

Monthly Report on Short-term Transactions of Electricity in India

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Abbreviations

Abbreviation	Expanded Version
ABSP_ANTP	Acme Bhiwadi Solar Power Private Limited, Anantpur
ACBIL	ACB (India) Limited
ACP	Area Clearing Price
ACV	Area Clearing Volume
ACME_SLR	ACME Solar Power Project
ACME_RUMS	Acme Rewa Ultra Mega Solar Project
ADANI GREEN	Adani Green Energy Limited
ADANIHB_SLR	Adani Hybrid Energy Jaisalmer One Limited (Solar)
ADANI_SLR 4	Adani Solar Energy Four Private Limited
ADANIHB_WIND	Adani Hybrid Energy Jaisalmer One Limited (Wind)
ADY1_PVGD	Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park
ADY2_PVGD	Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park
ADY3_PVGD	Adyah Solar Energy Pvt Ltd., Block 3 Pavagada Solar Park
ADY6_PVGD	Adyah Solar Energy Pvt Ltd., Block 6 Pavagada Solar Park
ADY10_PVGD	Adyah Solar Energy Pvt Ltd., Block 10 Pavagada Solar Park
ADY13_PVGD	Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park
AGEMPL BHUJ	Adani Green Energy (MP) Ltd., Bhuj
AHEJOL_S_FTG2	Adani Hybrid Energy Jaisalmer One Limited (SOLAR)
AHEJOL_W_FTG2	Adani Hybrid Energy Jaisalmer One Limited (WIND)
AHEJ2L_SOLAR	Adani Hybrid Energy Jaisalmer Two Limited (Solar)
AHEJ3L_SOLAR	Adani Hybrid Energy Jaisalmer Three Limited (Solar)
AHEJ4L_SOLAR	Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Solar
AHEJ4L_WIND	Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Wind
AHSP_ANTP	Acme Hisar Solar Power Private Limited, Anantpur
AKS_PVGD	ACME Kurukshetra Solar Energy Pvt. Ltd
AKSP_ANTP	Acme Karnal Solar Power Private Limited, Anantpur
ALFANAR_BHUJ	Alfanar Group Wind Project, Bhuj, Gujarat
AMPS Hazira	Arcelor Mittal Nippon Steel, Hazira
APTEL	Appellate Tribunal for Electricity
ARERJL_SLR	Adani Renewable Energy Park Rajasthan Ltd.
ARINSUM_RUMS	Solenergi Rewa Ultra Mega Solar Project
ARS_PVGD	ACME REWARI Solar Power Pvt Ltd.
ASEJTL_SLR	Adani Solar Energy Jodhpur Two Ltd.
AVAADA1_PVGD	Avaada Solar Energy Private Ltd., Pavagada Project 1
AVAADA2_PVGD	Avaada Solar Energy Private Ltd., Pavagada Project 2
AVADARJHN_SLR	Avaada Rjhn Private Limited_Solar
AYANA_NPKUNTA	Ayana Power, NP Kunta
AZURE_ANTP	Azure Power, Anantpur
AZURE_PVGD	Azure Power, Pavagada
AZURE_SLR	Azure Power Solar Power Project
AZURE34_SLR	Azure Power 34 Pvt. Ltd. Solar Power Project
AZURE43_SLR	Azure Power Forty Three Private Limited
BALCO	Bharat Aluminum Company Limited
BARC	Bhabha Atomic Research Centre
BBMB	Bhakra Beas Management Board
BETAM_TCN	Betam Wind Energy Private Limited, Tuticorin
BHADRAVATHI HVDC	Bhadravathi High Voltage Direct Current Link

BRBCL	Bhartiya Rail Bijlee Company Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGPL	Coastal Gujarat Power Limited
CHUKHA HEP	Chhukha Hydroelectric Project, Bhutan
CHUZACHEN HEP	Chuzachen Hydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
CLEANSPLR	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
G-TAM	Green 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
KAPP 3&4	Kakrapar Atomic Power Station Unit 3 & 4
KARCHAM WANGTOO	Karcham Wangtoo H.E. Project
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	Lanco Amarkantak Power Private Limited
LANKO BUDHIL	Lanco Budhil 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
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_TCIN	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
ONGC Platana	ONGC Tripura Power Company
OPGC	Odisha Power Generation Corporation
ORANGE_TCIN	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_BHUJ	ReNew Power Limited, Bhuj
RENEW_PVGD	ReNew Wind Energy (TN2) Private Limited
RENEW_SLR_BKN	Renew Solar Bikaner
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 SixPrivate 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
SINGOLI BHATWARI HEP	Singoli-Bhatwari Hydroelectric Project, Uttarakhand
SPRNG_NPKUNTA	Sprng Energy, NP Kunta
SPRING_PUGALUR	Spring Solar Power Private Limited, Pugalur
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
VINDHYACHAL HVDC	Vindhyachal High Voltage Direct Current Link
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 inter-State Trading Licensees and directly by the Distribution Licensees, Power Exchanges (Indian Energy Exchange Ltd (IEX) and Power Exchange India Ltd (PXIL)), and Deviation Settlement Mechanism (DSM). The main objectives of the report are: (i) to analyze 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 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 during the month of **June 2022** is presented in the following sections.

2. Volume of Short-term Transactions of Electricity

2.1. During June 2022, total electricity generation, excluding generation from renewable and captive power plants in India was 124231.00 MU (Table-1). Of the total electricity generation, 13.51% was transacted through short-term, comprising of 6.39% through bilateral (through traders and term-ahead contracts on power exchanges, and directly between distribution companies), followed by 5.46% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)} and 1.67% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions (16789.40 MU), 47.30% was transacted through bilateral (32.22% through traders and term-ahead contracts on power exchanges, and 15.07% directly between distribution companies), followed by 40.37% through power exchanges {DAM (including G-DAM) and RTM} and 12.33% through DSM (Table-1 & Figure-2). Daily volume of short-term transactions is shown in Table-25 & Figure-4.

2.3. Of the total volume of electricity transacted through power exchanges, 53.51% of the volume was transacted in DAM (including G-DAM), followed by 20.52% in Term Ahead Market (TAM) (including G-TAM) and 25.97% 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 the transactions undertaken through power exchanges. There were 44 trading licensees as of June 2022. Of which, 28 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Adani Enterprises Ltd., Tata Power Trading Company (P) Ltd. and Manikaran Power Ltd. had a share of 81.53% 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 for measuring the competition among the trading licensees. Increase in the HHI generally indicates decrease in competition and increase of 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 0.1775 for the month of June 2022, which indicates moderate concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX and PXIL was 4084.99 MU and 116.20 MU respectively. The volume of total buy bids and sell bids was 6586.08 MU and 6835.38 MU respectively in IEX, while the same was 244.53 MU and 212.69 MU respectively in PXIL.

2.7. Of the total volume of electricity transacted in the DAM of IEX, volume sold by the neighboring countries of India was 178.20 MU and the volume purchased was 28.49 MU, under the Cross Border Trade of electricity through power exchange (Table-29). No Cross Border transaction of electricity was undertaken through PXIL.

2.8. The volume of electricity transacted in the G-DAM of IEX was 362.23 MU, while no electricity was transacted in the G-DAM of PXIL. The volume of total buy bids and sell bids was 1522.46 MU and 459.62 MU respectively in IEX. The volume of total buy bids was 47.42

MU in PXIL, while no sell bids were received.

2.9. The volume of electricity transacted in the RTM of IEX and PXIL was 2213.66 MU and 1.03 MU respectively. The volume of total buy bids and sell bids was 4000.53 MU and 3482.81 MU respectively in IEX, while the same was 6.67 MU and 7.15 MU respectively in PXIL. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

2.10. The volume of electricity transacted in the TAM of IEX and PXIL was 759.03 MU and 759.58 MU respectively (Table-8 & Table-9). The volume of electricity transacted in the Green Term Ahead Market (G-TAM) of IEX and PXIL was 171.16 MU and 60.73 MU respectively (Table-10 & Table-11).

3. Price of Short-term Transactions of Electricity

3.1. **Price of electricity transacted through Traders:** The minimum, maximum and weighted average sale prices for the electricity transacted through traders were ₹3.37/kWh, ₹12.03/kWh and ₹5.59/kWh respectively (Table-3). The weighted average sale prices were also computed for the electricity transacted during Round the Clock (RTC), Peak and Off-peak periods separately, and the sale prices were ₹5.70/kWh, ₹8.00/kWh and ₹4.92/kWh respectively (Table-4).

3.2. **Price of electricity transacted through Power Exchanges:** The minimum, maximum and weighted average prices for the electricity transacted in the DAM of IEX were ₹1.00/kWh, ₹12.00/kWh and ₹6.88/kWh respectively. These prices in the DAM of PXIL were ₹1.90/kWh, ₹12.00/kWh and ₹6.42/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹2.97/kWh, ₹12.00/kWh and ₹5.94/kWh respectively. (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.50/kWh, ₹12.00/kWh and ₹6.67/kWh respectively. These prices in the RTM of PXIL were ₹2.82/kWh, ₹12.00/kWh and ₹8.41/kWh respectively (Table-7). The weighted average price of electricity transacted in the TAM of IEX and PXIL was ₹6.74/kWh and ₹7.40/kWh respectively (Table-8 and Table-9). The price of electricity transacted in the G-TAM of IEX and PXIL was ₹7.14/kWh and ₹6.70/kWh respectively (Table-10 and Table-11).

