Average Price (₹/kWh) |          |
|---------|----------------------|--------------|-------------|---------------|--------------------------------|----------|
|         |                      | Sale         | Purchase    | Net*          | Sale                           | Purchase |
| 1       | Nepal                | 28.08        | 0.00        | -28.08        | 3.71                           | -        |
| 2       | Bhutan               | 0.71         | 0.00        | -0.71         | 4.20                           | -        |
|         | <b>Total</b>         | <b>28.79</b> | <b>0.00</b> | <b>-28.79</b> | -                              | -        |

Source: IEX

\* Net indicates difference of volume purchased and sold by the respective neighbouring country

Note: No Cross Border transactions were recorded in RTM at PXIL and HPX





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