

Monthly Report on Short-term Transactions of Electricity in India

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Abbreviations

Abbreviation

ABSP_ANTP
ACBIL
ACP
ACV
ACME_SLR
ACME_RUMS
ADANI GREEN
ADANIHB_SLR
ADANI_SLR 4
ADANIHB_WIND
ADY1_PVGD
ADY2_PVGD
ADY3_PVGD
ADY6_PVGD
ADY10_PVGD
ADY13_PVGD
AGEMPL BHUJ
AHEJOL_S_FTG2
AHEJOL_W_FTG2
AHEJ2L_SOLAR
AHEJ3L_SOLAR
AHEJ4L_SOLAR
AHEJ4L_WIND
AHSP_ANTP
AKS_PVGD
AKSP_ANTP
ALFANAR_BHUJ
AMPS Hazira
APTEL
ARERJL_SLR
ARINSUM_RUMS
ARS_PVGD
ARTPP
ASEJTL_SLR
AVAADA1_PVGD
AVAADA2_PVGD
AVADARJHN_SLR
AYANA_NPKUNTA
AZURE_ANTP
AZURE_PVGD
AZURE_SLR
AZURE34_SLR
AZURE43_SLR
BALCO
BARC
BBMB
BETAM_TCN
BHADRAVATHI HVDC
BRBCL
CEA
CERC
CGPL

Expanded Version

Acme Bhiwadi Solar Power Private Limited, Anantpur
ACB (India) Limited
Area Clearing Price
Area Clearing Volume
ACME Solar Power Project
Acme Rewa Ultra Mega Solar Project
Adani Green Energy Limited
Adani Hybrid Energy Jaisalmer One Limited (Solar)
Adani Solar Energy Four Private Limited
Adani Hybrid Energy Jaisalmer One Limited (Wind)
Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 3 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 6 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 10 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park
Adani Green Energy (MP) Ltd.,Bhuj
Adani Hybrid Energy Jaisalmer One Limited (SOLAR)
Adani Hybrid Energy Jaisalmer One Limited (WIND)
Adani Hybrid Energy Jaisalmer Two Limited (Solar)
Adani Hybrid Energy Jaisalmer Three Limited (Solar)
Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Solar
Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Wind
Acme Hisar Solar Power Private Limited,Anantpur
ACME Kurukshetra Solar Energy Pvt. Ltd
Acme Karnal Solar Power Private Limited,Anantpur
Alfanar Group Wind Project, Bhuj, Gujarat
Arcelor Mittal Nippon Steel, Hazira
Appellate Tribunal for Electricity
Adani Renewable Energy Park Rajasthan Ltd.
Solenergi RewaUltraMega Solar Project
ACME REWARI Solar Power Pvt Ltd.
Adani Power Limited - Raipur TPP
Adani Solar Energy Jodhpur Two Ltd.
Avaada Solar Energy Private Ltd., Pavagada Project 1
Avaada Solar Energy Private Ltd., Pavagada Project 2
Avaada Rjhn Private Limited_Solar
Ayana Power, NP Kunta
Azure Power,Anantpur
Azure Power,Pavagada
Azure Power Solar Power Project
Azure Power 34 Pvt. Ltd. Solar Power Project
Azure Power Forty Three Private Limited
Bharat Aluminum Company Limited
Bhabha Atomic Research Centre
Bhakra Beas Management Board
Betam Wind Energy Private Limited, Tuticorin
Bhadravathi High Voltage Direct Current Link
Bhartiya Rail Bijlee Company Limited
Central Electricity Authority
Central Electricity Regulatory Commission
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 |
| DB POWER | Diligent Power Pvt. 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 | Doyang Hydro 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 |
| ESSAR STEEL | Essar Steel Ltd |
| 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 |
| 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 |
| 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 |
| 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 |
| MAHOBASLR | 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 |
| MP | Madhya Pradesh |
| MRPL | Mahindra Renewables Private Limited |
| MSEPL | Masaya Solar Energy Private Limited |
| MTPS | TATA Power Mundra Thermal Power Station |
| MTPS II | Muzaffarpur Thermal Power Station – Stage II |
| MYTRAH_TCEN | 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 |
| NPGC | Nabinagar Power Generating Company (Pvt.) Limited |
| 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 |
| ONGC Platana | ONGC Tripura Power Company |
| OPGC | Odisha Power Generation Corporation |
| ORANGE_TCEN | 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 |
| PX | Power Exchange |
| PXIL | Power Exchange India Limited |
| RAIL | Indian Railways |
| 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 |
| REC | Renewable Energy Certificate |
| REGL | Raigarh Energy Generation Limited |
| RENEW_BHACHAU | ReNew Power Limited, Bhachau |
| RENEW_BHUI | ReNew Power Limited, Bhuj |
| RENEW_PVGD | ReNew Wind Energy (TN2) Private Limited |
| RENEW_SLR_BKN | Renew Solar Bikaner |
| RENEW_SR_SLR | Renew Surya Ravi Private Limited (Solar) |
| 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 |
| 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 |
| TEESTA STG3 | Teesta Stage 3 Hydro Power Project |
| TEHRI | Tehri Hydro Electric Power Project |
| TAM | Term Ahead Market |
| 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 **October 2023** is presented in the following sections.

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

2.1. During October 2023, total electricity generation, excluding generation from renewable and captive power plants in India, was 133780.03 MU (Table-1). Of the total electricity generation, 13.20% was transacted through short-term and DSM, comprising of 6.05% through bilateral¹ (through Traders and Term-Ahead contracts on power exchanges, and directly between distribution companies), followed by 5.53% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)} and 1.63% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions and DSM volume (17665.51 MU), 45.79% was transacted through bilateral (37.40% through Traders and Term-Ahead contracts on power exchanges, and 8.38% directly between distribution companies), followed by 41.86% through

¹ With change in the regime on implementation of GNA Regulations from 1st 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.

power exchanges {DAM (including G-DAM & HP-DAM) and RTM} and 12.35% through DSM (Table-1 & Figure-2). The daily volume of power exchange transactions is shown in Table-27. 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, 42.24% of the volume was transacted in DAM (including G-DAM & HP-DAM), followed by 36.93% in Term Ahead Market (TAM) (including G-TAM & HP-TAM) and 20.83% in RTM (Figure-3).

2.4. The share of electricity traded by each trading licensee is given in Table-2 & Figure-5. The volume of electricity transacted by the trading licensees includes bilateral transactions and transactions undertaken through power exchanges. There were 54 trading licensees as of October 2023. Of which, 31 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 Arunachal Pradesh Power Corporation (P) Ltd., had a share of 79.18% 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 0.1449 for the month of October 2023, which indicates non-concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX, PXIL and HPX was 4688.35 MU, 21.60 MU and 36.83 MU, respectively. The volume of total buy bids and sell bids was 10207.52 MU and 7074.44 MU, respectively in IEX, 129.45 MU and 41.68 MU, respectively in PXIL, while the same was 69.45 MU and 41.25 MU, respectively in 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 378.04 MU, while the volume purchased was 0.11

MU, under the Cross Border Trade of electricity through power exchange (Table-34(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 183.59 MU, while no electricity was transacted in the G-DAM of PXIL and HPX. The volume of total buy bids and sell bids was 2018.82 MU and 224.67 MU, respectively, in IEX. The volume of total buy bids was 8.88 MU in PXIL, while no sell bids were received at PXIL. No bids were received in HPX.

2.9. The volume of electricity transacted in the HP-DAM of IEX and PXIL was 15.80 MU and 6.86 MU, respectively. The volume of total buy bids and sell bids was 58.64 MU and 1543.39 MU, respectively in IEX, while the same was 6.86 MU and 6.86 MU, respectively in PXIL.

2.10. The volume of electricity transacted in the RTM of IEX, PXIL and HPX was 2402.26 MU, 25.42 MU and 14.62 MU, respectively. The volume of total buy bids and sell bids was 7844.09 MU and 3480.50 MU, respectively in IEX, 43.87 MU and 27.09 MU, respectively in PXIL, while the same was 24.59 MU and 16.08 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 9.66 MU, while no volume was purchased, under the Cross Border Trade of electricity through power exchange (Table-34(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 1911.06 MU, 926.24 MU and 1107.59 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 7.24 MU, 2.95 MU and 5.82 MU, respectively (Table-12, Table-13 & Table-14).

2.13. The volume of electricity transacted in the HP-TAM of PXIL and HPX was 122.01 MU and 248.17 MU (Table-15 & Table-16).

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 ₹2.70/kWh, ₹10.00/kWh and ₹6.77/kWh, respectively (Table-3). The weighted average sale prices were also computed for the electricity transacted during Round the Clock (RTC) and Off-peak periods separately, and the sale prices were ₹6.94/kWh and ₹4.00/kWh, respectively. No electricity was transacted through traders during Peak periods (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 ₹1.50/kWh, ₹10.00/kWh and ₹6.36/kWh, respectively. These prices in the DAM 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 DAM of HPX were ₹10.00/kWh, ₹10.00/kWh and ₹10.00/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹1.70/kWh, ₹10.00/kWh and ₹6.37/kWh, respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the HP-DAM of IEX were ₹12.00/kWh, ₹20.00/kWh and ₹16.95/kWh, respectively. These prices in the HP-DAM of PXIL were ₹13.00/kWh, ₹17.00/kWh and ₹16.48/kWh respectively (Table-7). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹1.75/kWh, ₹10.00/kWh and ₹5.99/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 ₹4.00/kWh, ₹10.00/kWh and ₹9.88/kWh respectively (Table-8). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹8.25/kWh, ₹9.35/kWh and ₹8.85/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 ₹6.62/kWh, ₹7.61/kWh and ₹5.52/kWh, respectively (Table-12, Table-13 and Table-14). The weighted average price of electricity transacted in the HP-TAM of PXIL and HPX was ₹16.81/kWh and ₹14.81/kWh (Table-15 and Table-16). No electricity was transacted in G-DAM of PXIL and HPX, HP-TAM of IEX.

3.3. **DSM Charges:** The minimum, maximum and average charge under DSM was ₹1.75/kWh, ₹15.41/kWh and ₹6.87/kWh, respectively (Table-30).

3.4. The comparison of weighted average prices of electricity transacted through trading licensees and power exchanges is shown in Figure-6. The daily prices of electricity transacted through various segments at power exchanges and their comparison are shown in Table-28(a), (b) & (c) and Figure-7. The daily volume and charges under DSM are shown in Table-30.

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 ₹0.033/kWh.

5. Volume of Short-term Transactions of Electricity (Regional Entity²-Wise)

5.1. Of the total DAM transactions at power exchanges, the top 5 regional entities/states sold 32.84% of the volume, and these were Uttar Pradesh, Nepal (NVVN), Adani Power Limited - Raipur TPP, Essar Power Ltd. and DB Power (Table-17). The top 5 regional entities/states purchased 61.21% of the volume, and these were Maharashtra, Telangana, Gujarat, Uttar Pradesh and Andhra Pradesh (Table-18).

5.2. Of the total G-DAM transactions at power exchanges, the top 5 regional entities/states sold 50.34% of the volume, and these were Karnataka, Jammu & Kashmir, Renew Surya Ravi Private Limited (Solar), Singoli-Bhatwari Hydroelectric Project Uttarakhand and Ostro Energy Private Limited Hiriur (Table-19). The top 5 regional entities/states purchased 62.53% of the volume, and these were Arcelor Mittal Nippon Steel Hazira, Kerala, Bharat Aluminum Company Limited, Maharashtra and Goa (Table-20).

5.3. Of the total HP-DAM transactions at power exchanges, the top 5 regional entities/states sold 92.99% of the volume, and these were Ratnagiri Gas and Power Private Limited, Ratnagiri Gas and Power Private Ltd. (supply to Indian Railways), NTPC Stations (Northern Region), NTPC Stations (Western Region) and DGEN Mega Power Project

² 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.

(Table-21). Only 4 regional entities/states purchased 100.00% of the volume, and these were Tamil Nadu, West Bengal, Bihar and Maharashtra (Table-22).

5.4. Of the total RTM transactions at power exchanges, the top 5 regional entities/states sold 40.62% of the volume, and these were Bihar, Rajasthan, Madhya Pradesh, Odisha and Chhattisgarh (Table-23). The top 5 regional entities/states purchased 51.30% of the volume, and these were Telangana, Maharashtra, Uttar Pradesh, Karnataka and Andhra Pradesh (Table-24).

5.5. The total volume of net transactions through power exchanges (Regional entity-wise), is shown in Table-25 & 29. The top 5 electricity selling regional entities/states of power exchange transactions were Chhattisgarh, Nepal (NVVN), Adani Power Limited - Raipur TPP, Essar Power Limited and DB Power. The top 5 electricity purchasing regional entities/states of power exchange transactions were Maharashtra, Telangana, Andhra Pradesh, Gujarat and West Bengal.

5.6. Of the total under-drawal/ over-injection volume under DSM in October 2023, the top 5 regional entities/states accounted for 23.47% of the volume, and these were Rajasthan, Maharashtra, Madhya Pradesh, Gujarat and Uttar Pradesh (Table-31). The top 5 regional entities/states under DSM accounted for 23.98% of the total over-drawal/ under-injection volume, and these were NTPC Stations (Eastern Region), NTPC Stations (Southern Region), NTPC Stations (Western Region), Karnataka and Jammu & Kashmir (Table-32).

6. Congestion³ 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,

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

limits the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”⁴.

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 October 2023, congestion was experienced in DAM, G-DAM and HP-DAM on IEX.

6.3. The volume of electricity that could not be cleared due to congestion was 0.01% of the unconstrained cleared volume in DAM, 0.31% of the unconstrained cleared volume in G-DAM and 0.001% of the unconstrained cleared volume in HP-DAM of IEX. In terms of time, congestion occurred was 0.97% in DAM, 0.87% in G-DAM and 0.10% in HP-DAM of IEX during the month. (Table-26).

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.

⁴“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 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.

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 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 October 2023 are shown in Table-33. The market clearing volume of RECs transacted on IEX and PXIL was 217023 and 96796, respectively. The weighted average market clearing price of these RECs was ₹419/MWh in IEX and ₹446/MWh in PXIL. No RECs were traded on 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 0.04 and 0.07 in IEX and PXIL, respectively. No buy bids were received on HPX.

7.6. The volume of RECs transacted through Trading Licensees in October 2023 was 14609. The weighted average trade price for the RECs transacted through traders was ₹523/MWh.

8. Inferences:

- a) The percentage of short-term transactions of electricity and DSM volume to total electricity generation was 13.20%.
- b) Of the total short-term transactions and DSM volume (17665.51 MU), 45.79% was transacted through bilateral (37.40% through Traders and Term-Ahead contracts on power exchanges, and 8.38% directly between distribution companies), followed by 41.86% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM} and 12.35% through DSM.
- c) Of the total volume of electricity transacted through power exchanges, 42.24% of the volume was transacted in DAM (including G-DAM & HP-DAM), followed by 36.93% in Term Ahead Market (TAM) (including G-TAM & HP-TAM) and 20.83% in RTM
- d) The top 5 trading licensees had a share of 79.18% 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 0.1449, indicating non-concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹6.77/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX, PXIL and HPX was ₹6.36/kWh, ₹10.00/kWh and ₹10.00/kWh. The weighted average price of electricity transacted in G-DAM of IEX was ₹6.37/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 and PXIL was ₹16.95/kWh and ₹16.48/kWh, respectively. The weighted average price of electricity transacted in RTM of IEX, PXIL and HPX was ₹5.99/kWh, ₹10.00/kWh and ₹9.88/kWh.
- h) The weighted average price of electricity transacted in TAM of IEX, PXIL and HPX was ₹8.25/kWh, ₹9.35/kWh and ₹8.85/kWh, respectively. The weighted average price of electricity transacted in G-TAM of IEX, PXIL and HPX was ₹6.62/kWh, ₹7.61/kWh and ₹5.52/kWh, respectively. The weighted average price of electricity transacted in HP-TAM of PXIL and HPX was ₹16.81/kWh and ₹14.81/kWh.
- i) The average charge under DSM was ₹6.87/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.033/kWh.
- k) The top 5 electricity selling regional entities/states of power exchange transactions were Chhattisgarh, Nepal (NVVN), Adani Power Limited - Raipur TPP, Essar Power Limited and DB Power. The top 5 electricity purchasing regional entities/states of power exchange transactions were Maharashtra, Telangana, Andhra Pradesh, Gujarat and West Bengal.
- l) The top 5 under-drawing/ over-injecting regional entities/states under DSM were Rajasthan, Maharashtra, Madhya Pradesh, Gujarat and Uttar Pradesh. The top 5 over-drawing/ under-injecting regional entities/states under DSM were NTPC Stations (Eastern Region), NTPC Stations (Southern Region), NTPC Stations (Western Region), Karnataka and Jammu & Kashmir.