3.3. **Price of electricity transacted through DSM:** The minimum, maximum and average price of DSM was ₹0.00/kWh, ₹8.00/kWh and ₹5.48/kWh respectively (Table-12).

3.4. The comparison of weighted average prices of electricity transacted through trading licensees, power exchanges & average price of DSM are shown in Figure-6. The daily prices of electricity transacted through power exchanges & DSM and their comparison are shown in Table-26(a) & (b) and Figure-7.

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 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 ₹0.021/kWh.

5. Volume of Short-term Transactions of Electricity (Regional Entity¹-Wise)

5.1. Of the total bilateral transactions, top 5 regional entities/states sold 34.16% of the volume. These were Himachal Pradesh, Madhya Pradesh, Teesta Stage 3 Hydro Power Project, Jaypee Nigrie Super Thermal Power Project and Karnataka (Table-13). Top 5 regional entities/states purchased 63.11% of the volume, and these were Punjab, Delhi, Gujarat, Maharashtra and Uttar Pradesh (Table-14).

5.2. Of the total DAM transactions at power exchanges, top 5 regional entities/states sold 32.85% of the volume, and these were Madhya Pradesh, Karnataka, Delhi, Raipur Energen Limited Himachal Pradesh and Jindal Power Ltd Stage II (Table-15). Top 5 regional entities/states purchased 59.94% of the volume, and these were Andhra Pradesh, Uttar Pradesh, Gujarat, Haryana and West Bengal (Table-16).

¹ In case of a State, the entities which are “selling” also include generators connected to State Grid and the entities which are “buying” also include open access consumers.

5.3. Of the total G-DAM transactions at power exchanges, top 5 regional entities/states sold 68.55% of the volume, and these were Adani Hybrid Energy Jaisalmer Four Limited (Solar), Andhra Pradesh, Madhya Pradesh, Adani Hybrid Energy Jaisalmer One Limited (SOLAR) and Adani Hybrid Energy Jaisalmer Three Limited (Solar) (Table-17). Top 5 regional entities/states purchased 65.12% of the volume, and these were Punjab, DVC, Gujarat, Daman and Diu & Dadar and Nagar Haveli and Maharashtra (Table-18).

5.4. Of the total RTM transactions at power exchanges, top 5 regional entities/states sold 44.39% of the volume, and these were Bihar, Madhya Pradesh, Karnataka, Delhi and NEEPCO Stations (Table-19). Top 5 regional entities/states purchased 50.32% of the volume, and these were Rajasthan, Telangana, Uttar Pradesh, Maharashtra and Punjab (Table-20).

5.5. Of the total under drawal in June 2022, top 5 regional entities/states under drew 32.50% of the volume, and these were Gujarat, Tamil Nadu, Karnataka, NHPC Stations and Madhya Pradesh (Table-21). Top 5 regional entities/states overdrew 31.99% of the total over drawal volume, and these were NTPC Stations (Western Region), NTPC Stations (Northern Region), Uttar Pradesh, Rajasthan and Haryana (Table-22).

5.6. The total volume of net short-term transactions of electricity (Regional entity-wise), i.e., volume of net transactions through bilateral, power exchanges and DSM are shown in Table-23 & 27. Top 5 electricity selling regional entities/states were Madhya Pradesh, Karnataka, Himachal Pradesh, Teesta Stage 3 Hydro Power Project and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Punjab, Uttar Pradesh, Gujarat, Haryana and Delhi.

6. Congestion² 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

² “Congestion” means a situation where the demand for transmission capacity exceeds the available transfer capability

assumes that there is no congestion in the inter-State transmission system between different regions. However, in reality, the system operator (NLDC) in coordination with RLDCs limits the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”³.

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 June 2022, congestion was experienced in only RTM of IEX (Table-24).

6.3. The volume of electricity that could not be cleared due to congestion in RTM of IEX was 0.04% of the unconstrained cleared volume. In terms of time, congestion occurred was 0.83% in RTM of IEX during the month (Table-24).

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

7.1. The concept of Renewable Energy Certificates (RECs) seeks to address mismatch between 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 development of 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 details of REC transactions for the month of June 2022 are shown in Table-28. The market clearing volume of solar RECs transacted on IEX and PXIL were 214046 and 20947

³“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.

respectively and the weighted average market clearing price of these RECs was ₹1500/MWh in IEX and ₹1500/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 459200 and 171622 respectively and the weighted average market clearing price of these RECs was ₹ 1000/MWh in IEX and ₹ 1000/MWh in PXIL.

7.4. The gap between the volume of buy and sell bids of RECs placed through power exchanges shows the variation in demand for both solar and non-solar RECs. For Solar RECs, the ratio of buy bids to sell bids was 0.17 and 0.04 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids 0.31 and 0.25 in IEX and PXIL respectively.

8. Inferences:

- a) The percentage of short-term transactions of electricity to total electricity generation was 13.51%.
- b) Of the total short-term transactions (16789.40 MU), 47.30% was transacted through bilateral (32.22% through traders and term-ahead contracts on power exchanges, and 15.07% directly between distribution companies), followed by 40.37% through power exchanges {DAM (including G-DAM) and RTM} and 12.33% through DSM
- c) Of the total volume of electricity transacted through power exchanges, 53.51% of the volume was transacted in DAM (including G-DAM), followed by 20.52% in Term Ahead Market (TAM) (including G-TAM) and 25.97% in RTM.
- d) Top 5 trading licensees had a share of 81.53% 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 0.1775, indicating moderate concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹5.59/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX and PXIL was ₹6.88/kWh and ₹6.42/kWh respectively. The weighted average price of electricity transacted in G-DAM of IEX was ₹5.94/kWh. The weighted average price of electricity

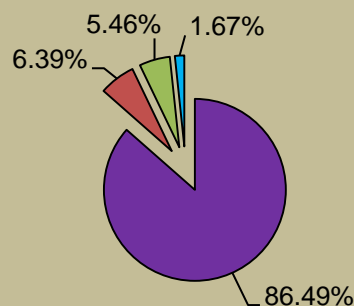
transacted in RTM of IEX and PXIL was ₹6.67/kWh and ₹8.41/kWh respectively. No electricity was transacted in the G-DAM of PXIL.

- h) The weighted average price of electricity transacted in the TAM of IEX and PXIL was ₹6.74/kWh and ₹7.40/kWh respectively. The weighted average price of electricity transacted in the G-TAM of IEX and PXIL was ₹7.14/kWh and ₹6.70/kWh respectively.
- i) The average price of electricity transacted through DSM was ₹5.48/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.021/kWh, which was in line with the Trading Licence Regulations 2020.
- k) Top 5 electricity selling regional entities/states were Madhya Pradesh, Karnataka, Himachal Pradesh, Teesta Stage 3 Hydro Power Project and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Punjab, Uttar Pradesh, Gujarat, Haryana and Delhi.
- l) During the month, congestion was experienced in only RTM of IEX. The volume of electricity that could not be cleared, due to congestion, in RTM of IEX was 0.04% of the unconstrained cleared volume. In terms of time, congestion occurred was 0.83% in RTM of IEX during the month.
- m) The market clearing volume of solar RECs transacted on IEX and PXIL were 214046 and 20947 respectively and the weighted average market clearing price of these RECs was ₹1500/MWh in IEX and ₹1500/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 459200 and 171622 respectively and the weighted average market clearing price of these RECs was ₹ 1000/MWh in IEX and ₹ 1000/MWh in PXIL.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), JUNE 2022				
Sr.No	Short-term transactions	Volume (MU)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	7940.75	47.30	6.39
	(i) Through Traders and PXs	5410.06	32.22	4.35
	(ii) Direct	2530.69	15.07	2.04
2	Through Power Exchanges	6778.12	40.37	5.46
	(i) IEX			
	(a) DAM	4084.99	24.33	3.29
	(b) RTM	2213.66	13.18	1.78
	(c) GDAM	362.23	2.16	0.29
	(ii)PXIL			
	(a) DAM	116.20	0.69	0.09
	(b) RTM	1.03	0.01	0.00
	(c) GDAM	0.00	0.00	0.00
3	Through DSM	2070.53	12.33	1.67
	Total Short-term transactions	16789.40	-	13.51
	Total Generation	124231.00	-	-

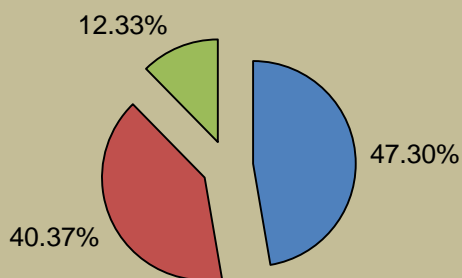
Source: NLDC

Figure-1: Volume of Various Kinds of Electricity Transactions in Total Electricity Generation, June 2022



■ Long-term ■ Bilateral ■ Through Power Exchanges ■ Through DSM

Figure-2: Volume of Short-term Transactions of Electricity, June 2022



■ Bilateral ■ Power Exchanges ■ DSM

Figure-3: Volume transacted in different markets segments on Power Exchanges, June 2022