- m) During the month of October 2023, congestion was experienced in DAM, G-DAM and HP-DAM on IEX. The volume of electricity that could not be cleared due to congestion was 0.01% of the unconstrained cleared volume in DAM, 0.31% of the unconstrained cleared volume in G-DAM and 0.001% of the unconstrained cleared volume in HP-DAM of IEX.
- n) The market clearing volume of RECs transacted on IEX and PXIL was 217023 and 96796, respectively. The weighted average market clearing price of these RECs was ₹419/MWh in IEX and ₹446/MWh in PXIL. No RECs were traded on HPX. The volume of RECs transacted through Trading Licensees in October 2023 was 14609. The weighted average trade price for the RECs transacted through traders was ₹523/MWh.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY AND DSM (ALL INDIA), OCTOBER 2023

| Sr. No | Transaction | Volume (MU) | % to short-term transactions and DSM Volume | % to Total Generation |
|--|--------------------------------|------------------|---|-----------------------|
| A | Short-term transactions | | | |
| 1 | Bilateral* | 8088.65 | 45.79 | 6.05 |
| | (i) Through Traders and PXs | 6607.64 | 37.40 | 4.94 |
| | (ii) Direct | 1481.01 | 8.38 | 1.11 |
| 2 | Through Power Exchanges | 7395.33 | 41.86 | 5.53 |
| | (i) IEX | | | |
| | (a) DAM | 4688.35 | 26.54 | 3.50 |
| | (b) RTM | 2402.26 | 13.60 | 1.80 |
| | (c) GDAM | 183.59 | 1.04 | 0.14 |
| | (d) HP-DAM | 15.80 | 0.09 | 0.01 |
| | (ii) PXIL | | | |
| | (a) DAM | 21.60 | 0.12 | 0.02 |
| | (b) RTM | 25.42 | 0.14 | 0.02 |
| | (c) GDAM | 0.00 | 0.00 | 0.00 |
| | (d) HP-DAM | 6.86 | 0.04 | 0.01 |
| | (ii) HPX | | | |
| | (a) DAM | 36.83 | 0.21 | 0.03 |
| | (b) RTM | 14.62 | 0.08 | 0.01 |
| | (c) GDAM | 0.00 | 0.00 | 0.00 |
| | (d) HP-DAM | 0.00 | 0.00 | 0.00 |
| B | Through DSM | 2181.53 | 12.35 | 1.63 |
| Total Short-term transactions and DSM | | 17665.51 | | 13.20 |
| Total Generation | | 133780.03 | | - |

Source: NLDC

Figure-1: Volume of various kinds of Electricity Transactions in Total Electricity Generation, October 2023

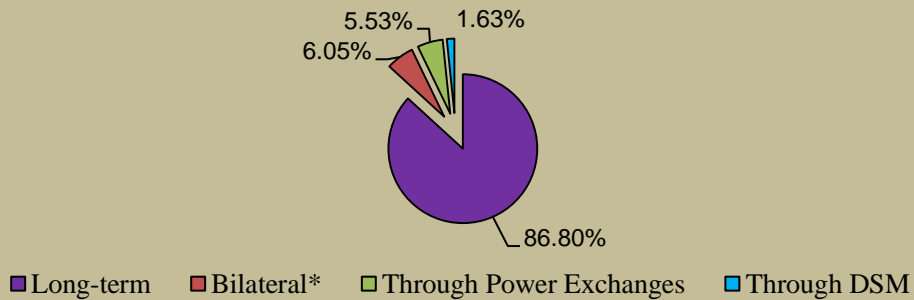
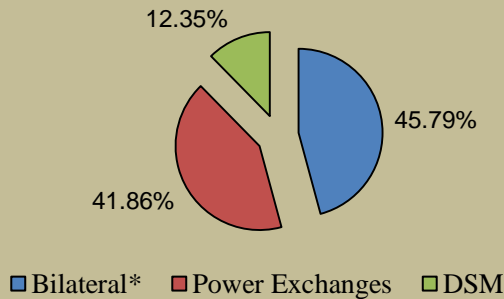


Figure-2: Volume of Short-term Transactions of Electricity and DSM Volume, October 2023



* With change in the regime on implementation of GNA Regulations from 1st 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.

Figure-3: Volume transacted in different markets segments on Power Exchanges, October 2023

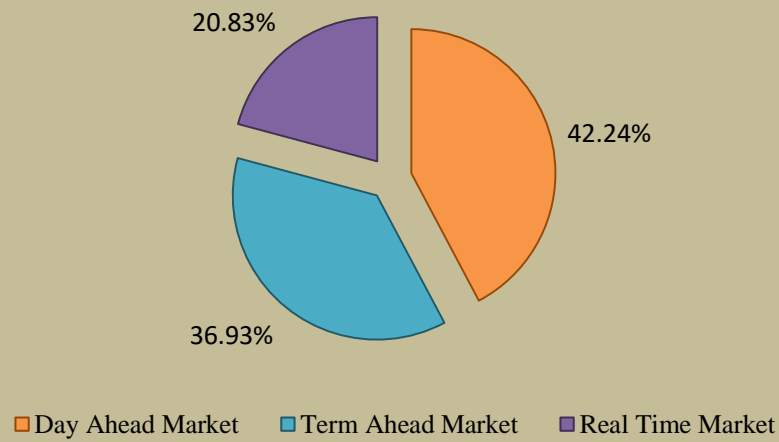
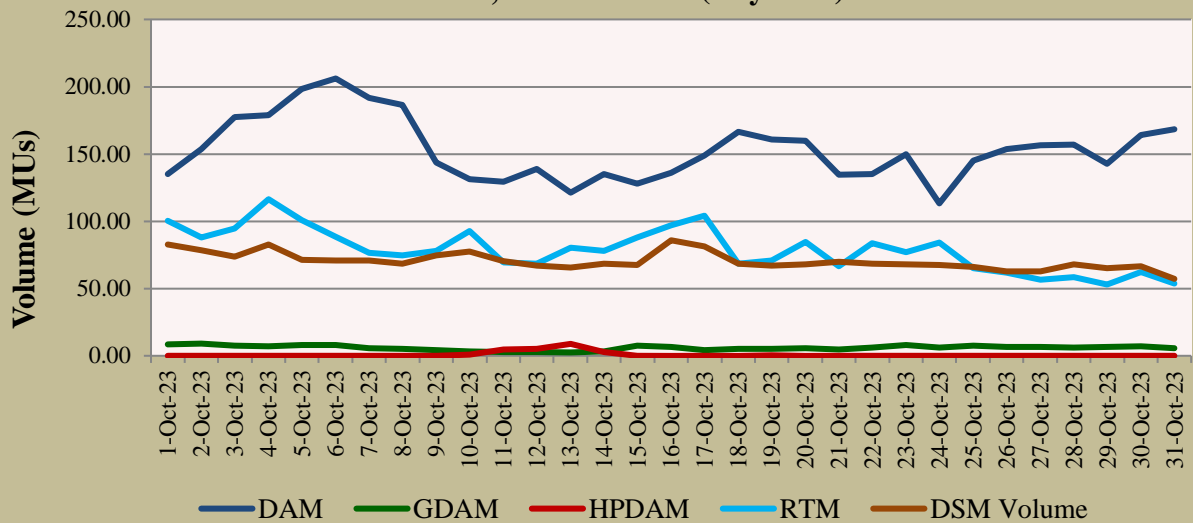
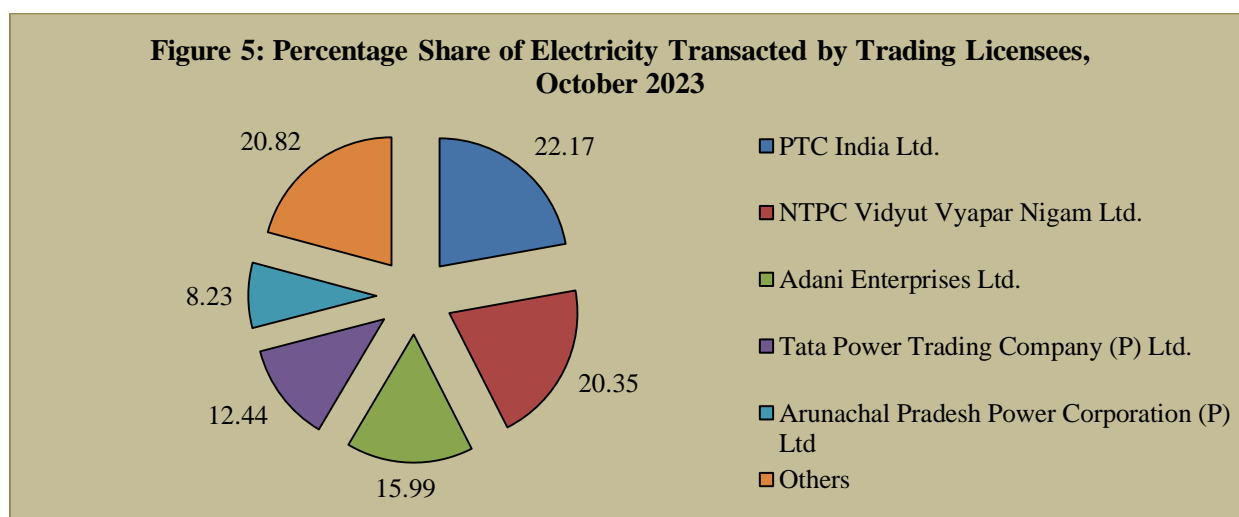


Figure-4: Volume of Transactions on Power Exchange and DSM Volume, October 2023 (Day-wise)



| Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, OCTOBER 2023 | | | |
|--|--|---|----------------------------|
| Sr. No | Name of the Trading Licensee | % Share in total Volume traded by Trading Licensees | Herfindahl-Hirschman Index |
| 1 | PTC India Ltd. | 22.17 | 0.0491 |
| 2 | NTPC Vidyut Vyapar Nigam Ltd. | 20.35 | 0.0414 |
| 3 | Adani Enterprises Ltd. | 15.99 | 0.0256 |
| 4 | Tata Power Trading Company (P) Ltd. | 12.44 | 0.0155 |
| 5 | Arunachal Pradesh Power Corporation (P) Ltd | 8.23 | 0.0068 |
| 6 | Manikaran Power Ltd. | 4.54 | 0.0021 |
| 7 | GMR Energy Trading Ltd. | 4.39 | 0.0019 |
| 8 | JSW Power Trading Company Ltd | 4.19 | 0.0018 |
| 9 | Gita Power & Infrastructure Private Limited | 2.20 | 0.0005 |
| 10 | RPG Power Trading Company Ltd. | 1.02 | 0.0001 |
| 11 | Instinct Infra & Power Ltd. | 0.83 | 0.0001 |
| 12 | Ambitious Power Trading Company Ltd. | 0.71 | 0.0001 |
| 13 | NTPC Ltd. | 0.64 | 0.0000 |
| 14 | Kreate Energy (I) Pvt. Ltd. | 0.61 | 0.0000 |
| 15 | Greenko Energies Pvt Ltd | 0.34 | 0.0000 |
| 16 | Statkraft Markets Pvt. Ltd. | 0.29 | 0.0000 |
| 17 | Kundan International Pvt. Ltd. | 0.28 | 0.0000 |
| 18 | Abja Power Private Limited | 0.19 | 0.0000 |
| 19 | Saranyu Power Trading Private Limited | 0.15 | 0.0000 |
| 20 | Instant Venture Pvt. Ltd. | 0.07 | 0.0000 |
| 21 | NLC India Ltd. | 0.06 | 0.0000 |
| 22 | Shree Cement Ltd. | 0.06 | 0.0000 |
| 23 | Energedge Power Trading Pvt. Ltd. | 0.06 | 0.0000 |
| 24 | Ideal Energy Solution Pvt. Ltd. | 0.05 | 0.0000 |
| 25 | SJVN Ltd. | 0.05 | 0.0000 |
| 26 | Powerfull Energy Trading Pvt. Ltd. | 0.03 | 0.0000 |
| 27 | Adarsh Stainless Pvt. Ltd. | 0.03 | 0.0000 |
| 28 | Refex Industries Ltd. | 0.02 | 0.0000 |
| 29 | Customized Energy Solutions India (P) Ltd. | 0.02 | 0.0000 |
| 30 | Phillip Commodities India (P) Ltd. | 0.014 | 0.0000 |
| 31 | Shell Energy Marketing and Trading India Pvt. Ltd. | 0.002 | 0.0000 |
| TOTAL | | 100.00% | 0.1449 |
| Top 5 trading licensees | | 79.18% | |
| Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges. | | | |
| Note 2: Volume of electricity transacted by Global Energy Ltd. is not included. | | | |
| Source: Information submitted by trading licensees | | | |



| Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, OCTOBER 2023 | | |
|--|------------------|-------------------------------|
| Sr.No | Item | Sale Price of Traders (₹/kWh) |
| 1 | Minimum | 2.70 |
| 2 | Maximum | 10.00 |
| 3 | Weighted Average | 6.77 |

Source: Information submitted by trading licensees

| Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), OCTOBER 2023 | | |
|--|-----------------|-------------------------------|
| Sr.No | Period of Trade | Sale Price of Traders (₹/kWh) |
| 1 | RTC | 6.94 |
| 2 | PEAK | - |
| 3 | OFF PEAK | 4.00 |

Source: Information submitted by trading licensees

| Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | | | |
|--|------------------|----------------------|-----------------------|----------------------|
| Sr.No | ACP | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
| 1 | Minimum | 1.50 | 10.00 | 10.00 |
| 2 | Maximum | 10.00 | 10.00 | 10.00 |
| 3 | Weighted Average | 6.36 | 10.00 | 10.00 |

Source: IEX, PXIL and HPX

| Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | | | |
|--|------------------|----------------------|-----------------------|----------------------|
| Sr.No | ACP | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
| 1 | Minimum | 1.70 | - | - |
| 2 | Maximum | 10.00 | - | - |
| 3 | Weighted Average | 6.37 | - | - |

Source: IEX, PXIL and HPX

| Table-7: PRICE OF ELECTRICITY TRANSACTED IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | | | |
|---|------------------|----------------------|-----------------------|----------------------|
| Sr.No | ACP | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
| 1 | Minimum | 12.00 | 13.00 | - |
| 2 | Maximum | 20.00 | 17.00 | - |
| 3 | Weighted Average | 16.95 | 16.48 | - |

Source: IEX, PXIL and HPX

| Table-8: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | | | |
|--|------------------|----------------------|-----------------------|----------------------|
| Sr.No | ACP | Price in IEX (₹/kWh) | Price in PXIL (₹/kWh) | Price in HPX (₹/kWh) |
| 1 | Minimum | 1.75 | 10.00 | 4.00 |
| 2 | Maximum | 10.00 | 10.00 | 10.00 |
| 3 | Weighted Average | 5.99 | 10.00 | 9.88 |

Source: IEX, PXIL and HPX

| Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, OCTOBER 2023 | | | |
|--|---------------------------------|------------------------------|--------------------------------|
| Sr.No | Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Intra-Day Contracts | 4.22 | 9.81 |
| 2 | Day Ahead Contingency Contracts | 229.85 | 9.15 |
| 3 | Daily Contracts | 390.32 | 9.78 |
| 4 | Weekly Contracts | 246.96 | 8.95 |
| 5 | Monthly Contracts | 230.48 | 7.00 |
| 6 | Any Day Single Sided Contracts | 809.24 | 7.39 |
| | Total | 1911.06 | 8.25 |