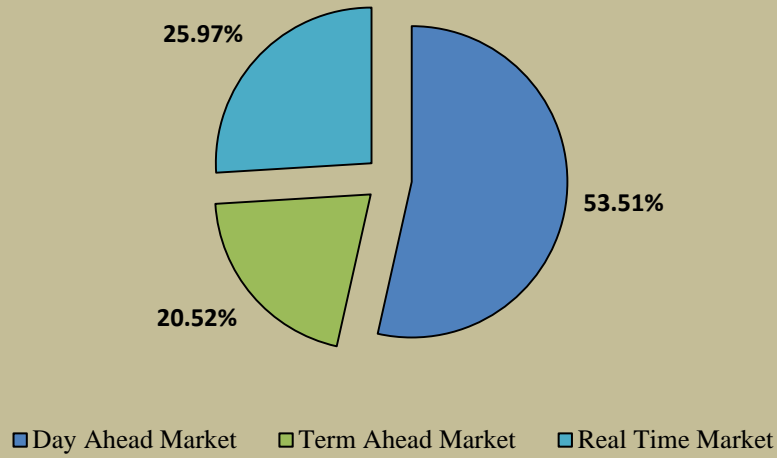


Figure-4: Volume of Short-term Transactions of Electricity, June 2022 (Day-wise)

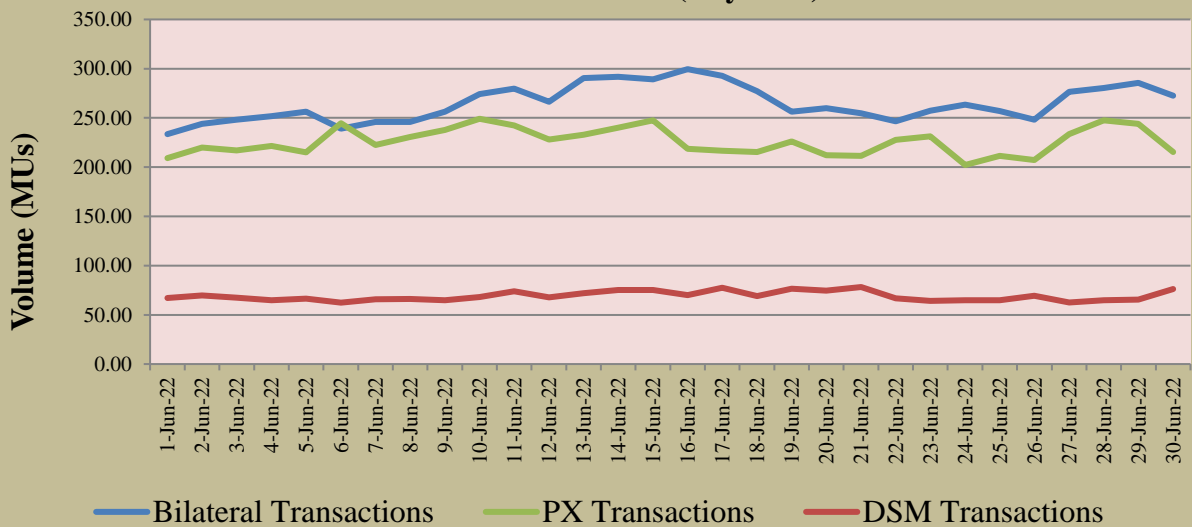


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, JUNE 2022			
Sr. No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	32.57	0.1060
2	NTPC Vidyut Vyapar Nigam Ltd.	17.33	0.0300
3	Adani Enterprises Ltd.	12.98	0.0169
4	Tata Power Trading Company (P) Ltd.	12.67	0.0161
5	Manikaran Power Ltd.	5.98	0.0036
6	GMR Energy Trading Ltd.	4.40	0.0019
7	Arunachal Pradesh Power Corporation (P) Ltd	4.33	0.0019
8	Instinct Infra & Power Ltd.	1.78	0.0003
9	JSW Power Trading Company Ltd	1.46	0.0002
10	Kreate Energy (I) Pvt. Ltd.	1.43	0.0002
11	Statkraft Markets Pvt. Ltd.	1.15	0.0001
12	NHPC Limited	1.03	0.0001
13	Greenko Energies Pvt Ltd	0.85	0.0001
14	Knowledge Infrastructure Systems (P) Ltd	0.84	0.0001
15	RPG Power Trading Company Ltd.	0.68	0.0000
16	Kundan International Pvt. Ltd.	0.12	0.0000
17	Abja Power Private Limited	0.10	0.0000
18	Shubheksha Advisors Pvt. Ltd.	0.08	0.0000
19	NLC India Ltd.	0.07	0.0000
20	Shree Cement Ltd.	0.05	0.0000
21	Instant Venture Pvt. Ltd.	0.04	0.0000
22	Saranyu Power Trading Private Limited	0.03	0.0000
23	Ambitious Power Trading Company Ltd.	0.02	0.0000
24	Phillip Commodities India (P) Ltd.	0.01	0.0000
25	Gita Power & Infrastructure Private Limited	0.01	0.0000
26	Reneurja Power LLP	0.001	0.0000
27	Altilium Energie Private Limited	0.001	0.0000
28	Customized Energy Solutions India (P) Ltd.	0.0004	0.0000
TOTAL		100.00%	0.1775
Top 5 trading licensees		81.53%	
<i>Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges.</i>			
<i>Note 2: Volume of electricity transacted by Global Energy Ltd. is not included.</i>			
<i>Source: Information submitted by trading licensees</i>			

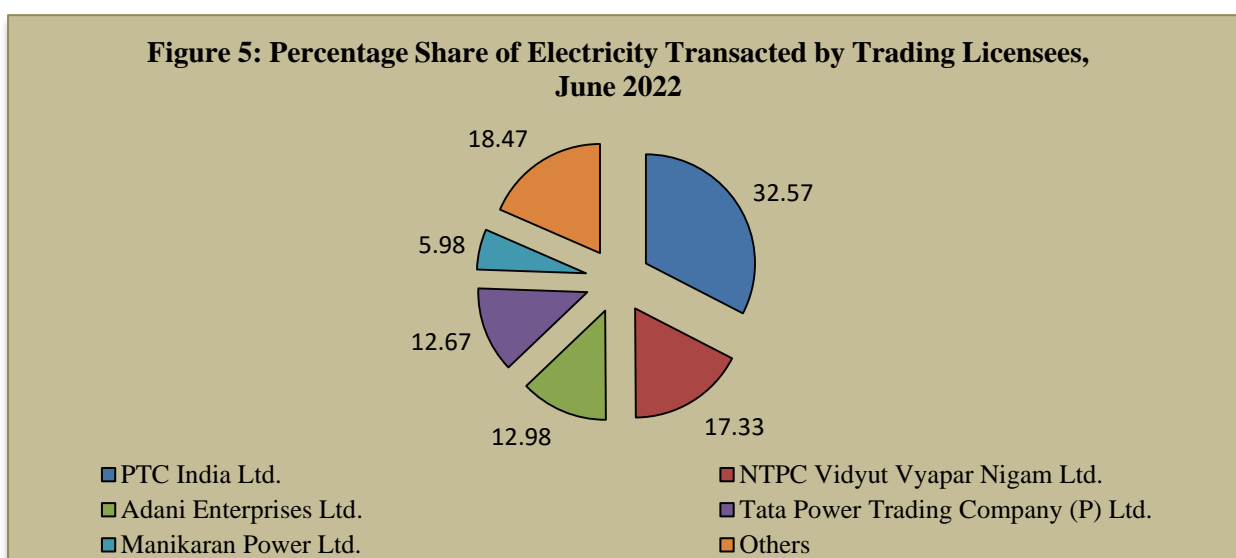


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, JUNE 2022		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	3.37
2	Maximum	12.03
3	Weighted Average	5.59

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), JUNE 2022		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	5.70
2	PEAK	8.00
3	OFF PEAK	4.92

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JUNE 2022			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	1.00	1.90
2	Maximum	12.00	12.00
3	Weighted Average	6.88	6.42

Source: IEX and PXIL

Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JUNE 2022			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	2.97	-
2	Maximum	12.00	-
3	Weighted Average	5.94	-

Source: IEX and PXIL

Table-7: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JUNE 2022			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	0.50	2.82
2	Maximum	12.00	12.00
3	Weighted Average	6.67	8.41

Source: IEX and PXIL

Table-8: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, JUNE 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	3.67	11.07
2	Day Ahead Contingency Contracts	624.11	7.03
3	Daily Contracts	131.25	5.23
	Total	759.03	6.74

Source: IEX

Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, JUNE 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	3.78	11.28
2	Day Ahead Contingency Contracts	724.60	7.44
3	Any Day(s) Contracts	31.20	5.87
	Total	759.58	7.40

Source: PXIL

Table-10: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, JUNE 2022			
Sr.No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	168.76	7.17
2	Daily Contracts	2.40	4.60
	Total	171.16	7.14

Source: IEX

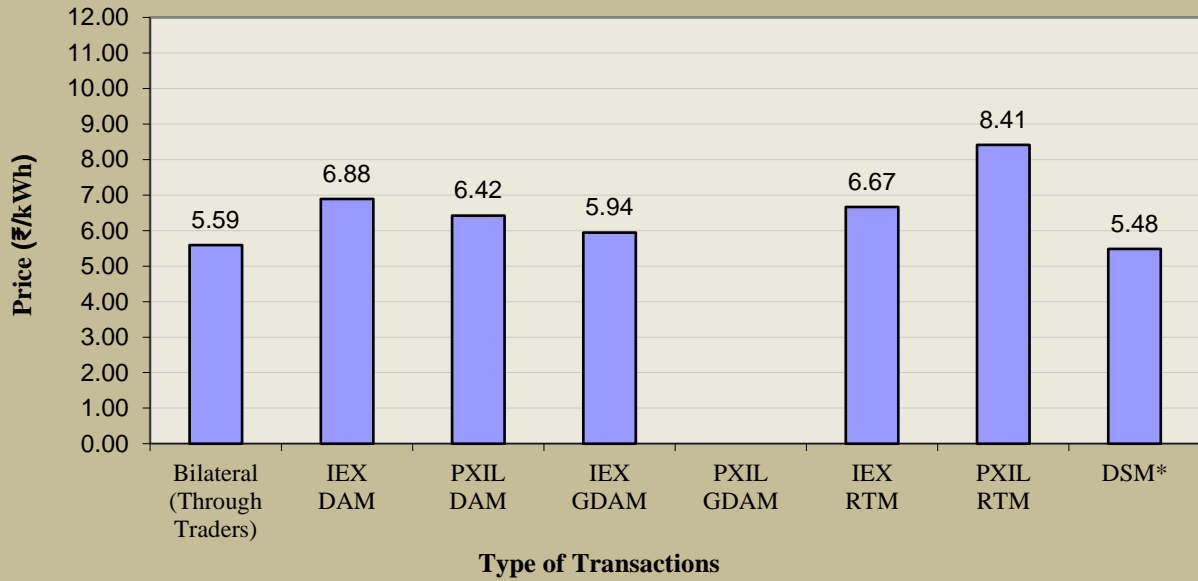
Table-11: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, JUNE 2022			
Sr.No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	60.73	6.70
	Total	60.73	6.70

Source: PXIL

Table-12: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, JUNE 2022		
Sr.No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	5.48

Source: NLDC

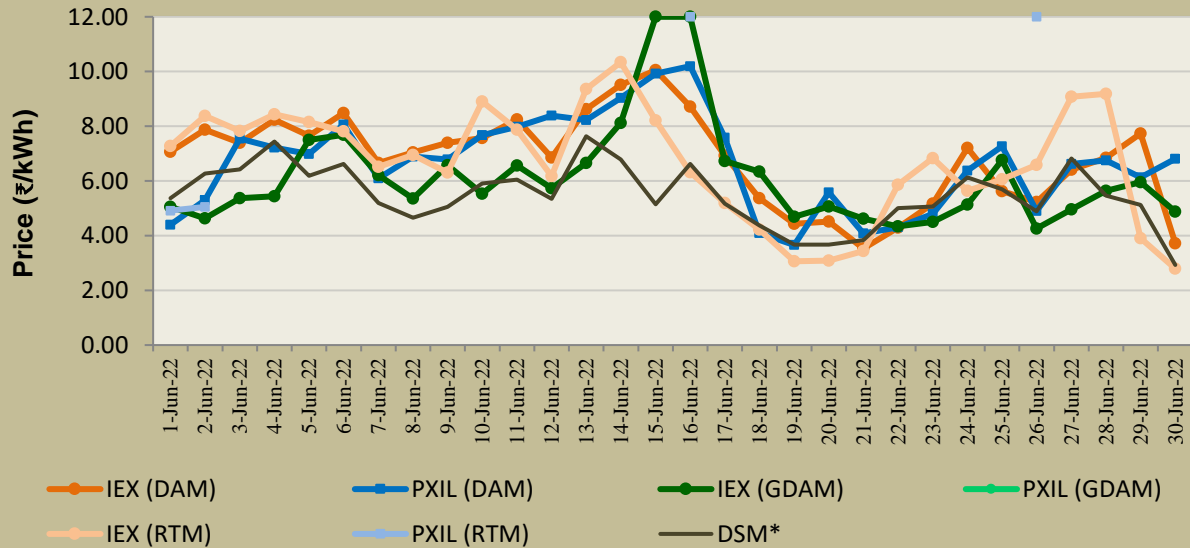
Figure-6: Weighted Average Price of Short-term Transactions of Electricity, June 2022



Note: No electricity was transacted in G-DAM of PXIL during June 2022.

** Simple average price of DSM of the month*

Figure-7: Weighted Average Price of Short-term Transactions of Electricity, June 2022 (Day-wise)



Note: On PXIL, transactions were recorded in RTM only on 1st – 2nd, 16th and 26th June 2022. Further, no electricity was transacted in G-DAM of PXIL during June 2022.

** Simple average price of DSM for each day of the month*

Table-13: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, JUNE 2022		
Name of the Entity	Volume of Sale (MUs)	% of Volume
HIMACHAL PRADESH	781.31	9.84
MP	607.53	7.65
TEESTA STG3	495.08	6.24
JAYPEE NIGRIE	424.42	5.35
KARNATAKA	404.23	5.09
RPREL	332.70	4.19
SEMBCORP	320.37	4.03
TAMIL NADU	287.95	3.63
TELANGANA	272.33	3.43
JINDAL STAGE-II	254.38	3.20
ADHUNIK POWER LTD	245.32	3.09
JINDAL POWER	243.14	3.06
REGL	232.93	2.93
ESSAR POWER	224.67	2.83
DVC	207.35	2.61
DB POWER	186.09	2.34
RAJASTHAN	177.74	2.24
RKM POWER	168.00	2.12
MAHARASHTRA	166.19	2.09
JITPL	151.72	1.91
J & K	136.02	1.71
JHABUA POWER_MP	99.37	1.25
AHEJ4L_WIND	94.21	1.19
AHEJ4L_SOLAR	85.29	1.07
MEGHALAYA	82.37	1.04
DAGACHU	74.03	0.93
DIKCHU HEP	67.68	0.85
JORETHANG	62.57	0.79
TASHIDENG HEP	61.20	0.77
WEST BENGAL	59.21	0.75
AD HYDRO	55.82	0.70
ABC_BHDL2	54.87	0.69
GUJARAT	53.72	0.68
ACME_HEERGARH	52.88	0.67
AHEJ3L_SOLAR	52.86	0.67
CLEANSPL_SLR	50.20	0.63
AHEJ2L_SOLAR	43.33	0.55
ODISHA	40.99	0.52
KARCHAM WANGTOO	40.54	0.51
UTTAR PRADESH	40.27	0.51
SINGOLI BHATWARI HEP	38.07	0.48
MSUPL_BHDL2	35.02	0.44
TATA_SLR	34.09	0.43
MANIPUR	31.70	0.40
SORANG HEP	30.26	0.38
RENEW_SLR_BKN	29.02	0.37
AHEJ2L_WIND	25.67	0.32
AHEJ3L_WIND	24.82	0.31
UTTARAKHAND	19.66	0.25
ARUNACHAL PRADESH	18.40	0.23
SHREE CEMENT	17.63	0.22
KSK MAHANADI	17.38	0.22
GMR KAMALANGA	15.00	0.19
SAINJ HEP	13.51	0.17
OSTRO	13.26	0.17

THARI_SLR	12.67	0.16
ANDHRA PRADESH	11.30	0.14
KERALA	9.88	0.12
THERMAL POWERTECH	9.34	0.12
NAGALAND	6.84	0.09
EMCO	6.53	0.08
BIHAR	5.35	0.07
LANKO_AMK	5.04	0.06
GOA	3.78	0.05
SIKKIM	3.08	0.04
CONTINNUM PT	2.99	0.04
ADANI_WIND	2.99	0.04
ASEJTL_SLR	2.31	0.03
MB POWER	1.33	0.02
ACBIL	1.08	0.01
JHARKHAND	0.75	0.01
CHUZACHEN HEP	0.34	0.004
Total	7940.00	100.00
Volume Sold by top 5 Regional Entities	2712.56	34.16

Table-14: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, JUNE 2022

Name of the Entity	Volume of Purchase (MUs)	% of Volume
PUNJAB	1347.28	16.97
DELHI	1167.56	14.70
GUJARAT	1126.47	14.19
MAHARASHTRA	717.48	9.04
UTTAR PRADESH	652.50	8.22
ODISHA	626.88	7.89
HARYANA	561.56	7.07
AMPS Hazira	221.61	2.79
JHARKHAND	208.18	2.62
UTTARAKHAND	189.12	2.38
WEST BENGAL	163.94	2.06
CHHATTISGARH	149.92	1.89
BANGLADESH	141.17	1.78
BALCO	121.86	1.53
MP	120.83	1.52
TELANGANA	92.22	1.16
ANDHRA PRADESH	89.17	1.12
DD&DNH	59.38	0.75
GOA	52.00	0.65
BIHAR	43.84	0.55
SIKKIM	21.53	0.27
PONDICHERRY	18.06	0.23
KERALA	15.40	0.19
RAJASTHAN	13.47	0.17
NCR ALLAHABAD	10.13	0.13
DVC	4.97	0.06
HIMACHAL PRADESH	2.76	0.03
MEGHALAYA	1.04	0.01
TAMIL NADU	0.38	0.005
KARNATAKA	0.03	0.0004
TOTAL	7940.75	100.00
Volume Purchased by top 5 Regional Entities	5011.30	63.11