Source: IEX

| Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, OCTOBER 2023 | | | |
|---|---------------------------------|-------------------------------------|---------------------------------------|
| Sr.No | Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Intra-Day Contracts | 12.88 | 9.35 |
| 2 | Day Ahead Contingency Contracts | 302.08 | 9.19 |
| 3 | Daily Contracts | 392.41 | 9.81 |
| 4 | Weekly Contracts | 41.79 | 9.67 |
| 5 | Any Day Single Sided Contracts | 177.08 | 8.52 |
| | Total | 926.24 | 9.35 |

Source: PXIL

| Table-11: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, OCTOBER 2023 | | | |
|--|---------------------------------|-------------------------------------|---------------------------------------|
| Sr.No | Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Intra-Day Contracts | 8.06 | 9.99 |
| 2 | Day Ahead Contingency Contracts | 257.15 | 9.18 |
| 3 | Daily Contracts | 438.32 | 9.87 |
| 4 | Weekly Contracts | 86.35 | 7.56 |
| 5 | Any Day Single Sided Contracts | 317.71 | 7.50 |
| | Total | 1107.59 | 8.85 |

Source: HPX

| Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, OCTOBER 2023 | | | |
|--|-----------------------------------|-------------------------------------|---------------------------------------|
| Sr. No | Green Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Day Ahead Contingency Contracts | 0.21 | 9.65 |
| 2 | Daily Contracts | 7.03 | 6.53 |
| | Total | 7.24 | 6.62 |

Source: IEX

| Table-13: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, OCTOBER 2023 | | | |
|---|-----------------------------------|-------------------------------------|---------------------------------------|
| Sr. No | Green Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Day Ahead Contingency Contracts | 2.95 | 7.61 |
| | Total | 2.95 | 7.61 |

Source: PXIL

| Table-14: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF HPX, OCTOBER 2023 | | | |
|--|-----------------------------------|-------------------------------------|---------------------------------------|
| Sr. No | Green Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Day Ahead Contingency Contracts | 5.82 | 5.52 |
| | Total | 5.82 | 5.52 |

Source: HPX

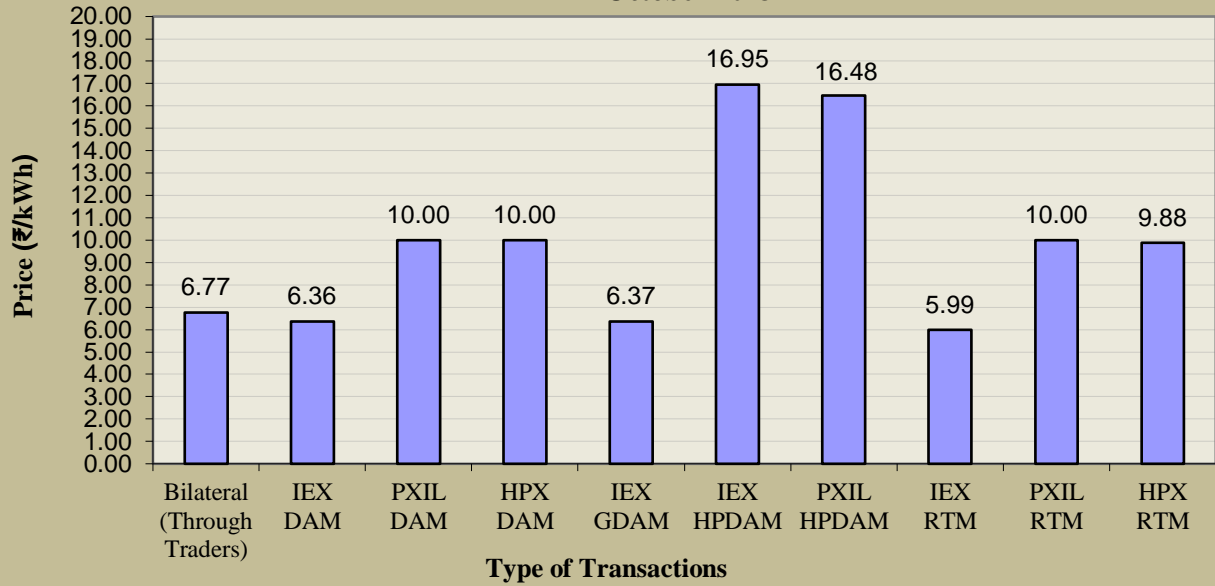
| Table-15: VOLUME AND PRICE OF ELECTRICITY IN HIGH PRICE TERM AHEAD MARKET OF PXIL, OCTOBER 2023 | | | |
|--|--|-------------------------------------|---------------------------------------|
| Sr. No | High Price Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Intra-Day Contracts | 45.80 | 17.67 |
| 2 | Day Ahead Contingency Contracts | 76.22 | 16.29 |
| | Total | 122.01 | 16.81 |

Source: PXIL

| Table-16: VOLUME AND PRICE OF ELECTRICITY IN HIGH PRICE TERM AHEAD MARKET OF HPX, OCTOBER 2023 | | | |
|---|--|-------------------------------------|---------------------------------------|
| Sr. No | High Price Term ahead contracts | Actual Scheduled Volume (MU) | Weighted Average Price (₹/kWh) |
| 1 | Intra-Day Contracts | 17.47 | 15.86 |
| 2 | Day Ahead Contingency Contracts | 62.94 | 14.47 |
| 3 | Daily Contracts | 167.76 | 14.83 |
| | Total | 248.17 | 14.81 |

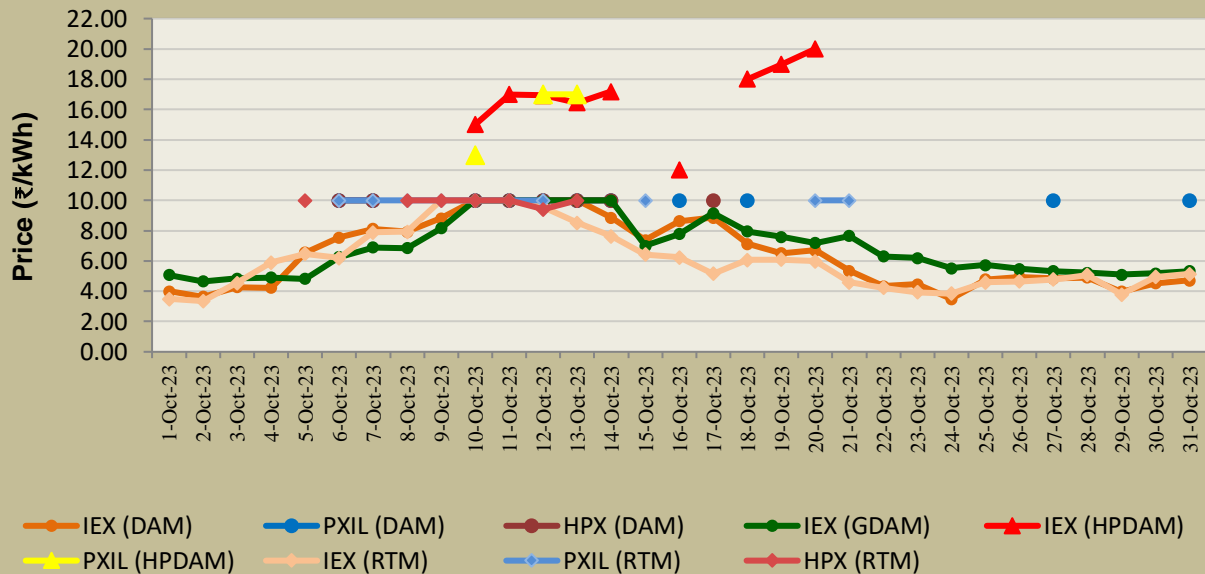
Source: HPX

Figure-6: Weighted Average Price of Short-term Transactions of Electricity, October 2023



Note: No electricity was transacted in G-DAM of PXIL & HPX, and in HP-DAM of HPX during October 2023

Figure-7: Weighted Average Price of Short-term Transactions of Electricity, October 2023 (Day-wise)



Note: No electricity was transacted in G-DAM of PXIL & HPX, and in HP-DAM of HPX during October 2023

| Table-17: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|---|-----------------------------|--------------------|
| Name of the Entity | Volume of Sale (MUs) | % of Volume |
| UTTAR PRADESH | 502.42 | 10.58 |
| NEPAL(NVVN) | 311.64 | 6.57 |
| ARTPP | 281.33 | 5.93 |
| ESSAR POWER | 248.12 | 5.23 |
| DB POWER | 215.40 | 4.54 |
| CHHATTISGARH | 214.14 | 4.51 |
| JAYPEE NIGRIE | 186.51 | 3.93 |
| DELHI | 157.91 | 3.33 |
| JITPL | 146.91 | 3.09 |
| ODISHA | 146.28 | 3.08 |
| GUJARAT | 141.19 | 2.97 |
| REGL | 130.61 | 2.75 |
| NTPC STATIONS-ER | 121.17 | 2.55 |
| RAJASTHAN | 101.57 | 2.14 |
| DCPP | 97.08 | 2.05 |
| PUNJAB | 93.61 | 1.97 |
| HIMACHAL PRADESH | 89.78 | 1.89 |
| MP | 88.18 | 1.86 |
| WEST BENGAL | 87.37 | 1.84 |
| JINDAL STAGE-II | 80.10 | 1.69 |
| TAMIL NADU | 76.66 | 1.61 |
| NEEPCO STATIONS | 73.07 | 1.54 |
| MB POWER | 71.31 | 1.50 |
| JINDAL POWER | 60.39 | 1.27 |
| KARNATAKA | 59.11 | 1.25 |
| IL&FS | 57.11 | 1.20 |
| MAHARASHTRA | 56.07 | 1.18 |
| SEMBICORP | 55.27 | 1.16 |
| TELANGANA | 53.63 | 1.13 |
| MEGHALAYA | 47.35 | 1.00 |
| SKS POWER | 46.40 | 0.98 |
| HARYANA | 42.85 | 0.90 |
| NEP | 40.55 | 0.85 |
| ACBIL | 40.51 | 0.85 |
| KARCHAM WANGTOO | 38.45 | 0.81 |
| TEESTA HEP | 34.60 | 0.73 |
| ANDHRA PRADESH | 29.46 | 0.62 |
| PONDICHERY | 28.91 | 0.61 |
| RKM POWER | 26.68 | 0.56 |
| DGPCL Bhutan | 25.85 | 0.54 |
| RENEW_SR_SLR | 25.02 | 0.53 |
| AD HYDRO | 19.93 | 0.42 |
| CHANDIGARH | 19.35 | 0.41 |
| MIZORAM | 18.31 | 0.39 |
| BIHAR | 17.91 | 0.38 |
| EMCO | 15.84 | 0.33 |
| ADANI_WIND | 14.63 | 0.31 |
| SIMHAPURI | 14.55 | 0.31 |
| NTPC STATIONS-WR | 13.84 | 0.29 |
| SAINJ HEP | 13.33 | 0.28 |
| GOA | 10.14 | 0.21 |
| MARUTI COAL | 9.72 | 0.20 |
| NTPC STATIONS-SR | 9.63 | 0.20 |
| SHREE CEMENT | 9.12 | 0.19 |

| | | |
|---|----------------|---------------|
| JHABUA POWER_MP | 8.99 | 0.19 |
| NTPC STATIONS-NER | 8.83 | 0.19 |
| ONGC PALATANA | 8.08 | 0.17 |
| DHARIWAL POWER | 8.06 | 0.17 |
| ARUNACHAL PRADESH | 7.67 | 0.16 |
| SB_SLR | 6.98 | 0.15 |
| J & K | 6.75 | 0.14 |
| DGEN MEGA POWER | 6.64 | 0.14 |
| JHARKHAND | 6.06 | 0.13 |
| ASEJTL_SLR | 5.63 | 0.12 |
| DVC | 5.56 | 0.12 |
| SORANG HEP | 5.33 | 0.11 |
| SIKKIM | 4.25 | 0.09 |
| DIKCHU HEP | 4.08 | 0.09 |
| NAGALAND | 4.04 | 0.09 |
| ADHUNIK POWER LTD | 3.53 | 0.07 |
| IGSTPS | 2.93 | 0.06 |
| UTTARAKHAND | 2.74 | 0.06 |
| KERALA | 2.66 | 0.06 |
| CONTINNUM PT | 2.19 | 0.05 |
| COASTGEN | 2.09 | 0.04 |
| SINGOLI BHATWARI HEP | 2.06 | 0.04 |
| RENERGY5_WIND | 2.02 | 0.04 |
| MANIPUR | 1.96 | 0.04 |
| BALCO | 1.64 | 0.03 |
| OSTRO Hiriyyur | 1.59 | 0.03 |
| LANCO BUDHIL | 1.53 | 0.03 |
| NHPC STATIONS | 1.36 | 0.03 |
| NPGC | 1.17 | 0.02 |
| CHUZACHEN HEP | 1.03 | 0.02 |
| NTPC STATIONS-NR | 0.98 | 0.02 |
| GMR KAMALANGA | 0.79 | 0.02 |
| KBUNL | 0.61 | 0.01 |
| NLC | 0.09 | 0.002 |
| MTPS | 0.02 | 0.0004 |
| Total | 4746.78 | 100.00 |
| Volume sold by top 5 Regional Entities | 1558.90 | 32.84 |

| Table-18: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|--|---------------------------------|--------------------|
| Name of the Entity | Volume of Purchase (MUs) | % of Volume |
| MAHARASHTRA | 828.89 | 17.46 |
| TELANGANA | 660.81 | 13.92 |
| GUJARAT | 512.64 | 10.80 |
| UTTAR PRADESH | 465.77 | 9.81 |
| ANDHRA PRADESH | 437.57 | 9.22 |
| WEST BENGAL | 333.10 | 7.02 |
| UTTARAKHAND | 178.05 | 3.75 |
| TAMIL NADU | 155.91 | 3.28 |
| KARNATAKA | 151.70 | 3.20 |
| J & K | 129.97 | 2.74 |
| PUNJAB | 127.08 | 2.68 |
| AMPS Hazira | 116.92 | 2.46 |
| MP | 106.80 | 2.25 |
| RAJASTHAN | 82.17 | 1.73 |
| BIHAR | 75.25 | 1.59 |
| ODISHA | 74.33 | 1.57 |
| DELHI | 60.18 | 1.27 |
| KERALA | 45.04 | 0.95 |
| DD&DNH | 43.31 | 0.91 |
| HARYANA | 35.00 | 0.74 |
| DVC | 22.46 | 0.47 |
| NCR ALLAHABAD | 22.08 | 0.47 |
| JINDAL STAGE-II | 20.38 | 0.43 |
| GOA | 15.31 | 0.32 |
| JHARKHAND | 9.93 | 0.21 |
| BALCO | 9.39 | 0.20 |
| ASSAM | 6.90 | 0.15 |
| CHHATTISGARH | 5.83 | 0.12 |
| CHANDIGARH | 5.83 | 0.12 |
| HIMACHAL PRADESH | 2.46 | 0.05 |
| MEGHALAYA | 2.24 | 0.05 |
| TRIPURA | 2.04 | 0.04 |
| JHABUA POWER_MP | 1.33 | 0.03 |
| NEP | 0.11 | 0.002 |
| TOTAL | 4746.78 | 100.00 |
| Volume purchased by top 5 Regional Entities | 2905.68 | 61.21 |

| Table-19: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|---|-----------------------------|--------------------|
| Name of the Entity | Volume of Sale (MUs) | % of Volume |
| KARNATAKA | 24.53 | 13.36 |
| J & K | 20.36 | 11.09 |
| RENEW_SR_SLR | 19.79 | 10.78 |
| SINGOLI BHATWARI HEP | 15.00 | 8.17 |
| OSTRO Hiriya | 12.75 | 6.94 |
| ADANI_WIND | 12.15 | 6.62 |
| ASEJTL_SLR | 10.84 | 5.91 |
| SB_SLR | 10.44 | 5.69 |
| CONTINNUM PT | 10.41 | 5.67 |
| NTPC STATIONS-SR | 8.13 | 4.43 |
| SORANG HEP | 7.00 | 3.81 |
| RENERGY5_WIND | 5.05 | 2.75 |
| HIMACHAL PRADESH | 4.82 | 2.62 |
| TELANGANA | 3.42 | 1.86 |
| RAJASTHAN | 3.41 | 1.86 |
| ANDHRA PRADESH | 3.37 | 1.84 |
| SIKKIM | 3.05 | 1.66 |
| MAHARASHTRA | 2.45 | 1.34 |
| MP | 2.41 | 1.31 |
| DELHI | 2.37 | 1.29 |
| INOX_BHUJ | 1.43 | 0.78 |
| UTTAR PRADESH | 0.42 | 0.23 |
| Total | 183.59 | 100.00 |
| Volume sold by top 5 Regional Entities | 92.42 | 50.34 |

| Table-20: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|--|---------------------------------|--------------------|
| Name of the Entity | Volume of Purchase (MUs) | % of Volume |
| AMPS Hazira | 62.83 | 34.22 |
| KERALA | 16.69 | 9.09 |
| BALCO | 13.02 | 7.09 |
| MAHARASHTRA | 12.26 | 6.68 |
| GOA | 10.01 | 5.45 |
| PUNJAB | 9.47 | 5.16 |
| RAJASTHAN | 8.31 | 4.53 |
| DVC | 7.16 | 3.90 |
| TAMIL NADU | 6.63 | 3.61 |
| UTTAR PRADESH | 5.83 | 3.17 |
| DELHI | 5.68 | 3.10 |
| BIHAR | 4.52 | 2.46 |
| KARNATAKA | 3.81 | 2.08 |
| MP | 3.78 | 2.06 |
| GUJARAT | 2.87 | 1.56 |
| TELANGANA | 2.82 | 1.53 |
| NCR ALLAHABAD | 2.74 | 1.49 |
| JHARKHAND | 2.68 | 1.46 |
| ODISHA | 1.74 | 0.95 |
| ANDHRA PRADESH | 0.30 | 0.17 |
| HARYANA | 0.18 | 0.10 |
| ASSAM | 0.11 | 0.06 |
| HIMACHAL PRADESH | 0.09 | 0.05 |
| MEGHALAYA | 0.04 | 0.02 |
| DD&DNH | 0.04 | 0.02 |
| TOTAL | 183.59 | 100.00 |
| Volume purchased by top 5 Regional Entities | 114.80 | 62.53 |

| Table-21: VOLUME OF ELECTRICITY SOLD IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|--|-----------------------------|--------------------|
| Name of the Entity | Volume of Sale (MUs) | % of Volume |
| RATNAGIRI | 6.96 | 30.73 |
| RGPPL_IR | 4.04 | 17.84 |
| NTPC STATIONS-NR | 3.85 | 16.99 |
| NTPC STATIONS-WR | 3.40 | 15.01 |
| DGEN MEGA POWER | 2.82 | 12.42 |
| GUJARAT | 1.50 | 6.60 |
| KARNATAKA | 0.08 | 0.35 |
| SHREE CEMENT | 0.02 | 0.07 |
| Total | 22.66 | 100.00 |
| Volume sold by top 5 Regional Entities | 21.07 | 92.99 |

| Table-22: VOLUME OF ELECTRICITY PURCHASED IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|---|---------------------------------|--------------------|
| Name of the Entity | Volume of Purchase (MUs) | % of Volume |
| TAMIL NADU | 16.37 | 72.24 |
| WEST BENGAL | 5.89 | 25.97 |
| BIHAR | 0.40 | 1.75 |
| MAHARASHTRA | 0.01 | 0.04 |
| TOTAL | 22.66 | 100.00 |
| Volume purchased by top 5 Regional Entities | 22.66 | 100.00 |

Table-23: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, OCTOBER 2023

| Name of the Entity | Volume of Sale (MUs) | % of Volume |
|--------------------|----------------------|-------------|
| BIHAR | 256.08 | 10.49 |
| RAJASTHAN | 236.08 | 9.67 |
| MP | 170.79 | 6.99 |
| ODISHA | 168.99 | 6.92 |
| CHHATTISGARH | 160.01 | 6.55 |
| ASSAM | 121.61 | 4.98 |
| PUNJAB | 110.83 | 4.54 |
| JHARKHAND | 89.61 | 3.67 |
| WEST BENGAL | 79.96 | 3.27 |
| DELHI | 74.04 | 3.03 |
| UTTAR PRADESH | 66.04 | 2.70 |
| ANDHRA PRADESH | 64.82 | 2.65 |
| MAHARASHTRA | 59.87 | 2.45 |
| GUJARAT | 59.38 | 2.43 |
| NTPC STATIONS-ER | 55.92 | 2.29 |
| HIMACHAL PRADESH | 41.68 | 1.71 |
| HARYANA | 41.40 | 1.70 |
| NTPC STATIONS-WR | 35.94 | 1.47 |
| TELANGANA | 30.04 | 1.23 |
| NEEPCO STATIONS | 29.88 | 1.22 |
| TRIPURA | 28.59 | 1.17 |
| NTPC STATIONS-NR | 28.44 | 1.16 |
| TAMIL NADU | 26.91 | 1.10 |
| KARNATAKA | 25.45 | 1.04 |
| MB POWER | 23.44 | 0.96 |
| MANIPUR | 23.39 | 0.96 |
| DGEN MEGA POWER | 19.82 | 0.81 |
| NTPC STATIONS-SR | 16.81 | 0.69 |
| NPGC | 16.02 | 0.66 |
| J & K | 15.31 | 0.63 |
| SEMBICORP | 15.18 | 0.62 |
| RKM POWER | 14.29 | 0.59 |
| PONDICHERRY | 13.14 | 0.54 |
| BALCO | 12.27 | 0.50 |
| ESSAR POWER | 11.78 | 0.48 |
| TEESTA HEP | 11.60 | 0.48 |
| ARTPP | 10.94 | 0.45 |
| ACBIL | 9.95 | 0.41 |
| NEPAL(NVVN) | 9.66 | 0.40 |
| ARUNACHAL PRADESH | 9.40 | 0.38 |
| NTPC STATIONS-NER | 9.00 | 0.37 |
| UTTARAKHAND | 8.49 | 0.35 |
| DB POWER | 8.48 | 0.35 |
| MTPS | 8.24 | 0.34 |
| SASAN UMPP | 8.11 | 0.33 |
| TRN ENERGY | 6.88 | 0.28 |
| SIKKIM | 6.05 | 0.25 |
| REGL | 6.00 | 0.25 |

| | | |
|---|----------------|---------------|
| IGSTPS | 5.68 | 0.23 |
| JINDAL STAGE-II | 5.13 | 0.21 |
| JHABUA POWER_MP | 4.79 | 0.20 |
| SIMHAPURI | 4.71 | 0.19 |
| JORETHANG | 4.45 | 0.18 |
| ONGC PALATANA | 4.34 | 0.18 |
| DVC | 4.34 | 0.18 |
| ADHUNIK POWER LTD | 4.08 | 0.17 |
| JITPL | 3.95 | 0.16 |
| KERALA | 3.93 | 0.16 |
| MEGHALAYA | 3.76 | 0.15 |
| IL&FS | 3.62 | 0.15 |
| AD HYDRO | 3.12 | 0.13 |
| DCPP | 3.03 | 0.12 |
| SKS POWER | 2.92 | 0.12 |
| JINDAL POWER | 2.36 | 0.10 |
| GOA | 2.35 | 0.10 |
| NLC | 2.22 | 0.09 |
| SINGOLI BHATWARI HEP | 2.22 | 0.09 |
| TASHIDENG HEP | 2.16 | 0.09 |
| NAGALAND | 2.15 | 0.09 |
| MARUTI COAL | 1.59 | 0.07 |
| DD&DNH | 1.37 | 0.06 |
| SAINJ HEP | 0.80 | 0.03 |
| EMCO | 0.78 | 0.03 |
| SHREE CEMENT | 0.77 | 0.03 |
| COASTGEN | 0.76 | 0.03 |
| DIKCHU HEP | 0.68 | 0.03 |
| DHARIWAL POWER | 0.58 | 0.02 |
| OSTRO Hiriyur | 0.51 | 0.02 |
| SORANG HEP | 0.48 | 0.02 |
| NETCL VALLUR | 0.46 | 0.02 |
| DOYANG HEP | 0.35 | 0.01 |
| PARE HEP | 0.22 | 0.01 |
| JAYPEE NIGRIE | 0.21 | 0.01 |
| CHANDIGARH | 0.20 | 0.01 |
| KARCHAM WANGTOO | 0.18 | 0.01 |
| GMR KAMALANGA | 0.16 | 0.01 |
| CHUZACHEN HEP | 0.15 | 0.01 |
| LANCO BUDHIL | 0.11 | 0.004 |
| RENEW_SR_SLR | 0.01 | 0.0005 |
| RANGANADI HEP | 0.01 | 0.0004 |
| Total | 2442.30 | 100.00 |
| Volume sold by top 5 Regional Entities | 991.95 | 40.62 |

| Table-24: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, OCTOBER 2023 | | |
|--|---------------------------------|--------------------|
| Name of the Entity | Volume of Purchase (MUs) | % of Volume |
| TELANGANA | 332.69 | 13.62 |
| MAHARASHTRA | 331.43 | 13.57 |
| UTTAR PRADESH | 218.24 | 8.94 |
| KARNATAKA | 207.33 | 8.49 |
| ANDHRA PRADESH | 163.27 | 6.68 |
| KERALA | 136.82 | 5.60 |
| J & K | 111.74 | 4.58 |
| PUNJAB | 105.15 | 4.31 |
| WEST BENGAL | 99.33 | 4.07 |
| TAMIL NADU | 87.51 | 3.58 |
| DVC | 86.25 | 3.53 |
| RAJASTHAN | 85.91 | 3.52 |
| GUJARAT | 67.73 | 2.77 |
| UTTARAKHAND | 60.30 | 2.47 |
| ODISHA | 45.99 | 1.88 |
| HARYANA | 44.96 | 1.84 |
| DELHI | 43.13 | 1.77 |
| MP | 37.98 | 1.56 |
| BIHAR | 32.93 | 1.35 |
| HIMACHAL PRADESH | 29.26 | 1.20 |
| JINDAL STAGE-II | 21.71 | 0.89 |
| AMPS Hazira | 19.94 | 0.82 |
| ASSAM | 13.41 | 0.55 |
| DD&DNH | 10.27 | 0.42 |
| BALCO | 7.73 | 0.32 |
| NCR ALLAHABAD | 6.26 | 0.26 |
| CHHATTISGARH | 6.10 | 0.25 |
| MEGHALAYA | 5.18 | 0.21 |
| JHARKHAND | 5.05 | 0.21 |
| SUL | 3.08 | 0.13 |
| GOA | 3.05 | 0.12 |
| SIMHAPURI | 2.34 | 0.10 |
| NTPC STATIONS-WR | 1.34 | 0.05 |
| MARUTI COAL | 1.20 | 0.05 |
| ARUNACHAL PRADESH | 1.18 | 0.05 |
| MANIPUR | 1.17 | 0.05 |
| RGPPL_IR | 1.04 | 0.04 |
| REGL | 0.81 | 0.03 |
| TRIPURA | 0.77 | 0.03 |
| ESSAR POWER | 0.58 | 0.02 |
| SIKKIM | 0.46 | 0.02 |
| DCPP | 0.44 | 0.02 |
| CHANDIGARH | 0.40 | 0.02 |
| ACBIL | 0.35 | 0.01 |
| JHABUA POWER_MP | 0.27 | 0.01 |
| PONDICHERRY | 0.10 | 0.004 |
| SHREE CEMENT | 0.09 | 0.004 |
| SAINJ HEP | 0.02 | 0.001 |
| TOTAL | 2442.30 | 100.00 |
| Volume purchased by top 5 Regional Entities | 1252.96 | 51.30 |

| Table-25: TOTAL VOLUME OF NET TRANSACTIONS THROUGH POWER EXCHANGES (REGIONAL ENTITY-WISE), OCTOBER 2023 | | |
|---|--------------------|---|
| S. No. | Name of the Entity | Total volume of net transactions through Power Exchanges* |
| 1 | MAHARASHTRA | 1054.19 |
| 2 | TELANGANA | 909.23 |
| 3 | ANDHRA PRADESH | 503.49 |
| 4 | GUJARAT | 381.17 |
| 5 | WEST BENGAL | 270.98 |
| 6 | KARNATAKA | 253.67 |
| 7 | UTTARAKHAND | 227.11 |
| 8 | AMPS Hazira | 199.69 |
| 9 | J & K | 199.29 |
| 10 | KERALA | 191.96 |
| 11 | TAMIL NADU | 162.85 |
| 12 | UTTAR PRADESH | 120.96 |
| 13 | DVC | 105.98 |
| 14 | DD&DNH | 52.24 |
| 15 | PUNJAB | 37.27 |
| 16 | NCR ALLAHABAD | 31.08 |
| 17 | BALCO | 16.23 |
| 18 | GOA | 15.88 |
| 19 | SUL | 3.08 |
| 20 | RANGANADI HEP | -0.01 |
| 21 | PARE HEP | -0.22 |
| 22 | DOYANG HEP | -0.35 |
| 23 | NETCL VALLUR | -0.46 |
| 24 | KBUNL | -0.61 |
| 25 | GMR KAMALANGA | -0.95 |
| 26 | CHUZACHEN HEP | -1.19 |
| 27 | NHPC STATIONS | -1.36 |
| 28 | INOX_BHUJ | -1.43 |
| 29 | LANCO BUDHIL | -1.63 |
| 30 | TASHIDENG HEP | -2.16 |
| 31 | NLC | -2.31 |
| 32 | COASTGEN | -2.85 |
| 33 | RGPL IR | -3.01 |
| 34 | HARYANA | -4.10 |
| 35 | JORETHANG | -4.45 |
| 36 | DIKCHU HEP | -4.77 |
| 37 | NAGALAND | -6.19 |
| 38 | TRN ENERGY | -6.88 |
| 39 | RATNAGIRI | -6.96 |
| 40 | RENERGY5_WIND | -7.07 |
| 41 | ADHUNIK POWER LTD | -7.61 |
| 42 | SASAN UMPP | -8.11 |
| 43 | MTPS | -8.26 |
| 44 | IGSTPS | -8.61 |
| 45 | DHARIWAL POWER | -8.64 |
| 46 | SHREE CEMENT | -9.81 |
| 47 | MARUTI COAL | -10.11 |
| 48 | JHABUA POWER_MP | -12.18 |
| 49 | ONGC PALATANA | -12.42 |
| 50 | CONTINNUM PT | -12.60 |
| 51 | SORANG HEP | -12.81 |
| 52 | SIKKIM | -12.89 |
| 53 | CHANDIGARH | -13.32 |
| 54 | SAINJ HEP | -14.12 |
| 55 | OSTRO Hiriya | -14.85 |
| 56 | ARUNACHAL PRADESH | -15.89 |
| 57 | ASEJTL_SLR | -16.47 |
| 58 | EMCO | -16.62 |
| 59 | SIMHAPURI | -16.91 |
| 60 | NPGC | -17.19 |
| 61 | SB_SLR | -17.42 |
| 62 | NTPC STATIONS-NER | -17.82 |