Table-15: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JUNE 2022

Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	354.47	8.44
KARNATAKA	347.52	8.27
DELHI	269.62	6.42
RPREL	216.43	5.15
JINDAL STAGE-II	192.12	4.57
NEPAL(NVVN)	178.19	4.24
BIHAR	162.01	3.86
SEMBCORP	158.57	3.77
TEESTA STG3	144.53	3.44
DB POWER	130.02	3.09
CHHATTISGARH	128.65	3.06
MB POWER	121.23	2.89
ESSAR POWER	120.39	2.87
JITPL	115.15	2.74
MAHARASHTRA	110.60	2.63
NEEPCO STATIONS	104.12	2.48
ASSAM	93.30	2.22
GUJARAT	84.32	2.01
RAJASTHAN	82.44	1.96
TAMIL NADU	78.34	1.86
ACBIL	72.58	1.73
UTTAR PRADESH	72.07	1.72
REGL	68.31	1.63
WEST BENGAL	62.13	1.48
NTPC STATIONS-NR	57.11	1.36
JAYPEE NIGRIE	53.34	1.27
TELANGANA	46.96	1.12
ARUNACHAL PRADESH	41.22	0.98
HIMACHAL PRADESH	39.81	0.95
JHARKHAND	35.60	0.85
KERALA	34.88	0.83
MARUTI COAL	31.81	0.76
GOA	28.99	0.69
JINDAL POWER	28.62	0.68
ADHUNIK POWER LTD	28.48	0.68
RKM POWER	28.40	0.68
ANDHRA PRADESH	26.13	0.62
KARCHAM WANGTOO	25.11	0.60
SIKKIM	23.97	0.57
EMCO	17.27	0.41
SAINJ HEP	17.19	0.41
DVC	17.01	0.40
NLC	13.13	0.31
J & K	12.87	0.31
ODISHA	10.82	0.26
ONGC PALATANA	10.27	0.24
CHANDIGARH	9.05	0.22
HARYANA	8.48	0.20
CHUZACHEN HEP	8.29	0.20
AD HYDRO	8.16	0.19
NTPC STATIONS-ER	7.93	0.19
MIZORAM	6.68	0.16
NTPC STATIONS-WR	5.66	0.13
CGPL	5.54	0.13

GMR KAMALANGA	5.49	0.13
NAGALAND	5.38	0.13
SHREE CEMENT	4.16	0.10
UTTARAKHAND	3.49	0.08
LANCO BUDHIL	3.41	0.08
DIKCHU HEP	3.21	0.08
IL&FS	2.84	0.07
AHEJ4L_SOLAR	2.02	0.05
SINGOLI BHATWARI HEP	1.97	0.05
THERMAL POWERTECH	1.88	0.04
RENEW_SR_SLR	1.73	0.04
SORANG HEP	1.51	0.04
AHEJOL_S_FTG2	1.38	0.03
MEGHALAYA	1.26	0.03
ADANI_WIND	1.14	0.03
NTPC STATIONS-SR	0.97	0.02
AHEJ3L_SOLAR	0.87	0.02
DHARIWAL POWER	0.77	0.02
ADANI GREEN	0.61	0.01
PUNJAB	0.60	0.01
TASHIDENG HEP	0.33	0.01
JORETHANG	0.30	0.01
OSTRO	0.02	0.0005
Total	4201.20	100.00
Volume sold by top 5 Regional Entities	1380.16	32.85

Table-16: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JUNE 2022

Name of the Entity	Volume of Purchase (MUs)	% of Volume
ANDHRA PRADESH	736.11	17.52
UTTAR PRADESH	583.40	13.89
GUJARAT	424.26	10.10
HARYANA	408.28	9.72
WEST BENGAL	366.31	8.72
TAMIL NADU	231.82	5.52
MAHARASHTRA	211.96	5.05
PUNJAB	209.06	4.98
ODISHA	146.52	3.49
RAJASTHAN	122.70	2.92
TELANGANA	112.33	2.67
ASSAM	82.17	1.96
AMPS Hazira	77.69	1.85
UTTARAKHAND	77.59	1.85
MP	76.06	1.81
HIMACHAL PRADESH	64.76	1.54
DD&DNH	45.99	1.09
JHARKHAND	41.44	0.99
DELHI	37.50	0.89
NEP	27.97	0.67
KERALA	23.76	0.57
KARNATAKA	22.68	0.54
CHHATTISGARH	20.69	0.49
RAIL	14.35	0.34
CHANDIGARH	10.60	0.25
TRIPURA	7.54	0.18
BIHAR	6.95	0.17
BALCO	4.76	0.11
GOA	4.00	0.10
MEGHALAYA	1.13	0.03
NEPAL(NVVN)	0.52	0.01
MANIPUR	0.30	0.01
TOTAL	4201.20	100.00
Volume purchased by top 5 Regional Entities	2518.36	59.94

Table-17: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JUNE 2022		
Name of the Entity	Volume of Sale (MUs)	% of Volume
AHEJ4L_SOLAR	80.29	22.17
ANDHRA PRADESH	62.20	17.17
MP	49.39	13.63
AHEJOL_S_FTG2	31.36	8.66
AHEJ3L_SOLAR	25.09	6.93
KARNATAKA	23.98	6.62
TELANGANA	23.60	6.52
ADANI_WIND	15.82	4.37
J & K	13.35	3.69
NTPC STATIONS-SR	9.99	2.76
ADANI GREEN	8.84	2.44
MAHARASHTRA	7.25	2.00
RAJASTHAN	3.87	1.07
OSTRO	3.62	1.00
HIMACHAL PRADESH	1.75	0.48
CONTINNUM PT	1.16	0.32
KERALA	0.45	0.13
UTTAR PRADESH	0.21	0.06
Total	362.23	100.00
Volume sold by top 5 Regional Entities	248.32	68.55

Table-18: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JUNE 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
PUNJAB	70.70	19.52
DVC	46.39	12.81
GUJARAT	45.97	12.69
DD&DNH	44.28	12.22
MAHARASHTRA	28.54	7.88
ASSAM	20.49	5.66
KARNATAKA	19.56	5.40
DELHI	18.92	5.22
JHARKHAND	17.60	4.86
UTTAR PRADESH	15.37	4.24
RAIL	9.07	2.50
KERALA	8.20	2.26
RAJASTHAN	5.11	1.41
UTTARAKHAND	2.53	0.70
HARYANA	2.29	0.63
TELANGANA	2.25	0.62
ODISHA	1.60	0.44
BALCO	1.56	0.43
TAMIL NADU	1.01	0.28
MEGHALAYA	0.46	0.13
AMPS Hazira	0.20	0.05
WEST BENGAL	0.09	0.02
ANDHRA PRADESH	0.05	0.01
TOTAL	362.23	100.00
Volume purchased by top 5 Regional Entities	235.88	65.12

Table-19: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, JUNE 2022

Name of the Entity	Volume of Sale (MUs)	% of Volume
BIHAR	320.81	14.49
MP	256.51	11.58
KARNATAKA	186.03	8.40
DELHI	123.91	5.60
NEEPCO STATIONS	95.92	4.33
WEST BENGAL	93.78	4.23
ASSAM	83.99	3.79
ANDHRA PRADESH	74.67	3.37
MAHARASHTRA	71.66	3.24
CHHATTISGARH	70.32	3.18
J & K	68.85	3.11
TAMIL NADU	65.31	2.95
ODISHA	57.33	2.59
TELANGANA	44.33	2.00
MB POWER	42.57	1.92
RAJASTHAN	40.63	1.83
KERALA	40.40	1.82
CGPL	38.24	1.73
HIMACHAL PRADESH	37.05	1.67
PUNJAB	34.75	1.57
TEESTA HEP	27.26	1.23
JINDAL STAGE-II	22.46	1.01
RPREL	21.22	0.96
JHARKHAND	19.86	0.90
SASAN UMPP	19.65	0.89
HARYANA	15.68	0.71
NTPC STATIONS-SR	15.06	0.68
NLC	14.77	0.67
RKM POWER	14.67	0.66
TRIPURA	14.31	0.65
ADANI_WIND	13.69	0.62
UTTAR PRADESH	12.46	0.56
ESSAR POWER	12.21	0.55
SIKKIM	11.59	0.52
GUJARAT	8.65	0.39
DVC	8.04	0.36
GOA	7.77	0.35
SAINJ HEP	7.05	0.32
JINDAL POWER	6.99	0.32
NAGALAND	6.58	0.30
NTPC STATIONS-NR	6.54	0.30
AMPS Hazira	6.08	0.27
ARUNACHAL PRADESH	6.04	0.27
SINGOLI BHATWARI HEP	6.04	0.27
DB POWER	5.44	0.25
KARCHAM WANGTOO	4.84	0.22
MEGHALAYA	4.67	0.21
SORANG HEP	4.65	0.21
AD HYDRO	4.51	0.20
JITPL	3.88	0.18
MANIPUR	3.45	0.16
REGL	3.38	0.15
JORETHANG	3.03	0.14
TASHIDENG HEP	2.56	0.12

UTTARAKHAND	2.44	0.11
ADHUNIK POWER LTD	2.34	0.11
DIKCHU HEP	2.22	0.10
ONGC PALATANA	2.15	0.10
CHANDIGARH	1.84	0.08
OSTRO	1.65	0.07
ACBIL	1.55	0.07
DD&DNH	1.28	0.06
SHREE CEMENT	1.27	0.06
NTPC STATIONS-WR	1.05	0.05
CHUZACHEN HEP	1.00	0.05
IL&FS	0.94	0.04
NTPC STATIONS-ER	0.73	0.03
GMR KAMALANGA	0.53	0.02
MARUTI COAL	0.39	0.02
LANCO BUDHIL	0.38	0.02
MIZORAM	0.27	0.01
AHEJ4L_SOLAR	0.25	0.01
DHARIWAL POWER	0.19	0.01
RENEW_SR_SLR	0.06	0.003
Total	2214.69	100.00
Volume sold by top 5 Regional Entities	983.18	44.39