| | | |
|---|----------------------|---------|
| 63 | MIZORAM | -18.31 |
| 64 | SINGOLI BHATWARI HEP | -19.28 |
| 65 | AD HYDRO | -23.05 |
| 66 | MANIPUR | -24.17 |
| 67 | TRIPURA | -25.79 |
| 68 | DGPCL Bhutan | -25.85 |
| 69 | ADANI_WIND | -26.78 |
| 70 | DGEN MEGA POWER | -29.27 |
| 71 | NTPC STATIONS-NR | -33.28 |
| 72 | NTPC STATIONS-SR | -34.58 |
| 73 | KARCHAM WANGTOO | -38.63 |
| 74 | NEP | -40.45 |
| 75 | RKM POWER | -40.97 |
| 76 | PONDICHERRY | -41.94 |
| 77 | JINDAL STAGE-II | -43.15 |
| 78 | MEGHALAYA | -43.64 |
| 79 | RENEW_SR_SLR | -44.81 |
| 80 | TEESTA HEP | -46.21 |
| 81 | SKS POWER | -49.31 |
| 82 | ACBIL | -50.10 |
| 83 | NTPC STATIONS-WR | -51.85 |
| 84 | IL&FS | -60.73 |
| 85 | JINDAL POWER | -62.74 |
| 86 | SEMBCORP | -70.46 |
| 87 | JHARKHAND | -78.02 |
| 88 | MB POWER | -94.75 |
| 89 | DCPP | -99.66 |
| 90 | ASSAM | -101.19 |
| 91 | NEEPCO STATIONS | -102.95 |
| 92 | HIMACHAL PRADESH | -104.48 |
| 93 | MP | -112.82 |
| 94 | DELHI | -125.32 |
| 95 | REGL | -135.80 |
| 96 | JITPL | -150.86 |
| 97 | BIHAR | -160.90 |
| 98 | RAJASTHAN | -164.66 |
| 99 | NTPC STATIONS-ER | -177.10 |
| 100 | JAYPEE NIGRIE | -186.72 |
| 101 | ODISHA | -193.21 |
| 102 | DB POWER | -223.88 |
| 103 | ESSAR POWER | -259.32 |
| 104 | ARTPP | -292.27 |
| 105 | NEPAL(NVVN) | -321.29 |
| 106 | CHHATTISGARH | -362.21 |
| * Total net includes net of transactions of electricity through various segments on power exchanges | | |
| (-) indicates sale and (+) indicates purchase | | |

| Table-26: DETAILS OF CONGESTION IN POWER EXCHANGES, OCTOBER 2023 | | | | | | | | | | | | |
|---|---|------------------|-------|-------|------------------------|-------|-------|-----------------------------|-------|------------------|-------|-------|
| | 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 | IEX | PXIL | HPX |
| 1 | Unconstrained Cleared Volume (MUs) | 4688.68 | 21.60 | 36.83 | 184.16 | 0.00 | 0.00 | 15.799 | 6.86 | 2402.26 | 25.42 | 14.62 |
| 2 | Actual Cleared Volume and hence scheduled (MUs) | 4688.35 | 21.60 | 36.83 | 183.59 | 0.00 | 0.00 | 15.798 | 6.86 | 2402.26 | 25.42 | 14.62 |
| 3 | Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) * | 0.33 | 0.00 | 0.00 | 0.57 | 0.00 | 0.00 | 0.0001 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |
| 5 | Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume | 0.01% | 0.00% | 0.00% | 0.31% | 0.00% | 0.00% | 0.001% | 0.00% | 0.00% | 0.00% | 0.00% |
| 6 | Percentage of the time congestion occurred during the month (Number of hours congestion occurred/ Total number of hours in the month) | 0.97% | 0.00% | 0.00% | 0.87% | 0.00% | 0.00% | 0.10% | 0.00% | 0.00% | 0.00% | 0.00% |
| 7 | Congestion occurrence (%) time block wise | | | | | | | | | | | |
| | 0.00 - 6.00 hours | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | 6.00 - 12.00 hours | 41.38% | 0.00% | 0.00% | 42.31% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | 12.00 - 18.00 hours | 58.62% | 0.00% | 0.00% | 57.69% | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | 18.00 - 24.00 hours | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| * This power would have been scheduled had there been no congestion | | | | | | | | | | | | |
| Source: IEX, PXIL, HPX & NLDC | | | | | | | | | | | | |

**Table-27: VOLUME OF TRANSACTIONS THROUGH POWER EXCHANGES IN INDIA (DAY-WISE) (MUs),
OCTOBER 2023**

| Date | Day Ahead Market [#] | | | Green Day Ahead Market [#] | | | High Price DAM [#] | | Real Time Market [#] | | | Total Electricity Generation (MU) * |
|--------------|-------------------------------|--------------|--------------|-------------------------------------|-------------|-------------|-----------------------------|-------------|-------------------------------|--------------|--------------|-------------------------------------|
| | IEX | PXIL | HPX | IEX | PXIL | HPX | IEX | PXIL | IEX | PXIL | HPX | |
| 1-Oct-23 | 135.29 | 0.00 | 0.00 | 8.51 | 0.00 | 0.00 | 0.00 | 0.00 | 100.55 | 0.00 | 0.00 | 4005.27 |
| 2-Oct-23 | 153.53 | 0.00 | 0.00 | 9.06 | 0.00 | 0.00 | 0.00 | 0.00 | 87.83 | 0.00 | 0.00 | 3971.30 |
| 3-Oct-23 | 177.50 | 0.00 | 0.00 | 7.63 | 0.00 | 0.00 | 0.00 | 0.00 | 94.76 | 0.00 | 0.00 | 4146.92 |
| 4-Oct-23 | 178.88 | 0.00 | 0.00 | 7.24 | 0.00 | 0.00 | 0.00 | 0.00 | 116.38 | 0.00 | 0.00 | 4226.45 |
| 5-Oct-23 | 198.24 | 0.00 | 0.00 | 8.19 | 0.00 | 0.00 | 0.00 | 0.00 | 100.46 | 0.00 | 0.13 | 4290.06 |
| 6-Oct-23 | 202.87 | 1.20 | 2.02 | 8.09 | 0.00 | 0.00 | 0.00 | 0.00 | 88.41 | 0.23 | 0.00 | 4358.77 |
| 7-Oct-23 | 188.43 | 0.40 | 2.84 | 5.51 | 0.00 | 0.00 | 0.00 | 0.00 | 76.49 | 0.10 | 0.00 | 4415.21 |
| 8-Oct-23 | 186.43 | 0.00 | 0.00 | 5.38 | 0.00 | 0.00 | 0.00 | 0.00 | 73.89 | 0.34 | 0.36 | 4391.38 |
| 9-Oct-23 | 143.61 | 0.00 | 0.00 | 4.31 | 0.00 | 0.00 | 0.00 | 0.00 | 73.65 | 2.60 | 1.64 | 4527.29 |
| 10-Oct-23 | 126.38 | 0.15 | 4.80 | 3.16 | 0.00 | 0.00 | 0.01 | 0.90 | 83.14 | 9.46 | 0.33 | 4582.40 |
| 11-Oct-23 | 120.13 | 3.14 | 5.86 | 2.91 | 0.00 | 0.00 | 4.83 | 0.00 | 52.39 | 9.50 | 7.69 | 4653.48 |
| 12-Oct-23 | 130.49 | 2.54 | 5.98 | 2.69 | 0.00 | 0.00 | 4.35 | 0.56 | 63.00 | 2.43 | 2.88 | 4616.13 |
| 13-Oct-23 | 107.33 | 5.99 | 7.73 | 2.49 | 0.00 | 0.00 | 3.46 | 5.40 | 78.57 | 0.00 | 1.61 | 4630.75 |
| 14-Oct-23 | 120.78 | 7.29 | 7.20 | 3.04 | 0.00 | 0.00 | 2.76 | 0.00 | 78.19 | 0.00 | 0.00 | 4580.31 |
| 15-Oct-23 | 127.81 | 0.00 | 0.00 | 7.48 | 0.00 | 0.00 | 0.00 | 0.00 | 87.66 | 0.26 | 0.00 | 4384.38 |
| 16-Oct-23 | 135.80 | 0.20 | 0.00 | 6.73 | 0.00 | 0.00 | 0.00 | 0.00 | 97.13 | 0.00 | 0.00 | 4415.34 |
| 17-Oct-23 | 148.38 | 0.00 | 0.40 | 4.41 | 0.00 | 0.00 | 0.00 | 0.00 | 104.33 | 0.00 | 0.00 | 4253.41 |
| 18-Oct-23 | 166.44 | 0.10 | 0.00 | 5.30 | 0.00 | 0.00 | 0.00 | 0.00 | 68.55 | 0.00 | 0.00 | 4341.25 |
| 19-Oct-23 | 160.87 | 0.00 | 0.00 | 5.17 | 0.00 | 0.00 | 0.27 | 0.00 | 70.80 | 0.00 | 0.00 | 4396.09 |
| 20-Oct-23 | 159.77 | 0.00 | 0.00 | 5.57 | 0.00 | 0.00 | 0.12 | 0.00 | 84.23 | 0.20 | 0.00 | 4382.88 |
| 21-Oct-23 | 134.69 | 0.00 | 0.00 | 4.65 | 0.00 | 0.00 | 0.00 | 0.00 | 66.36 | 0.30 | 0.00 | 4306.79 |
| 22-Oct-23 | 135.26 | 0.00 | 0.00 | 6.30 | 0.00 | 0.00 | 0.00 | 0.00 | 83.70 | 0.00 | 0.00 | 4171.71 |
| 23-Oct-23 | 149.73 | 0.00 | 0.00 | 7.79 | 0.00 | 0.00 | 0.00 | 0.00 | 77.16 | 0.00 | 0.00 | 4108.09 |
| 24-Oct-23 | 113.27 | 0.00 | 0.00 | 6.07 | 0.00 | 0.00 | 0.00 | 0.00 | 84.27 | 0.00 | 0.00 | 3984.69 |
| 25-Oct-23 | 145.03 | 0.00 | 0.00 | 7.48 | 0.00 | 0.00 | 0.00 | 0.00 | 64.97 | 0.00 | 0.00 | 4168.83 |
| 26-Oct-23 | 153.55 | 0.00 | 0.00 | 6.59 | 0.00 | 0.00 | 0.00 | 0.00 | 61.68 | 0.00 | 0.00 | 4293.31 |
| 27-Oct-23 | 156.22 | 0.20 | 0.00 | 6.49 | 0.00 | 0.00 | 0.00 | 0.00 | 56.49 | 0.00 | 0.00 | 4288.18 |
| 28-Oct-23 | 156.85 | 0.00 | 0.00 | 6.23 | 0.00 | 0.00 | 0.00 | 0.00 | 58.25 | 0.00 | 0.00 | 4291.49 |
| 29-Oct-23 | 142.80 | 0.00 | 0.00 | 6.57 | 0.00 | 0.00 | 0.00 | 0.00 | 52.98 | 0.00 | 0.00 | 4119.20 |
| 30-Oct-23 | 164.11 | 0.00 | 0.00 | 6.83 | 0.00 | 0.00 | 0.00 | 0.00 | 62.29 | 0.00 | 0.00 | 4212.84 |
| 31-Oct-23 | 167.87 | 0.40 | 0.00 | 5.72 | 0.00 | 0.00 | 0.00 | 0.00 | 53.69 | 0.00 | 0.00 | 4265.83 |
| Total | 4688.35 | 21.60 | 36.83 | 183.59 | 0.00 | 0.00 | 15.80 | 6.86 | 2402.26 | 25.42 | 14.62 | 133780.03 |

Source: NLDC

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

[#] Scheduled volume of all the bid areas.

Note: With change in the regime on implementation of GNA Regulations from 1st 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-28(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), OCTOBER 2023 | | | | | | | | | | | | | | | |
|--|-------------------------|--------------------|-----------|--------------------------|--------------------|-----------|-------------------------|--------------------|-----------|------------------------------------|--------------------|-----------|-------------------------------------|--------------------|-----------|
| Market Segment | Day Ahead Market of IEX | | | Day Ahead Market of PXIL | | | Day Ahead Market of HPX | | | High Price Day Ahead Market of IEX | | | High Price Day Ahead Market of PXIL | | |
| Date | Minimum ACP | Maximum ACP | WA Price* | Minimum ACP | Maximum ACP | WA Price* | Minimum ACP | Maximum ACP | WA Price* | Minimum ACP | Maximum ACP | WA Price* | Minimum ACP | Maximum ACP | WA Price* |
| 1-Oct-23 | 2.00 | 5.50 | 3.99 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Oct-23 | 1.50 | 6.00 | 3.64 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3-Oct-23 | 2.70 | 8.50 | 4.28 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Oct-23 | 2.01 | 9.51 | 4.23 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5-Oct-23 | 4.00 | 10.00 | 6.55 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6-Oct-23 | 4.40 | 10.00 | 7.54 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 7-Oct-23 | 4.20 | 10.00 | 8.11 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 8-Oct-23 | 4.15 | 10.00 | 7.93 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9-Oct-23 | 5.16 | 10.00 | 8.82 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 15.00 | 15.00 | 15.00 | 13.00 | 13.00 | 13.00 |
| 11-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 17.00 | 17.00 | 17.00 | - | - | - |
| 12-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 16.50 | 17.00 | 16.93 | 17.00 | 17.00 | 17.00 |
| 13-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 14.00 | 17.90 | 16.45 | 17.00 | 17.00 | 17.00 |
| 14-Oct-23 | 5.00 | 10.00 | 8.86 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 15.00 | 17.90 | 17.19 | - | - | - |
| 15-Oct-23 | 2.87 | 10.00 | 7.39 | - | - | - | - | - | - | - | - | - | - | - | - |
| 16-Oct-23 | 4.67 | 10.00 | 8.62 | 10.00 | 10.00 | 10.00 | - | - | - | 12.00 | 12.00 | 12.00 | - | - | - |
| 17-Oct-23 | 4.99 | 10.00 | 8.86 | - | - | - | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 18-Oct-23 | 3.62 | 10.00 | 7.12 | 10.00 | 10.00 | 10.00 | - | - | - | 18.00 | 18.00 | 18.00 | - | - | - |
| 19-Oct-23 | 3.66 | 10.00 | 6.50 | - | - | - | - | - | - | 15.00 | 19.00 | 18.99 | - | - | - |
| 20-Oct-23 | 3.80 | 10.00 | 6.70 | - | - | - | - | - | - | 20.00 | 20.00 | 20.00 | - | - | - |
| 21-Oct-23 | 3.05 | 10.00 | 5.36 | - | - | - | - | - | - | - | - | - | - | - | - |
| 22-Oct-23 | 2.90 | 10.00 | 4.33 | - | - | - | - | - | - | - | - | - | - | - | - |
| 23-Oct-23 | 2.94 | 10.00 | 4.47 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24-Oct-23 | 2.30 | 5.00 | 3.50 | - | - | - | - | - | - | - | - | - | - | - | - |
| 25-Oct-23 | 3.00 | 10.00 | 4.77 | - | - | - | - | - | - | - | - | - | - | - | - |
| 26-Oct-23 | 3.04 | 10.00 | 4.95 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27-Oct-23 | 2.88 | 10.00 | 4.85 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - | - | - | - |
| 28-Oct-23 | 2.88 | 10.00 | 4.91 | - | - | - | - | - | - | - | - | - | - | - | - |
| 29-Oct-23 | 2.52 | 5.90 | 3.97 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30-Oct-23 | 3.00 | 10.00 | 4.53 | - | - | - | - | - | - | - | - | - | - | - | - |
| 31-Oct-23 | 3.00 | 10.00 | 4.71 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - | - | - | - |
| | 1.50 [#] | 10.00 [#] | 6.36 | 10.00 [#] | 10.00 [#] | 10.00 | 10.00 [#] | 10.00 [#] | 10.00 | 12.00 [#] | 20.00 [#] | 16.95 | 13.00 [#] | 17.00 [#] | 16.48 |
| 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-28(b): PRICE OF GREEN DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), OCTOBER 2023 | | | | | | | | | |
|--|-------------------------------|--------------------------|-------------------------|--------------------------------|-------------|-------------------------|-------------------------------|-------------|-------------------------|
| Market Segment | Green Day Ahead Market of IEX | | | Green Day Ahead Market of PXIL | | | Green Day Ahead Market of HPX | | |
| Date | Minimum ACP | Maximum ACP | Weighted Average Price* | Minimum ACP | Maximum ACP | Weighted Average Price* | Minimum ACP | Maximum ACP | Weighted Average Price* |
| 1-Oct-23 | 4.00 | 10.00 | 5.07 | - | - | - | - | - | - |
| 2-Oct-23 | 4.03 | 7.00 | 4.64 | - | - | - | - | - | - |
| 3-Oct-23 | 3.90 | 8.00 | 4.84 | - | - | - | - | - | - |
| 4-Oct-23 | 1.70 | 10.00 | 4.90 | - | - | - | - | - | - |
| 5-Oct-23 | 4.00 | 9.10 | 4.81 | - | - | - | - | - | - |
| 6-Oct-23 | 4.09 | 10.00 | 6.26 | - | - | - | - | - | - |
| 7-Oct-23 | 4.64 | 10.00 | 6.90 | - | - | - | - | - | - |
| 8-Oct-23 | 4.10 | 10.00 | 6.85 | - | - | - | - | - | - |
| 9-Oct-23 | 4.80 | 10.00 | 8.16 | - | - | - | - | - | - |
| 10-Oct-23 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 11-Oct-23 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 12-Oct-23 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 13-Oct-23 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 14-Oct-23 | 10.00 | 10.00 | 10.00 | - | - | - | - | - | - |
| 15-Oct-23 | 4.00 | 10.00 | 7.00 | - | - | - | - | - | - |
| 16-Oct-23 | 5.00 | 10.00 | 7.78 | - | - | - | - | - | - |
| 17-Oct-23 | 6.00 | 10.00 | 9.16 | - | - | - | - | - | - |
| 18-Oct-23 | 5.50 | 10.00 | 7.95 | - | - | - | - | - | - |
| 19-Oct-23 | 4.50 | 10.00 | 7.58 | - | - | - | - | - | - |
| 20-Oct-23 | 4.10 | 10.00 | 7.19 | - | - | - | - | - | - |
| 21-Oct-23 | 4.60 | 10.00 | 7.66 | - | - | - | - | - | - |
| 22-Oct-23 | 4.08 | 10.00 | 6.30 | - | - | - | - | - | - |
| 23-Oct-23 | 4.54 | 10.00 | 6.19 | - | - | - | - | - | - |
| 24-Oct-23 | 4.29 | 10.00 | 5.52 | - | - | - | - | - | - |
| 25-Oct-23 | 4.30 | 10.00 | 5.72 | - | - | - | - | - | - |
| 26-Oct-23 | 4.29 | 10.00 | 5.48 | - | - | - | - | - | - |
| 27-Oct-23 | 4.29 | 10.00 | 5.33 | - | - | - | - | - | - |
| 28-Oct-23 | 4.29 | 10.00 | 5.21 | - | - | - | - | - | - |
| 29-Oct-23 | 4.18 | 10.00 | 5.09 | - | - | - | - | - | - |
| 30-Oct-23 | 4.17 | 10.00 | 5.18 | - | - | - | - | - | - |
| 31-Oct-23 | 4.45 | 10.00 | 5.33 | - | - | - | - | - | - |
| | 1.70[#] | 10.00[#] | 6.37 | - | - | - | - | - | - |
| 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-28(c): PRICE OF REAL TIME TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), OCTOBER 2023 | | | | | | | | | |
|--|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| Market Segment | Real Time Market of IEX | | | Real Time Market of PXIL | | | Real Time Market of HPX | | |
| Date | Minimum ACP | Maximum ACP | Weighted Average Price* | Minimum ACP | Maximum ACP | Weighted Average Price* | Minimum ACP | Maximum ACP | Weighted Average Price* |
| 1-Oct-23 | 1.80 | 5.50 | 3.49 | - | - | - | - | - | - |
| 2-Oct-23 | 1.75 | 5.50 | 3.35 | - | - | - | - | - | - |
| 3-Oct-23 | 2.47 | 10.00 | 4.54 | - | - | - | - | - | - |
| 4-Oct-23 | 3.26 | 10.00 | 5.90 | - | - | - | - | - | - |
| 5-Oct-23 | 2.99 | 10.00 | 6.48 | - | - | - | 10.00 | 10.00 | 10.00 |
| 6-Oct-23 | 3.27 | 10.00 | 6.19 | 10.00 | 10.00 | 10.00 | - | - | - |
| 7-Oct-23 | 5.00 | 10.00 | 7.89 | 10.00 | 10.00 | 10.00 | - | - | - |
| 8-Oct-23 | 3.90 | 10.00 | 7.94 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 9-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 10-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 11-Oct-23 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| 12-Oct-23 | 6.49 | 10.00 | 9.55 | 10.00 | 10.00 | 10.00 | 4.00 | 10.00 | 9.41 |
| 13-Oct-23 | 3.81 | 10.00 | 8.52 | - | - | - | 10.00 | 10.00 | 10.00 |
| 14-Oct-23 | 2.01 | 10.00 | 7.63 | - | - | - | - | - | - |
| 15-Oct-23 | 2.00 | 10.00 | 6.43 | 10.00 | 10.00 | 10.00 | - | - | - |
| 16-Oct-23 | 3.22 | 10.00 | 6.24 | - | - | - | - | - | - |
| 17-Oct-23 | 2.63 | 10.00 | 5.16 | - | - | - | - | - | - |
| 18-Oct-23 | 2.20 | 10.00 | 6.07 | - | - | - | - | - | - |
| 19-Oct-23 | 3.00 | 10.00 | 6.10 | - | - | - | - | - | - |
| 20-Oct-23 | 3.49 | 10.00 | 5.99 | 10.00 | 10.00 | 10.00 | - | - | - |
| 21-Oct-23 | 2.50 | 10.00 | 4.59 | 10.00 | 10.00 | 10.00 | - | - | - |
| 22-Oct-23 | 2.38 | 7.00 | 4.22 | - | - | - | - | - | - |
| 23-Oct-23 | 2.24 | 8.00 | 3.94 | - | - | - | - | - | - |
| 24-Oct-23 | 2.00 | 5.90 | 3.85 | - | - | - | - | - | - |
| 25-Oct-23 | 2.00 | 10.00 | 4.59 | - | - | - | - | - | - |
| 26-Oct-23 | 2.35 | 10.00 | 4.66 | - | - | - | - | - | - |
| 27-Oct-23 | 2.50 | 10.00 | 4.77 | - | - | - | - | - | - |
| 28-Oct-23 | 2.93 | 10.00 | 5.07 | - | - | - | - | - | - |
| 29-Oct-23 | 2.36 | 6.07 | 3.79 | - | - | - | - | - | - |
| 30-Oct-23 | 2.00 | 10.00 | 4.94 | - | - | - | - | - | - |
| 31-Oct-23 | 3.00 | 10.00 | 5.14 | - | - | - | - | - | - |
| | 1.75[#] | 10.00[#] | 5.99 | 10.00[#] | 10.00[#] | 10.00 | 4.00[#] | 10.00[#] | 9.88 |
| 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: VOLUME OF TRANSACTIONS THROUGH POWER EXCHANGES (REGIONAL ENTITY*-WISE) (MUs),
OCTOBER 2023**

| Name of the Entity | Through DAM | | Through GDAM | | Through HP-DAM | | Through RTM | | Total Net*** |
|----------------------|-------------|----------|--------------|----------|----------------|----------|-------------|----------|--------------|
| | Sale | Purchase | Sale | Purchase | Sale | Purchase | Sale | Purchase | |
| PUNJAB | 93.61 | 127.08 | 0.00 | 9.47 | 0.00 | 0.00 | 110.83 | 105.15 | 37.27 |
| HARYANA | 42.85 | 35.00 | 0.00 | 0.18 | 0.00 | 0.00 | 41.40 | 44.96 | -4.10 |
| RAJASTHAN | 101.57 | 82.17 | 3.41 | 8.31 | 0.00 | 0.00 | 236.08 | 85.91 | -164.66 |
| DELHI | 157.91 | 60.18 | 2.37 | 5.68 | 0.00 | 0.00 | 74.04 | 43.13 | -125.32 |
| UTTAR PRADESH | 502.42 | 465.77 | 0.42 | 5.83 | 0.00 | 0.00 | 66.04 | 218.24 | 120.96 |
| UTTARAKHAND | 2.74 | 178.05 | 0.00 | 0.00 | 0.00 | 0.00 | 8.49 | 60.30 | 227.11 |
| HIMACHAL P | 89.78 | 2.46 | 4.82 | 0.09 | 0.00 | 0.00 | 41.68 | 29.26 | -104.48 |
| J & K | 6.75 | 129.97 | 20.36 | 0.00 | 0.00 | 0.00 | 15.31 | 111.74 | 199.29 |
| CHANDIGARH | 19.35 | 5.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.40 | -13.32 |
| MP | 88.18 | 106.80 | 2.41 | 3.78 | 0.00 | 0.00 | 170.79 | 37.98 | -112.82 |
| MAHARASHTRA | 56.07 | 828.89 | 2.45 | 12.26 | 0.00 | 0.01 | 59.87 | 331.43 | 1054.19 |
| GUJARAT | 141.19 | 512.64 | 0.00 | 2.87 | 1.50 | 0.00 | 59.38 | 67.73 | 381.17 |
| CHHATTISGARH | 214.14 | 5.83 | 0.00 | 0.00 | 0.00 | 0.00 | 160.01 | 6.10 | -362.21 |
| GOA | 10.14 | 15.31 | 0.00 | 10.01 | 0.00 | 0.00 | 2.35 | 3.05 | 15.88 |
| DD&DNH | 0.00 | 43.31 | 0.00 | 0.04 | 0.00 | 0.00 | 1.37 | 10.27 | 52.24 |
| ANDHRA P | 29.46 | 437.57 | 3.37 | 0.30 | 0.00 | 0.00 | 64.82 | 163.27 | 503.49 |
| KARNATAKA | 59.11 | 151.70 | 24.53 | 3.81 | 0.08 | 0.00 | 25.45 | 207.33 | 253.67 |
| KERALA | 2.66 | 45.04 | 0.00 | 16.69 | 0.00 | 0.00 | 3.93 | 136.82 | 191.96 |
| TAMIL NADU | 76.66 | 155.91 | 0.00 | 6.63 | 0.00 | 16.37 | 26.91 | 87.51 | 162.85 |
| PONDICHERRY | 28.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.14 | 0.10 | -41.94 |
| TELANGANA | 53.63 | 660.81 | 3.42 | 2.82 | 0.00 | 0.00 | 30.04 | 332.69 | 909.23 |
| WEST BENGAL | 87.37 | 333.10 | 0.00 | 0.00 | 0.00 | 5.89 | 79.96 | 99.33 | 270.98 |
| ODISHA | 146.28 | 74.33 | 0.00 | 1.74 | 0.00 | 0.00 | 168.99 | 45.99 | -193.21 |
| BIHAR | 17.91 | 75.25 | 0.00 | 4.52 | 0.00 | 0.40 | 256.08 | 32.93 | -160.90 |
| JHARKHAND | 6.06 | 9.93 | 0.00 | 2.68 | 0.00 | 0.00 | 89.61 | 5.05 | -78.02 |
| SIKKIM | 4.25 | 0.00 | 3.05 | 0.00 | 0.00 | 0.00 | 6.05 | 0.46 | -12.89 |
| DVC | 5.56 | 22.46 | 0.00 | 7.16 | 0.00 | 0.00 | 4.34 | 86.25 | 105.98 |
| ARUNACHAL P | 7.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.40 | 1.18 | -15.89 |
| ASSAM | 0.00 | 6.90 | 0.00 | 0.11 | 0.00 | 0.00 | 121.61 | 13.41 | -101.19 |
| MANIPUR | 1.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 23.39 | 1.17 | -24.17 |
| MEGHALAYA | 47.35 | 2.24 | 0.00 | 0.04 | 0.00 | 0.00 | 3.76 | 5.18 | -43.64 |
| MIZORAM | 18.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -18.31 |
| NAGALAND | 4.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.15 | 0.00 | -6.19 |
| TRIPURA | 0.00 | 2.04 | 0.00 | 0.00 | 0.00 | 0.00 | 28.59 | 0.77 | -25.79 |
| NTPC STATIONS-NR | 0.98 | 0.00 | 0.00 | 0.00 | 3.85 | 0.00 | 28.44 | 0.00 | -33.28 |
| NHPC STATIONS | 1.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.36 |
| NEP | 40.55 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -40.45 |
| AD HYDRO | 19.93 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.12 | 0.00 | -23.05 |
| IGSTPS | 2.93 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.68 | 0.00 | -8.61 |
| KARCHAM WANGTOO | 38.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | -38.63 |
| SHREE CEMENT | 9.12 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.77 | 0.09 | -9.81 |
| LANCO BUDHIL | 1.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | -1.63 |
| SORANG HEP | 5.33 | 0.00 | 7.00 | 0.00 | 0.00 | 0.00 | 0.48 | 0.00 | -12.81 |
| SAINJ HEP | 13.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 0.02 | -14.12 |
| SB_SLR | 6.98 | 0.00 | 10.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -17.42 |
| ASEJTL_SLR | 5.63 | 0.00 | 10.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -16.47 |
| SINGOLI BHATWARI HEP | 2.06 | 0.00 | 15.00 | 0.00 | 0.00 | 0.00 | 2.22 | 0.00 | -19.28 |
| NCR ALLAHABAD | 0.00 | 22.08 | 0.00 | 2.74 | 0.00 | 0.00 | 0.00 | 6.26 | 31.08 |
| RENEW_SR_SLR | 25.02 | 0.00 | 19.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | -44.81 |
| NTPC STATIONS-WR | 13.84 | 0.00 | 0.00 | 0.00 | 3.40 | 0.00 | 35.94 | 1.34 | -51.85 |
| JINDAL POWER | 60.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.36 | 0.00 | -62.74 |
| ACBIL | 40.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.95 | 0.35 | -50.10 |
| BALCO | 1.64 | 9.39 | 0.00 | 13.02 | 0.00 | 0.00 | 12.27 | 7.73 | 16.23 |
| DCPP | 97.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.03 | 0.44 | -99.66 |
| EMCO | 15.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.78 | 0.00 | -16.62 |
| ESSAR POWER | 248.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.78 | 0.58 | -259.32 |
| JINDAL STAGE-II | 80.10 | 20.38 | 0.00 | 0.00 | 0.00 | 0.00 | 5.13 | 21.71 | -43.15 |
| DB POWER | 215.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.48 | 0.00 | -223.88 |
| DHARIWAL POWER | 8.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 | 0.00 | -8.64 |

| | | | | | | | | | |
|-------------------|--------|--------|-------|-------|------|------|-------|-------|---------|
| JAYPEE NIGRIE | 186.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | -186.72 |
| DGEN MEGA POWER | 6.64 | 0.00 | 0.00 | 0.00 | 2.82 | 0.00 | 19.82 | 0.00 | -29.27 |
| MB POWER | 71.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 23.44 | 0.00 | -94.75 |
| MARUTI COAL | 9.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.59 | 1.20 | -10.11 |
| JHABUA POWER_MP | 8.99 | 1.33 | 0.00 | 0.00 | 0.00 | 0.00 | 4.79 | 0.27 | -12.18 |
| 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 | 6.88 | 0.00 | -6.88 |
| RKM POWER | 26.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.29 | 0.00 | -40.97 |
| SKS POWER | 46.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.92 | 0.00 | -49.31 |
| INOX_BHUJ | 0.00 | 0.00 | 1.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.43 |
| REGL | 130.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.00 | 0.81 | -135.80 |
| AMPS Hazira | 0.00 | 116.92 | 0.00 | 62.83 | 0.00 | 0.00 | 0.00 | 19.94 | 199.69 |
| RGPL IR | 0.00 | 0.00 | 0.00 | 0.00 | 4.04 | 0.00 | 0.00 | 1.04 | -3.01 |
| ADANI_WIND | 14.63 | 0.00 | 12.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -26.78 |
| CONTINNUM PT | 2.19 | 0.00 | 10.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -12.60 |
| RENERGY5_WIND | 2.02 | 0.00 | 5.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -7.07 |
| ARTPP | 281.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.94 | 0.00 | -292.27 |
| MTPS | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.24 | 0.00 | -8.26 |
| RATNAGIRI | 0.00 | 0.00 | 0.00 | 0.00 | 6.96 | 0.00 | 0.00 | 0.00 | -6.96 |
| NTPC STATIONS-SR | 9.63 | 0.00 | 8.13 | 0.00 | 0.00 | 0.00 | 16.81 | 0.00 | -34.58 |
| SIMHAPURI | 14.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.71 | 2.34 | -16.91 |
| COASTGEN | 2.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.76 | 0.00 | -2.85 |
| IL&FS | 57.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.62 | 0.00 | -60.73 |
| NLC | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.22 | 0.00 | -2.31 |
| SEMBCORP | 55.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.18 | 0.00 | -70.46 |
| NETCL VALLUR | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | 0.00 | -0.46 |
| OSTRO Hiriyur | 1.59 | 0.00 | 12.75 | 0.00 | 0.00 | 0.00 | 0.51 | 0.00 | -14.85 |
| NTPC STATIONS-ER | 121.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 55.92 | 0.00 | -177.10 |
| NPGC | 1.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.02 | 0.00 | -17.19 |
| ADHUNIK POWER LTD | 3.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.08 | 0.00 | -7.61 |
| CHUZACHEN HEP | 1.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | -1.19 |
| GMR KAMALANGA | 0.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | -0.95 |
| JITPL | 146.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.95 | 0.00 | -150.86 |
| TEESTA HEP | 34.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.60 | 0.00 | -46.21 |
| JORETHANG | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.45 | 0.00 | -4.45 |
| NEPAL(NVVN) | 311.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.66 | 0.00 | -321.29 |
| DIKCHU HEP | 4.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.68 | 0.00 | -4.77 |
| TASHIDENG HEP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.16 | 0.00 | -2.16 |
| DGPCL Bhutan | 25.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -25.85 |
| KBUNL | 0.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.61 |
| SUL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.08 | 3.08 |
| NTPC STATIONS-NER | 8.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.00 | 0.00 | -17.82 |
| NEEPCO STATIONS | 73.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.88 | 0.00 | -102.95 |
| RANGANADI HEP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | -0.01 |
| DOYANG HEP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 | -0.35 |
| ONGC PALATANA | 8.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.34 | 0.00 | -12.42 |
| PARE HEP | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 0.00 | -0.22 |