Table-20: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JUNE 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
RAJASTHAN	255.50	11.54
TELANGANA	249.85	11.28
UTTAR PRADESH	234.02	10.57
MAHARASHTRA	204.97	9.25
PUNJAB	170.07	7.68
ANDHRA PRADESH	168.69	7.62
WEST BENGAL	154.79	6.99
HIMACHAL PRADESH	128.47	5.80
TAMIL NADU	107.72	4.86
HARYANA	106.26	4.80
ODISHA	98.81	4.46
GUJARAT	74.28	3.35
DELHI	49.26	2.22
KERALA	23.32	1.05
ASSAM	23.29	1.05
AMPS Hazira	22.11	1.00
CHHATTISGARH	21.97	0.99
BIHAR	18.19	0.82
MP	16.05	0.72
DD&DNH	14.86	0.67
BALCO	14.39	0.65
DVC	13.64	0.62
MANIPUR	9.22	0.42
KARNATAKA	6.60	0.30
TRIPURA	5.89	0.27
MEGHALAYA	5.39	0.24
RAIL	5.02	0.23
UTTARAKHAND	4.17	0.19
JHARKHAND	2.80	0.13
CHANDIGARH	1.27	0.06
ARUNACHAL PRADESH	1.18	0.05
GOA	1.10	0.05
SIKKIM	0.56	0.03
RPREL	0.54	0.02
ACBIL	0.24	0.01
JINDAL STAGE-II	0.20	0.01
TOTAL	2214.69	100.00
Volume purchased by top 5 Regional Entities	1114.40	50.32

Table-21: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, JUNE 2022		
Name of the Entity	Volume of Under drawal (MUs)	% of Volume
GUJARAT	163.29	8.14
TAMIL NADU	137.77	6.87
KARNATAKA	124.52	6.21
NHPC STATIONS	113.66	5.66
MP	112.93	5.63
MAHARASHTRA	95.24	4.75
PUNJAB	83.44	4.16
ANDHRA PRADESH	72.75	3.63
NTPC STATIONS-WR	72.33	3.60
RAJASTHAN	68.94	3.44
NTPC STATIONS-NR	57.19	2.85
UTTAR PRADESH	51.27	2.55
TELANGANA	50.59	2.52
J & K	40.17	2.00
HARYANA	38.17	1.90
SASAN UMPP	33.94	1.69
AHEJ4L_SOLAR	25.74	1.28
CHHATTISGARH	25.24	1.26
AMPS Hazira	24.38	1.21
NJPC	23.14	1.15
DELHI	22.49	1.12
NTPC STATIONS-SR	21.91	1.09
NLC	18.18	0.91
KARCHAM WANGTOO	16.68	0.83
AZURE43_SLR	15.34	0.76
KERALA	15.04	0.75
ASSAM	14.45	0.72
BBMB	14.00	0.70
UTTARAKHAND	12.76	0.64
HIMACHAL PRADESH	12.68	0.63
NEEPCO STATIONS	12.18	0.61
AGEMPL BHUJ	10.65	0.53
RAMPUR HEP	10.02	0.50
ORANGE_TCN	9.29	0.46
GIWEL_TCN	9.20	0.46
PONDICHERRY	9.15	0.46
BETAM_TCN	8.53	0.43
GIWEL_BHUJ	8.27	0.41
RENEW_BHACHAU	7.61	0.38
MB POWER	7.26	0.36
AHEJ3L_SOLAR	7.14	0.36
RENEW_BHUJ	7.13	0.36
IGSTPS	6.78	0.34
CLEAN_SLR	6.77	0.34
MYTRAH_TCN	6.76	0.34
ALFANAR_BHUJ	6.47	0.32
AVADARJHN_SLR	6.45	0.32
ACME_RUMS	6.35	0.32
GOA	6.16	0.31
JINDAL STAGE-II	5.93	0.30
OSTRO	5.92	0.30
CHANDIGARH	5.85	0.29
MIZORAM	5.78	0.29
MAHINDRA_RUMS	5.75	0.29
TRIPURA	5.68	0.28
ARINSUM_RUMS	5.60	0.28
AVAADASN_SLR	5.17	0.26
AZURE41_SLR	5.07	0.25
ABC_BHDL2	4.95	0.25
JAYPEE NIGRIE	4.84	0.24
AYANA_RP1	4.75	0.24
INOX_BHUJ	4.69	0.23
ARUNACHAL PRADESH	4.60	0.23
RENEWJH_SLR	4.58	0.23
MEGHALAYA	4.48	0.22
LANKO_AMK	4.43	0.22

ADANIHB_WIND	4.38	0.22
RENEWSW_SLR	4.30	0.21
MRPL	4.21	0.21
EDEN_SLR	4.20	0.21
SBG_NPK	4.13	0.21
DD&DNH	4.01	0.20
ACME_SLR	3.94	0.20
NAPP	3.74	0.19
RKM POWER	3.73	0.19
RENEWSB	3.71	0.19
RENEWURJA_SLR	3.70	0.18
CLEANSPL_SLR	3.63	0.18
CGPL	3.44	0.17
AZURE_SLR	3.43	0.17
JINDAL POWER	3.43	0.17
AVIKIRAN	3.37	0.17
NTPC_ANTP	3.33	0.17
RENEW_SLR_BKN	3.17	0.16
AZURE_MAPLE_SLR	3.13	0.16
BARC	3.10	0.15
SBSR_SLR	3.09	0.15
DB POWER	2.98	0.15
MSUPL_BHDL2	2.93	0.15
NAGALAND	2.83	0.14
SBG_PVGD	2.74	0.14
KOTESHWAR	2.70	0.13
ESPL_RADHANESDA	2.67	0.13
AD HYDRO	2.67	0.13
SPRING_PUGALUR	2.40	0.12
THARI_SLR	2.39	0.12
ARERJL_SLR	2.32	0.12
BALCO	2.27	0.11
RENEW_SR_SLR	2.26	0.11
AZURE34_SLR	2.20	0.11
MANIPUR	2.18	0.11
RAP B	2.11	0.11
TATA_PVGD	2.10	0.10
KSK MAHANADI	2.08	0.10
TATA_ANTP	2.06	0.10
NTPC STATIONS-NER	2.05	0.10
TEHRI	1.91	0.10
JHABUA POWER_MP	1.81	0.09
RPREL	1.78	0.09
AYANA_NPKUNTA	1.78	0.09
EMCO	1.78	0.09
ACME_HEERGARH	1.74	0.09
ACBIL	1.73	0.09
FORTUM1_PVGD	1.66	0.08
RANGANADI HEP	1.64	0.08
TATA_SLR	1.57	0.08
GIPCL_RADHANESDA	1.56	0.08
RAP C	1.48	0.07
ADY1_PVGD	1.46	0.07
ADY2_PVGD	1.46	0.07
ADY13_PVGD	1.46	0.07
ADY10_PVGD	1.46	0.07
ADY3_PVGD	1.46	0.07
ADY6_PVGD	1.46	0.07
OSTRO Hiriyur	1.41	0.07
SINGOLI BHATWARI HEP	1.41	0.07
NSPCL	1.37	0.07
NETCL VALLUR	1.29	0.06
ABSP_ANTP	1.29	0.06
TPREL_RADHANESDA	1.23	0.06
AKSP_ANTP	1.18	0.06
FORTUM2_PVGD	1.18	0.06
FRV_ANTP	1.16	0.06
FRV_NPK	1.14	0.06
AHSP_ANTP	1.12	0.06
LANCO BUDHIL	1.11	0.06

GRT_JPL	1.07	0.05
SPRNG_NPKUNTA	1.06	0.05
ESSAR POWER	1.04	0.05
SAINJ HEP	0.99	0.05
RENEW_SLR	0.96	0.05
NEP	0.90	0.04
SB6_POKARAN	0.89	0.04
ONGC PALATANA	0.89	0.04
AZURE_ANTP	0.86	0.04
COASTGEN	0.81	0.04
PARAM_PVGD	0.79	0.04
AVAADA1_PVGD	0.76	0.04
SORANG HEP	0.76	0.04
SB_SLR	0.71	0.04
SHREE CEMENT	0.58	0.03
AZURE_PVGD	0.57	0.03
GSECL Radhanesda	0.56	0.03
ASEJTL_SLR	0.53	0.03
AVAADA2_PVGD	0.51	0.03
SEMBCORP	0.50	0.03
PARE HEP	0.49	0.02
TRN ENERGY	0.49	0.02
RAIL	0.46	0.02
DOYANG HEP	0.35	0.02
NTPL	0.35	0.02
KREDL_PVGD	0.33	0.02
RGPPL	0.29	0.01
YARROW_PVGD	0.28	0.01
ARS_PVGD	0.27	0.01
LOKTAK	0.26	0.01
AKS_PVGD	0.26	0.01
RSTPS_FSPP	0.25	0.01
RENEW_PVGD	0.25	0.01
DHARIWAL POWER	0.20	0.01
THERMAL POWERTECH	0.20	0.01
NFF	0.17	0.01
VINDHYACHAL HVDC	0.14	0.01
HVDC RAIGARH	0.10	0.005
HVDC CHAMPA	0.04	0.002
IL&FS	0.03	0.001
DCPP	0.02	0.001
BHADRAVATHI HVDC	0.01	0.001
Total	2006.67	100.00
Volume Exported by top 5 Regional Entities	652.18	32.50