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-30: VOLUME AND CHARGES UNDER DSM (DAY-WISE), OCTOBER 2023 | | | | |
|---|----------------|--------------------------------|--------------------------|-------------|
| Date | Volume (MU) | All India Grid Charges (₹/kWh) | | |
| | | Minimum | Maximum | Average |
| 1-Oct-23 | 82.50 | 2.01 | 6.51 | 4.07 |
| 2-Oct-23 | 78.34 | 1.75 | 6.00 | 3.82 |
| 3-Oct-23 | 73.58 | 2.70 | 10.00 | 4.65 |
| 4-Oct-23 | 82.55 | 3.26 | 10.00 | 6.07 |
| 5-Oct-23 | 71.39 | 3.93 | 10.00 | 6.98 |
| 6-Oct-23 | 70.71 | 3.51 | 10.00 | 7.56 |
| 7-Oct-23 | 70.69 | 5.00 | 10.00 | 8.66 |
| 8-Oct-23 | 68.57 | 4.20 | 10.00 | 8.59 |
| 9-Oct-23 | 74.79 | 4.53 | 10.00 | 9.92 |
| 10-Oct-23 | 77.69 | 5.00 | 11.14 | 10.01 |
| 11-Oct-23 | 70.14 | 10.00 | 14.05 | 10.17 |
| 12-Oct-23 | 66.92 | 10.00 | 14.80 | 10.16 |
| 13-Oct-23 | 65.52 | 7.91 | 15.41 | 10.32 |
| 14-Oct-23 | 68.23 | 5.00 | 14.01 | 9.29 |
| 15-Oct-23 | 67.56 | 3.04 | 10.00 | 7.50 |
| 16-Oct-23 | 85.85 | 3.57 | 10.00 | 8.76 |
| 17-Oct-23 | 81.07 | 3.57 | 10.00 | 8.99 |
| 18-Oct-23 | 68.45 | 3.57 | 10.01 | 7.70 |
| 19-Oct-23 | 66.90 | 3.57 | 10.30 | 7.56 |
| 20-Oct-23 | 68.06 | 3.57 | 10.33 | 7.43 |
| 21-Oct-23 | 69.80 | 2.87 | 10.00 | 5.86 |
| 22-Oct-23 | 68.38 | 2.87 | 10.00 | 4.69 |
| 23-Oct-23 | 67.97 | 2.87 | 10.00 | 4.65 |
| 24-Oct-23 | 67.63 | 2.30 | 10.00 | 4.09 |
| 25-Oct-23 | 65.83 | 2.30 | 10.00 | 5.08 |
| 26-Oct-23 | 62.60 | 2.30 | 10.00 | 5.24 |
| 27-Oct-23 | 62.97 | 2.50 | 10.00 | 5.26 |
| 28-Oct-23 | 68.01 | 2.50 | 10.00 | 5.31 |
| 29-Oct-23 | 65.00 | 2.50 | 10.00 | 4.24 |
| 30-Oct-23 | 66.64 | 2.50 | 10.00 | 5.19 |
| 31-Oct-23 | 57.18 | 2.50 | 10.00 | 5.31 |
| Total | 2181.53 | 1.75[#] | 15.41[#] | 6.87 |
| Source: NLDC | | | | |
| [#] Maximum/Minimum in the month | | | | |

Table-31: VOLUME OF ELECTRICITY UNDER DRAWAL/ OVER INJECTION (EXPORTED) UNDER DSM, OCTOBER 2023

| Name of the Entity | Volume of Under drawal/ Over injection (MUs) | % of Volume |
|--------------------|--|-------------|
| RAJASTHAN | 116.90 | 5.49 |
| MAHARASHTRA | 101.85 | 4.78 |
| MP | 99.39 | 4.67 |
| GUJARAT | 92.93 | 4.36 |
| UTTAR PRADESH | 89.00 | 4.18 |
| TELANGANA | 88.42 | 4.15 |
| PUNJAB | 77.63 | 3.64 |
| HARYANA | 75.86 | 3.56 |
| NTPC STATIONS-NR | 74.71 | 3.51 |
| NTPC STATIONS-WR | 64.77 | 3.04 |
| CHHATTISGARH | 61.20 | 2.87 |
| KARNATAKA | 55.85 | 2.62 |
| NHPC STATIONS | 53.26 | 2.50 |
| ANDHRA PRADESH | 50.38 | 2.36 |
| DELHI | 49.46 | 2.32 |
| TAMIL NADU | 45.41 | 2.13 |
| NTPC STATIONS-SR | 44.02 | 2.07 |
| NTPC STATIONS-ER | 40.70 | 1.91 |
| DVC | 39.86 | 1.87 |
| BIHAR | 38.43 | 1.80 |
| HIMACHAL PRADESH | 35.11 | 1.65 |
| SASAN UMPP | 34.23 | 1.61 |
| AMPS Hazira | 21.65 | 1.02 |
| JHARKHAND | 21.54 | 1.01 |
| J & K | 17.85 | 0.84 |
| WEST BENGAL | 16.24 | 0.76 |
| UTTARAKHAND | 16.12 | 0.76 |
| BBMB | 16.01 | 0.75 |
| JINDAL STAGE-II | 15.68 | 0.74 |
| NEEPCO STATIONS | 14.92 | 0.70 |
| IGSTPS | 14.86 | 0.70 |
| NLC | 12.32 | 0.58 |
| ODISHA | 12.31 | 0.58 |
| NJPC | 12.14 | 0.57 |
| RKM POWER | 10.54 | 0.49 |
| JAYPEE NIGRIE | 9.62 | 0.45 |
| JINDAL POWER | 9.31 | 0.44 |
| LANKO_AMK | 9.15 | 0.43 |
| PONDICHERRY | 8.72 | 0.41 |
| DD&DNH | 8.65 | 0.41 |
| TATA_PVGD | 8.30 | 0.39 |
| RAMPUR HEP | 7.66 | 0.36 |
| ASSAM | 7.58 | 0.36 |
| ESSAR POWER | 7.55 | 0.35 |
| TEHRI | 7.51 | 0.35 |
| MEGHALAYA | 7.46 | 0.35 |
| BALCO | 7.35 | 0.34 |
| SEMBCORP | 7.16 | 0.34 |
| KARCHAM WANGTOO | 7.16 | 0.34 |
| AZURE43_SLR | 7.11 | 0.33 |
| GOA | 6.83 | 0.32 |
| MAITHON POWER LTD | 6.64 | 0.31 |
| NPGC | 6.51 | 0.31 |
| RPREL | 6.44 | 0.30 |
| MIZORAM | 6.17 | 0.29 |
| ASEJTL_SLR | 6.11 | 0.29 |
| TRIPURA | 6.02 | 0.28 |
| NEPAL(NVVN) | 5.92 | 0.28 |
| SBESS | 5.82 | 0.27 |

| | | |
|-------------------|------|------|
| ARERJL_SLR | 4.96 | 0.23 |
| SIKKIM | 4.93 | 0.23 |
| SPRNG_NPKUNTA | 4.88 | 0.23 |
| CHANDIGARH | 4.71 | 0.22 |
| ARUNACHAL PRADESH | 4.69 | 0.22 |
| NAGALAND | 4.68 | 0.22 |
| AGEMPL BHUJ | 4.60 | 0.22 |
| ADANI_WIND | 4.50 | 0.21 |
| TASHIDENG HEP | 4.42 | 0.21 |
| MB POWER | 4.40 | 0.21 |
| CLEAN_SLR | 4.35 | 0.20 |
| GIWEL_BHUJ | 4.26 | 0.20 |
| SKRPL | 4.16 | 0.20 |
| KREDL_PVGD | 4.15 | 0.19 |
| NETCL VALLUR | 4.10 | 0.19 |
| AZURE41_SLR | 4.06 | 0.19 |
| NTPL | 4.01 | 0.19 |
| THARI_SLR | 3.98 | 0.19 |
| AYANA_RP1 | 3.90 | 0.18 |
| ARINSUM_RUMS | 3.84 | 0.18 |
| AVAADASN_SLR | 3.83 | 0.18 |
| ACME_HEERGARH | 3.76 | 0.18 |
| PARAM_PVGD | 3.72 | 0.17 |
| KERALA | 3.71 | 0.17 |
| RENEWURJA_SLR | 3.69 | 0.17 |
| MANIPUR | 3.63 | 0.17 |
| NEP | 3.57 | 0.17 |
| ACME_SLR | 3.55 | 0.17 |
| AZURE_PVGD | 3.53 | 0.17 |
| NSPCL | 3.52 | 0.17 |
| BARC | 3.52 | 0.17 |
| NTPC_ANTP | 3.48 | 0.16 |
| MSUPL_BHDL2 | 3.47 | 0.16 |
| RAIL | 3.47 | 0.16 |
| RENEWSB | 3.40 | 0.16 |
| GIWEL_TCN | 3.31 | 0.16 |
| MAHINDRA_RUMS | 3.31 | 0.16 |
| ALFANAR_BHUJ | 3.31 | 0.16 |
| ORANGE_TCN | 3.29 | 0.15 |
| ARS_PVGD | 3.29 | 0.15 |
| EDEN_SLR | 3.29 | 0.15 |
| JORETHANG | 3.20 | 0.15 |
| DB POWER | 3.18 | 0.15 |
| KOTESHWAR | 3.14 | 0.15 |
| ACME_RUMS | 3.10 | 0.15 |
| DAGACHU | 3.08 | 0.14 |
| RENEW_BHUJ | 3.01 | 0.14 |
| JITPL | 2.90 | 0.14 |
| CLEANSPL_SLR | 2.87 | 0.13 |
| ADHUNIK POWER LTD | 2.86 | 0.13 |
| EMCO | 2.85 | 0.13 |
| SBG_NPK | 2.82 | 0.13 |
| BRBCL,NABINAGAR | 2.78 | 0.13 |
| RENEW_SR_SLR | 2.77 | 0.13 |
| ABC_BHDL2 | 2.76 | 0.13 |
| NTPC STATIONS-NER | 2.73 | 0.13 |
| RENEW_SLR_BKN | 2.69 | 0.13 |
| RENEW_BHACHAU | 2.69 | 0.13 |
| RENEWSW_SLR | 2.65 | 0.12 |
| OSTRO | 2.60 | 0.12 |
| GRT_JPL | 2.58 | 0.12 |
| ADY1_PVGD | 2.56 | 0.12 |
| AVADARJHN_SLR | 2.55 | 0.12 |

| | | |
|----------------------|------|------|
| RENEWJH_SLR | 2.53 | 0.12 |
| FORTUM1_PVGD | 2.52 | 0.12 |
| JHABUA POWER_MP | 2.49 | 0.12 |
| OSTRO Hiriyur | 2.40 | 0.11 |
| TATA_SLR | 2.39 | 0.11 |
| AZURE_SLR | 2.30 | 0.11 |
| MRPL | 2.27 | 0.11 |
| SIMHAPURI | 2.14 | 0.10 |
| RONGNICHU HEP | 2.12 | 0.10 |
| RANGANADI HEP | 2.03 | 0.10 |
| ESPL_RADHANESDA | 1.98 | 0.09 |
| CGPL | 1.83 | 0.09 |
| AZURE34_SLR | 1.81 | 0.09 |
| FRV_ANTP | 1.77 | 0.08 |
| AVIKIRAN | 1.67 | 0.08 |
| RENEW_PVGD | 1.63 | 0.08 |
| MSEPL | 1.60 | 0.07 |
| APRAAVA | 1.59 | 0.07 |
| SKS POWER | 1.58 | 0.07 |
| BANGLADESH | 1.57 | 0.07 |
| NAPP | 1.57 | 0.07 |
| CHUZACHEN HEP | 1.57 | 0.07 |
| COASTGEN | 1.55 | 0.07 |
| AYANA_NPKUNTA | 1.54 | 0.07 |
| MYTRAH_TCN | 1.53 | 0.07 |
| INOX_BHUJ | 1.52 | 0.07 |
| KSK MAHANADI | 1.52 | 0.07 |
| ONGC PALATANA | 1.48 | 0.07 |
| TEESTA STG3 | 1.46 | 0.07 |
| ACBIL | 1.41 | 0.07 |
| NETRA WIND | 1.39 | 0.07 |
| AZURE_MAPLE_SLR | 1.33 | 0.06 |
| TATA_GREEN | 1.33 | 0.06 |
| GIPCL_RADHANESDA | 1.33 | 0.06 |
| AVAADA1_PVGD | 1.26 | 0.06 |
| Railways_ER ISTS | 1.26 | 0.06 |
| SBG_PVGD | 1.23 | 0.06 |
| SPRING_PUGALUR | 1.19 | 0.06 |
| TPREL_RADHANESDA | 1.18 | 0.06 |
| RAP B | 1.16 | 0.05 |
| THERMAL POWERTECH | 1.15 | 0.05 |
| AZURE_ANTP | 1.14 | 0.05 |
| DCPP | 1.13 | 0.05 |
| GSECL_Radhanesda | 1.12 | 0.05 |
| TORRENT SOLARGEN | 1.08 | 0.05 |
| ADANI GREEN | 1.05 | 0.05 |
| IL&FS | 1.00 | 0.05 |
| TATA_ANTP | 0.97 | 0.05 |
| TRN ENERGY | 0.95 | 0.04 |
| RAP C | 0.94 | 0.04 |
| DHARIWAL POWER | 0.93 | 0.04 |
| SINGOLI BHATWARI HEP | 0.87 | 0.04 |
| LANCO BUDHIL | 0.86 | 0.04 |
| MTPS II | 0.86 | 0.04 |
| SESPL | 0.84 | 0.04 |
| FORTUM2_PVGD | 0.83 | 0.04 |
| RGPPL | 0.82 | 0.04 |
| SAINJ HEP | 0.79 | 0.04 |
| RANGIT HEP | 0.78 | 0.04 |
| GMR KAMALANGA | 0.68 | 0.03 |
| RENEW_SLR | 0.66 | 0.03 |
| AHSP_ANTP | 0.64 | 0.03 |
| AKSP_ANTP | 0.63 | 0.03 |

| | | |
|---|----------------|---------------|
| AVAADA2_PVGD | 0.61 | 0.03 |
| ABSP_ANTP | 0.61 | 0.03 |
| TPSL | 0.61 | 0.03 |
| PARE HEP | 0.60 | 0.03 |
| AKS_PVGD | 0.60 | 0.03 |
| SORANG HEP | 0.53 | 0.02 |
| BETAM_TCN | 0.52 | 0.02 |
| SHREE CEMENT | 0.49 | 0.02 |
| NFF | 0.49 | 0.02 |
| DGEN MEGA POWER | 0.48 | 0.02 |
| JSW_RENEW_2 | 0.47 | 0.02 |
| LOKTAK | 0.47 | 0.02 |
| YARROW_PVGD | 0.45 | 0.02 |
| AD HYDRO | 0.38 | 0.02 |
| RSTPS_FSPP | 0.38 | 0.02 |
| POWERICA | 0.37 | 0.02 |
| SRSSFPL | 0.31 | 0.01 |
| DIKCHU HEP | 0.29 | 0.01 |
| HVDC ALPD | 0.28 | 0.01 |
| FRV_NPK | 0.24 | 0.01 |
| DOYANG HEP | 0.20 | 0.01 |
| SB_SLR | 0.09 | 0.00 |
| SB6_POKARAN | 0.06 | 0.00 |
| GSECL P-II | 0.06 | 0.00 |
| SBSR_SLR | 0.06 | 0.00 |
| KSMPL_SLR | 0.04 | 0.002 |
| HVDC PUS | 0.03 | 0.001 |
| HVDC CHAMPA | 0.01 | 0.001 |
| VINDHYACHAL HVDC | 0.01 | 0.0003 |
| HVDC RAIGARH | 0.001 | 0.00003 |
| BHADRAVATHI HVDC | 0.0001 | 0.00001 |
| Total | 2130.43 | 100.00 |
| Volume Exported by top 5 Regional Entities | 500.07 | 23.47 |

| Table-32: VOLUME OF ELECTRICITY OVER DRAWAL/ UNDER INJECTION (IMPORTED) UNDER DSM, OCTOBER 2023 | | |
|--|---|--------------------|
| Name of the Entity | Volume of Over drawal/ Under Injection (MUs) | % of Volume |
| NTPC STATIONS-ER | 115.83 | 5.19 |
| NTPC STATIONS-SR | 114.25 | 5.12 |
| NTPC STATIONS-WR | 108.68 | 4.87 |
| KARNATAKA | 100.78 | 4.51 |
| J & K | 95.94 | 4.30 |
| NTPC STATIONS-NR | 91.76 | 4.11 |
| WEST BENGAL | 75.94 | 3.40 |
| UTTAR PRADESH | 62.57 | 2.80 |
| ODISHA | 58.41 | 2.62 |
| ANDHRA PRADESH | 57.02 | 2.55 |
| BIHAR | 54.77 | 2.45 |
| TAMIL NADU | 54.65 | 2.45 |
| RAJASTHAN | 49.72 | 2.23 |
| ASSAM | 44.69 | 2.00 |
| MP | 43.25 | 1.94 |
| MAHARASHTRA | 38.91 | 1.74 |
| KERALA | 38.55 | 1.73 |
| GUJARAT | 37.93 | 1.70 |
| TELANGANA | 37.85 | 1.70 |
| PUNJAB | 34.31 | 1.54 |
| UTTARAKHAND | 29.13 | 1.30 |
| AGEMPL BHUJ | 28.00 | 1.25 |
| NEPAL(NVVN) | 27.10 | 1.21 |
| HARYANA | 26.23 | 1.17 |
| JHARKHAND | 24.29 | 1.09 |
| NLC | 21.76 | 0.97 |
| GIWEL_BHUJ | 21.66 | 0.97 |
| SPRING_PUGALUR | 20.18 | 0.90 |
| CGPL | 19.11 | 0.86 |
| AMPS Hazira | 18.33 | 0.82 |
| IGSTPS | 17.06 | 0.76 |
| GRT_JPL | 16.17 | 0.72 |
| GOA | 16.16 | 0.72 |
| INOX_BHUJ | 15.66 | 0.70 |
| SBESS | 15.59 | 0.70 |
| PARAM_PVGD | 15.58 | 0.70 |
| CHHATTISGARH | 14.93 | 0.67 |
| OSTRO Hiriyur | 14.75 | 0.66 |
| OSTRO | 14.67 | 0.66 |
| FORTUM1_PVGD | 14.40 | 0.65 |
| DVC | 13.56 | 0.61 |
| KREDL_PVGD | 13.07 | 0.59 |
| RENEW_BHUJ | 12.81 | 0.57 |
| HIMACHAL PRADESH | 12.53 | 0.56 |
| RENEW_BHACHAU | 11.75 | 0.53 |
| ALFANAR_BHUJ | 11.74 | 0.53 |
| SKRPL | 11.11 | 0.50 |
| SHREE CEMENT | 10.02 | 0.45 |
| NPGC | 9.07 | 0.41 |
| NETCL VALLUR | 8.57 | 0.38 |
| AVAADASN_SLR | 8.02 | 0.36 |
| RAIL | 7.94 | 0.36 |
| NHPC STATIONS | 7.72 | 0.35 |
| ADANI_WIND | 7.67 | 0.34 |
| NTPC STATIONS-NER | 7.58 | 0.34 |
| MB POWER | 7.28 | 0.33 |
| AVIKIRAN | 7.24 | 0.32 |
| JINDAL STAGE-II | 7.10 | 0.32 |

| | | |
|-------------------|------|------|
| NTPC_ANTP | 7.03 | 0.31 |
| AVADARJHN_SLR | 6.82 | 0.31 |
| TRIPURA | 6.59 | 0.30 |
| ARUNACHAL PRADESH | 6.41 | 0.29 |
| JHABUA POWER_MP | 6.29 | 0.28 |
| SESPL | 6.15 | 0.28 |
| JINDAL POWER | 5.98 | 0.27 |
| ARS_PVGD | 5.95 | 0.27 |
| JITPL | 5.94 | 0.27 |
| TORRENT SOLARGEN | 5.89 | 0.26 |
| TEESTA STG3 | 5.88 | 0.26 |
| BRBCL,NABINAGAR | 5.80 | 0.26 |
| APRAAVA | 5.78 | 0.26 |
| THERMAL POWERTECH | 5.75 | 0.26 |
| AZURE43_SLR | 5.59 | 0.25 |
| BANGLADESH | 5.49 | 0.25 |
| CHANDIGARH | 5.40 | 0.24 |
| NETRA WIND | 5.34 | 0.24 |
| DELHI | 5.24 | 0.23 |
| TEHRI | 4.89 | 0.22 |
| BALCO | 4.80 | 0.22 |
| SIMHAPURI | 4.55 | 0.20 |
| AZURE_PVGD | 4.51 | 0.20 |
| CLEAN_SLR | 4.48 | 0.20 |
| GIWEL_TCN | 4.22 | 0.19 |
| SPRNG_NPKUNTA | 4.20 | 0.19 |
| NTPL | 4.19 | 0.19 |
| DD&DNH | 4.13 | 0.19 |
| FRV_ANTP | 4.12 | 0.18 |
| SBG_NPK | 3.92 | 0.18 |
| ADY1_PVGD | 3.88 | 0.17 |
| RENEW_SR_SLR | 3.63 | 0.16 |
| ACBIL | 3.62 | 0.16 |
| ASEJTL_SLR | 3.51 | 0.16 |
| TATA_SLR | 3.48 | 0.16 |
| TATA_PVGD | 3.48 | 0.16 |
| EDEN_SLR | 3.36 | 0.15 |
| KAPP 3&4 | 3.32 | 0.15 |
| RENEWJH_SLR | 3.31 | 0.15 |
| RENEWSW_SLR | 3.31 | 0.15 |
| MSEPL | 3.25 | 0.15 |
| MTPS II | 3.21 | 0.14 |
| AVAADA1_PVGD | 3.08 | 0.14 |
| TATA_GREEN | 3.02 | 0.14 |
| RKM POWER | 3.00 | 0.13 |
| RENEWSB | 2.95 | 0.13 |
| ARINSUM_RUMS | 2.90 | 0.13 |
| ORANGE_TCN | 2.90 | 0.13 |
| ABC_BHDL2 | 2.85 | 0.13 |
| AYANA_RP1 | 2.84 | 0.13 |
| MAHINDRA_RUMS | 2.79 | 0.13 |
| THARI_SLR | 2.77 | 0.12 |
| SIKKIM | 2.75 | 0.12 |
| NEP | 2.74 | 0.12 |
| ACME_RUMS | 2.69 | 0.12 |
| NEEPCO STATIONS | 2.68 | 0.12 |
| RGPPL | 2.65 | 0.12 |
| AZURE_MAPLE_SLR | 2.61 | 0.12 |
| KARCHAM WANGTOO | 2.60 | 0.12 |
| RAP B | 2.60 | 0.12 |
| ARERJL_SLR | 2.59 | 0.12 |
| PONDICHERRY | 2.57 | 0.12 |
| RENEW_PVGD | 2.56 | 0.11 |

| | | |
|-------------------|------|------|
| AYANA_NPKUNTA | 2.55 | 0.11 |
| ACME_HEERGARH | 2.40 | 0.11 |
| DHARIWAL POWER | 2.37 | 0.11 |
| RENEWURJA_SLR | 2.37 | 0.11 |
| CLEANSPL_SLR | 2.33 | 0.10 |
| AZURE41_SLR | 2.23 | 0.10 |
| MRPL | 2.22 | 0.10 |
| POWERICA | 2.22 | 0.10 |
| ACME_SLR | 2.20 | 0.10 |
| MSUPL_BHDL2 | 2.19 | 0.10 |
| NAPP | 2.14 | 0.10 |
| SEMBICORP | 2.11 | 0.09 |
| DGEN MEGA POWER | 2.10 | 0.09 |
| FORTUM2_PVGD | 2.07 | 0.09 |
| RENEW_SLR_BKN | 2.07 | 0.09 |
| MANIPUR | 2.06 | 0.09 |
| BBMB | 1.96 | 0.09 |
| AZURE_ANTP | 1.88 | 0.08 |
| DB POWER | 1.71 | 0.08 |
| NSPCL | 1.69 | 0.08 |
| MEGHALAYA | 1.65 | 0.07 |
| GSECL P-II | 1.60 | 0.07 |
| COASTGEN | 1.59 | 0.07 |
| MAITHON POWER LTD | 1.57 | 0.07 |
| ADHUNIK POWER LTD | 1.54 | 0.07 |
| KSK MAHANADI | 1.47 | 0.07 |
| AZURE_SLR | 1.43 | 0.06 |
| TPSL | 1.35 | 0.06 |
| DCPP | 1.33 | 0.06 |
| DIKCHU HEP | 1.31 | 0.06 |
| Railways_ER ISTS | 1.29 | 0.06 |
| GMR KAMALANGA | 1.28 | 0.06 |
| RSTPS_FSPP | 1.28 | 0.06 |
| TATA_ANTP | 1.22 | 0.05 |
| FRV_NPK | 1.16 | 0.05 |
| SBG_PVGD | 1.11 | 0.05 |
| YARROW_PVGD | 1.05 | 0.05 |
| NJPC | 0.99 | 0.04 |
| JSW_RENEW_2 | 0.97 | 0.04 |
| AKSP_ANTP | 0.96 | 0.04 |
| RPREL | 0.95 | 0.04 |
| AHSP_ANTP | 0.95 | 0.04 |
| ESPL_RADHANESDA | 0.93 | 0.04 |
| AVAADA2_PVGD | 0.90 | 0.04 |
| ESSAR POWER | 0.88 | 0.04 |
| AKS_PVGD | 0.88 | 0.04 |
| ABSP_ANTP | 0.87 | 0.04 |
| AZURE34_SLR | 0.86 | 0.04 |
| BETAM_TCN | 0.80 | 0.04 |
| ADANI GREEN | 0.73 | 0.03 |
| IL&FS | 0.72 | 0.03 |
| SRSSFPL | 0.64 | 0.03 |
| RAP C | 0.60 | 0.03 |
| JORETHANG | 0.60 | 0.03 |
| KOTESHWAR | 0.54 | 0.02 |
| LANKO_AMK | 0.53 | 0.02 |
| RENEW_SLR | 0.52 | 0.02 |
| RANGIT HEP | 0.52 | 0.02 |
| JAYPEE NIGRIE | 0.48 | 0.02 |
| MEENAKSHI | 0.43 | 0.02 |
| MYTRAH_TCN | 0.42 | 0.02 |
| TPREL_RADHANESDA | 0.42 | 0.02 |
| TRN ENERGY | 0.40 | 0.02 |

| | | |
|---|----------------|---------------|
| MIZORAM | 0.39 | 0.02 |
| RANGANADI HEP | 0.39 | 0.02 |
| GIPCL_RADHANESDA | 0.37 | 0.02 |
| CHUZACHEN HEP | 0.35 | 0.02 |
| LANKO KONDAPALLI | 0.34 | 0.02 |
| SORANG HEP | 0.32 | 0.01 |
| SASAN UMPP | 0.31 | 0.01 |
| NAGALAND | 0.29 | 0.01 |
| PARE HEP | 0.28 | 0.01 |
| SAINJ HEP | 0.27 | 0.01 |
| RONGNICHU HEP | 0.26 | 0.01 |
| SKS POWER | 0.25 | 0.01 |
| GSECL_Radhanesda | 0.25 | 0.01 |
| EMCO | 0.25 | 0.01 |
| LANCO BUDHIL | 0.20 | 0.01 |
| LOKTAK | 0.19 | 0.01 |
| SBSR_SLR | 0.18 | 0.01 |
| DOYANG HEP | 0.16 | 0.01 |
| SB6_POKARAN | 0.13 | 0.01 |
| NFF | 0.12 | 0.01 |
| RAMPUR HEP | 0.10 | 0.00 |
| TASHIDENG HEP | 0.10 | 0.00 |
| SINGOLI BHATWARI HEP | 0.08 | 0.00 |
| AD HYDRO | 0.08 | 0.003 |
| DAGACHU | 0.07 | 0.003 |
| VINDHYACHAL HVDC | 0.04 | 0.002 |
| HVDC PUS | 0.04 | 0.002 |
| SB_SLR | 0.03 | 0.001 |
| KSMPL_SLR | 0.01 | 0.0003 |
| ONGC PALATANA | 0.01 | 0.0003 |
| HVDC RAIGARH | 0.002 | 0.0001 |
| BHADRAVATHI HVDC | 0.001 | 0.00005 |
| HVDC ALPD | 0.0004 | 0.00002 |
| TOTAL | 2232.62 | 100.00 |
| Volume Imported by top 5 Regional Entities | 535.48 | 23.98 |

Table-33: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES AND THROUGH TRADERS (BILATERAL), OCTOBER 2023

| Sr. No | Details of REC Transactions | Through Power Exchange | | | Bilateral through Traders |
|--------|-------------------------------------|------------------------|---------|--------|---------------------------|
| | | IEX | PXIL | HPX | |
| 1 | Volume of Buy Bid | 676259 | 428075 | - | - |
| 2 | Volume of Sell Bid | 17722777 | 5948615 | 208811 | - |
| 3 | Ratio of Buy Bid to Sell Bid Volume | 0.04 | 0.07 | - | - |
| 4 | Traded Volume (MWh) | 217023 | 96796 | - | 14609 |
| 5 | Weighted Average Price (₹/MWh) | 419 | 446 | - | 523 |

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-34(a): VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, OCTOBER 2023

| Sr. No. | Neighbouring Country | Volume (MU) | | | Weighted Average Price (₹/kWh) | |
|---------|----------------------|---------------|-------------|----------------|--------------------------------|----------|
| | | Sale | Purchase | Net* | Sale | Purchase |
| 1 | Nepal | 352.19 | 0.11 | -352.08 | 6.44 | 1.85 |
| 2 | Bhutan | 25.85 | 0.00 | -25.85 | 6.70 | - |
| | Total | 378.04 | 0.11 | -377.94 | - | - |

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-34(b): VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH REAL TIME MARKET AT IEX, OCTOBER 2023

| Sr. No. | Neighbouring Country | Volume (MU) | | | Weighted Average Price (₹/kWh) | |
|---------|----------------------|-------------|-------------|--------------|--------------------------------|----------|
| | | Sale | Purchase | Net* | Sale | Purchase |
| 1 | Nepal | 9.66 | 0.00 | -9.66 | 7.13 | - |
| 2 | Bhutan | 0.00 | 0.00 | 0.00 | - | - |
| | Total | 9.66 | 0.00 | -9.66 | - | - |

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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