Table-22: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, JUNE 2022		
Name of the Entity	Volume of Over drawal (MUs)	% of Volume
NTPC STATIONS-WR	194.05	9.09
NTPC STATIONS-NR	152.76	7.16
UTTAR PRADESH	139.80	6.55
RAJASTHAN	107.39	5.03
HARYANA	88.80	4.16
ANDHRA PRADESH	85.04	3.98
TAMIL NADU	75.03	3.52
GUJARAT	65.07	3.05
MAHARASHTRA	59.32	2.78
TELANGANA	57.17	2.68
NTPC STATIONS-SR	56.82	2.66
J & K	42.72	2.00
UTTARAKHAND	40.92	1.92
DELHI	39.51	1.85
KARNATAKA	39.03	1.83
MP	35.01	1.64
PUNJAB	31.31	1.47
HIMACHAL PRADESH	29.74	1.39
NLC	28.45	1.33
CHHATTISGARH	28.14	1.32
NETCL VALLUR	27.14	1.27
SEMBCORP	26.85	1.26
KERALA	23.43	1.10
IGSTPS	22.72	1.06
AMPS Hazira	22.42	1.05
AHEJ4L_SOLAR	18.40	0.86
THERMAL POWERTECH	18.22	0.85
RPREL	16.48	0.77
GIWEL_BHUI	16.42	0.77
RAIL	15.12	0.71
AGEMPL BHUI	14.50	0.68
KAPP 3&4	13.76	0.64
OSTRO	13.60	0.64
NEP	13.60	0.64
ASSAM	13.18	0.62
DD&DNH	12.17	0.57
CGPL	11.54	0.54
ESSAR POWER	10.78	0.51
NHPC STATIONS	10.77	0.50
NTPL	10.75	0.50
CHANDIGARH	10.70	0.50
IL&FS	10.37	0.49
GIWEL_TCN	10.31	0.48
ADANIHB_WIND	10.03	0.47
GOA	9.60	0.45
NAPP	9.37	0.44
BALCO	9.37	0.44
RENEW_BHUI	9.16	0.43
ORANGE_TCN	9.07	0.43
MYTRAH_TCN	8.91	0.42
MEGHALAYA	8.76	0.41
RENEW_BHACHAU	8.45	0.40
NTPC STATIONS-NER	8.41	0.39
BETAM_TCN	8.24	0.39
AVADARJHN_SLR	7.69	0.36
AD HYDRO	7.68	0.36
AHEJ3L_SOLAR	7.65	0.36
TRIPURA	7.65	0.36
MB POWER	7.31	0.34
JHABUA POWER_MP	7.30	0.34
ALFANAR_BHUI	6.90	0.32
INOX_BHUI	6.87	0.32
ACME_HEERGARH	6.28	0.29
NSPCL	5.70	0.27
ARUNACHAL PRADESH	5.25	0.25
AVAADASN_SLR	5.14	0.24
RGPPL	4.97	0.23
KARCHAM WANGTOO	4.97	0.23

SBG_NPK	4.95	0.23
RKM POWER	4.80	0.22
MAHINDRA_RUMS	4.66	0.22
ABC_BHDL2	4.25	0.20
TATA_SLR	4.05	0.19
RAP C	4.03	0.19
ACME_RUMS	4.01	0.19
ARINSUM_RUMS	3.93	0.18
AZURE43_SLR	3.73	0.17
SBG_PVGD	3.72	0.17
CLEANSR_SLR	3.66	0.17
BBMB	3.66	0.17
COASTGEN	3.66	0.17
AVIKIRAN	3.60	0.17
RENEWURJA_SLR	3.51	0.16
PONDICHERRY	3.17	0.15
MSUPL_BHDL2	3.13	0.15
NTPC_ANTP	3.07	0.14
SAINJ HEP	3.02	0.14
CLEAN_SLR	2.93	0.14
AYANA_RP1	2.79	0.13
RENEWSB	2.78	0.13
NJPC	2.77	0.13
SPRING_PUGALUR	2.76	0.13
MANIPUR	2.71	0.13
SASAN UMPP	2.67	0.13
RENEWJH_SLR	2.63	0.12
DB POWER	2.61	0.12
DGEN MEGA POWER	2.30	0.11
NEEPCO STATIONS	2.27	0.11
RENEW_SR_SLR	2.27	0.11
ARERJL_SLR	2.26	0.11
RENEW_SLR_BKN	2.21	0.10
ACME_SLR	2.21	0.10
JINDAL STAGE-II	2.13	0.10
SORANG HEP	2.11	0.10
OSTRO Hiriyur	2.11	0.10
TEHRI	2.07	0.10
EMCO	2.04	0.10
EDEN_SLR	2.04	0.10
MRPL	2.04	0.10
JINDAL POWER	2.02	0.09
ACBIL	1.97	0.09
ONGC PALATANA	1.93	0.09
RENEWSW_SLR	1.86	0.09
AZURE41_SLR	1.78	0.08
SHREE CEMENT	1.75	0.08
AZURE_SLR	1.63	0.08
SKS POWER	1.58	0.07
SBSR_SLR	1.58	0.07
ESPL_RADHANESDA	1.46	0.07
SPRNG_NPKUNTA	1.44	0.07
AZURE_MAPLE_SLR	1.42	0.07
TATA_ANTP	1.41	0.07
SB6_POKARAN	1.35	0.06
TPREL_RADHANESDA	1.19	0.06
GRT_JPL	1.18	0.06
FORTUM1_PVGD	1.16	0.05
AZURE34_SLR	1.14	0.05
AYANA_NPKUNTA	1.13	0.05
SINGOLI BHATWARI HEP	1.02	0.05
TATA_PVGD	0.99	0.05
LANKO_AMK	0.98	0.05
DHARIWAL POWER	0.96	0.04
THAR1_SLR	0.94	0.04
GIPCL_RADHANESDA	0.94	0.04
ADY1_PVGD	0.90	0.04
ADY2_PVGD	0.90	0.04
ADY13_PVGD	0.90	0.04
ADY10_PVGD	0.90	0.04

ASEJTL_SLR	0.89	0.04
RAP B	0.82	0.04
TRN ENERGY	0.82	0.04
ADY3_PVGD	0.81	0.04
ADY6_PVGD	0.81	0.04
AHSP_ANTP	0.75	0.03
AKSP_ANTP	0.73	0.03
FORTUM2_PVGD	0.72	0.03
RSTPS_FSPP	0.72	0.03
JAYPEE NIGRIE	0.70	0.03
NAGALAND	0.68	0.03
ABSP_ANTP	0.65	0.03
LANCO BUDHIL	0.64	0.03
FRV_ANTP	0.64	0.03
RANGANADI HEP	0.62	0.03
KSK MAHANADI	0.60	0.03
KOTESHWAR	0.58	0.03
AVAADA1_PVGD	0.58	0.03
RAMPUR HEP	0.57	0.03
FRV_NPK	0.56	0.03
AVAADA2_PVGD	0.54	0.03
AZURE_ANTP	0.54	0.03
RENEW_SLR	0.50	0.02
MIZORAM	0.49	0.02
SIMHAPURI	0.49	0.02
SB_SLR	0.49	0.02
LANKO KONDAPALLI	0.48	0.02
MEENAKSHI	0.44	0.02
PARAM_PVGD	0.42	0.02
AZURE_PVGD	0.32	0.02
PARE HEP	0.24	0.01
RENEW_PVGD	0.23	0.01
NFF	0.22	0.01
LOKTAK	0.18	0.01
YARROW_PVGD	0.17	0.01
AKS_PVGD	0.16	0.01
HVDC CHAMPA	0.15	0.01
ARS_PVGD	0.14	0.01
KREDL_PVGD	0.14	0.01
BHADRAVATHI HVDC	0.10	0.005
DOYANG HEP	0.07	0.003
HVDC RAIGARH	0.07	0.003
GSECL_Radhaneeda	0.06	0.003
DCPP	0.06	0.003
TOTAL	2134.38	100.00
Volume Imported by top 5 Regional Entities	682.80	31.99

Table-23: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), JUNE 2022		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	PUNJAB	1709.63
2	UTTAR PRADESH	1448.81
3	GUJARAT	1426.06
4	HARYANA	1104.86
5	DELHI	896.73
6	ANDHRA PRADESH	832.00
7	MAHARASHTRA	771.33
8	ODISHA	764.66
9	WEST BENGAL	470.01
10	AMPS Hazira	313.56
11	UTTARAKHAND	275.98
12	JHARKHAND	213.82
13	DD&DNH	171.39
14	BALCO	149.68
15	BANGLADESH	141.17
16	RAJASTHAN	130.54
17	NTPC STATIONS-WR	115.01
18	TELANGANA	76.02
19	RAIL	43.09
20	NEP	40.67
21	NTPC STATIONS-NR	31.92
22	NETCL VALLUR	25.85
23	GOA	20.00
24	IGSTPS	15.95
25	KAPP 3&4	13.76
26	PONDICHERRY	12.07
27	NTPL	10.40
28	NCR ALLAHABAD	10.13
29	NTPC STATIONS-SR	8.90
30	GIWEL_BHUI	8.15
31	THERMAL POWERTECH	6.81
32	IL&FS	6.56
33	NTPC STATIONS-NER	6.36
34	CHANDIGARH	5.84
35	ADANIHB_WIND	5.66
36	NAPP	5.63
37	RGPPL	4.68
38	NSPCL	4.33
39	AGEMPL BHUI	3.85
40	COASTGEN	2.85
41	RAP C	2.55
42	DGEN MEGA POWER	2.30
43	INOX_BHUI	2.18
44	MYTRAH_TCN	2.15
45	RENEW_BHUI	2.03
46	SKS POWER	1.58
47	AVADARJHN_SLR	1.23
48	GIWEL_TCN	1.11
49	TRIPURA	1.09
50	SBG_PVGD	0.99
51	RENEW_BHACHAU	0.84
52	SBG_NPK	0.82
53	OSTRO Hiriyur	0.69
54	SIMHAPURI	0.49
55	LANKO KONDAPALLI	0.48
56	RSTPS_FSPP	0.47
57	SB6_POKARAN	0.46
58	MEENAKSHI	0.44
59	ALFANAR_BHUI	0.43
60	SPRNG_NPKUNTA	0.38
61	SPRING_PUGALUR	0.36
62	TRN ENERGY	0.33

63	AVIKIRAN	0.23
64	TEHRI	0.16
65	HVDC CHAMPA	0.11
66	GRT_JPL	0.11
67	BHADRAVATHI HVDC	0.09
68	NFF	0.06
69	DCPP	0.04
70	AVAADA2_PVGD	0.04
71	RENEW_PVGD	-0.02
72	HVDC RAIGARH	-0.03
73	AVAADASN_SLR	-0.03
74	TPREL_RADHANESDA	-0.04
75	ARERJL_SLR	-0.06
76	LOKTAK	-0.08
77	AKS_PVGD	-0.10
78	YARROW_PVGD	-0.11
79	ARS_PVGD	-0.13
80	VINDHYACHAL HVDC	-0.14
81	AVAADA1_PVGD	-0.18
82	KREDL_PVGD	-0.19
83	RENEWURJA_SLR	-0.20
84	DHARIWAL POWER	-0.20
85	ORANGE_TCN	-0.22
86	SB_SLR	-0.22
87	PARE HEP	-0.25
88	AZURE_PVGD	-0.25
89	NTPC_ANTP	-0.26
90	DOYANG HEP	-0.28
91	BETAM_TCN	-0.29
92	AZURE_ANTP	-0.32
93	PARAM_PVGD	-0.36
94	AHSP_ANTP	-0.37
95	AKSP_ANTP	-0.45
96	RENEW_SLR	-0.46
97	FORTUM2_PVGD	-0.46
98	FORTUM1_PVGD	-0.49
99	GSECL_Radhanesda	-0.50
100	FRV_ANTP	-0.52
101	ADY1_PVGD	-0.56
102	ADY2_PVGD	-0.56
103	ADY13_PVGD	-0.56
104	ADY10_PVGD	-0.56
105	FRV_NPK	-0.58
106	GIPCL_RADHANESDA	-0.62
107	ABSP_ANTP	-0.64
108	TATA_ANTP	-0.65
109	ADY3_PVGD	-0.65
110	ADY6_PVGD	-0.65
111	AYANA_NPKUNTA	-0.65
112	RENEWSB	-0.93
113	RANGANADI HEP	-1.02
114	AZURE34_SLR	-1.06
115	MAHINDRA_RUMS	-1.09
116	TATA_PVGD	-1.12
117	ESPL_RADHANESDA	-1.21
118	RAP B	-1.29
119	SBSR_SLR	-1.51
120	ARINSUM_RUMS	-1.67
121	AZURE_MAPLE_SLR	-1.71
122	ACME_SLR	-1.74
123	RENEW_SR_SLR	-1.79
124	AZURE_SLR	-1.80
125	ASEJTL_SLR	-1.95
126	RENEWJH_SLR	-1.95
127	AYANA_RP1	-1.96
128	KOTESHWAR	-2.12

129	EDEN_SLR	-2.17
130	MRPL	-2.18
131	ACME_RUMS	-2.34
132	RENEWSW_SLR	-2.45
133	BARC	-3.10
134	AZURE41_SLR	-3.29
135	CHHATTISGARH	-3.48
136	CLEAN_SLR	-3.84
137	CONTINNUM PT	-4.16
138	LANCO BUDHIL	-4.26
139	KERALA	-6.54
140	LANKO_AMK	-8.49
141	NTPC STATIONS-ER	-8.66
142	ADANI GREEN	-9.45
143	RAMPUR HEP	-9.45
144	CHUZACHEN HEP	-9.63
145	BBMB	-10.34
146	OSTRO	-10.88
147	ONGC PALATANA	-11.38
148	AZURE43_SLR	-11.62
149	MIZORAM	-12.24
150	THARI_SLR	-14.11
151	SIKKIM	-16.55
152	NLC	-17.62
153	KSK MAHANADI	-18.87
154	NJPC	-20.37
155	NAGALAND	-20.94
156	GMR KAMALANGA	-21.02
157	SHREE CEMENT	-21.88
158	EMCO	-23.54
159	AHEJ3L_WIND	-24.82
160	MANIPUR	-25.11
161	AHEJ2L_WIND	-25.67
162	TEESTA HEP	-27.26
163	RENEW_SLR_BKN	-29.98
164	TATA_SLR	-31.61
165	MARUTI COAL	-32.21
166	AHEJOL_S_FTG2	-32.74
167	ADANI_WIND	-33.64
168	MSUPL_BHDL2	-34.82
169	SORANG HEP	-35.07
170	CGPL	-35.68
171	SAINJ HEP	-35.71
172	AHEJ2L_SOLAR	-43.33
173	SINGOLI BHATWARI HEP	-46.47
174	ACME_HEERGARH	-48.34
175	CLEANSR_SLR	-50.17
176	SASAN UMPP	-50.91
177	ASSAM	-52.61
178	ABC_BHDL2	-55.57
179	AD HYDRO	-63.48
180	ARUNACHAL PRADESH	-63.84
181	TASHIDENG HEP	-64.09
182	JORETHANG	-65.90
183	DIKCHU HEP	-73.11
184	DAGACHU	-74.03
185	ACBIL	-74.73
186	MEGHALAYA	-76.01
187	AHEJ3L_SOLAR	-78.32
188	KARCHAM WANGTOO	-82.20
189	JHABUA POWER_MP	-93.89
190	AHEJ4L_WIND	-94.21
191	NHPC STATIONS	-102.89
192	TAMIL NADU	-153.42
193	MB POWER	-165.08
194	DVC	-167.40

195	AHEJ4L_SOLAR	-175.19
196	NEPAL(NVVN)	-177.68
197	NEEPCO STATIONS	-209.94
198	RKM POWER	-210.01
199	J & K	-228.54
200	JITPL	-270.75
201	ADHUNIK POWER LTD	-276.14
202	JINDAL POWER	-280.16
203	REGL	-304.62
204	DB POWER	-321.93
205	ESSAR POWER	-347.53
206	BIHAR	-419.18
207	SEMBCORP	-452.59
208	JINDAL STAGE-II	-472.57
209	JAYPEE NIGRIE	-481.89
210	RPREL	-555.11
211	TEESTA STG3	-639.60
212	HIMACHAL PRADESH	-646.87
213	KARNATAKA	-998.38
214	MP	-1132.88
* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral, power exchange and DSM		
(-) indicates sale and (+) indicates purchase		

Table-24: DETAILS OF CONGESTION IN POWER EXCHANGES, JUNE 2022							
	Details of Congestion	Day Ahead Market		Green Day Ahead Market		Real Time Market	
		IEX	PXIL	IEX	PXIL	IEX	PXIL
A	Unconstrained Cleared Volume (MUs)	4084.99	116.20	362.23	0.00	2214.64	1.03
B	Actual Cleared Volume and hence scheduled (MUs)	4084.99	116.20	362.23	0.00	2213.66	1.03
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) *	0.00	0.00	0.00	0.00	0.98	0.00
D	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
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%
F	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/Total number of hours in the month)	0.00%	0.00%	0.00%	0.00%	0.83%	0.00%
G	Congestion occurrence (%) time block wise						
	0.00 - 6.00 hours	0.00%	0.00%	0.00%	0.00%	54.17%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%	0.00%	0.00%	37.50%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%
	18.00 - 24.00 hours	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 & NLDC

Table-25: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), JUNE 2022										
Date	Bilateral		Day Ahead Market [#]		Green Day Ahead Market [#]		Real Time Market [#]		Deviation Settlement (Over Drawl + Under Generation)	Total Electricity Generation (MU) as given at CEA Website*
	Through Traders and PXs**	Direct	IEX	PXIL	IEX	PXIL	IEX	PXIL		
1-Jun-22	174.50	59.02	125.69	4.68	5.52	0.00	72.87	0.45	67.14	4165.04
2-Jun-22	184.40	59.47	147.28	5.83	8.59	0.00	58.20	0.08	69.60	4229.22
3-Jun-22	186.79	61.40	139.84	6.37	6.55	0.00	64.22	0.00	67.42	4251.96
4-Jun-22	187.42	64.21	144.04	5.87	9.31	0.00	62.26	0.00	64.80	4285.56
5-Jun-22	189.50	66.80	140.27	5.57	8.06	0.00	61.17	0.00	66.43	4122.97
6-Jun-22	174.17	64.94	166.38	5.86	7.69	0.00	64.57	0.00	62.35	4274.71
7-Jun-22	176.21	69.78	147.83	4.02	9.74	0.00	60.79	0.00	65.69	4276.82
8-Jun-22	176.37	69.55	146.11	5.30	12.84	0.00	66.50	0.00	66.05	4246.26
9-Jun-22	184.93	71.46	149.25	6.74	9.16	0.00	72.53	0.00	64.72	4240.72
10-Jun-22	194.81	79.46	151.79	6.70	13.03	0.00	77.58	0.00	67.94	4300.35
11-Jun-22	194.45	85.21	143.55	2.81	8.98	0.00	87.05	0.00	73.93	4265.23
12-Jun-22	176.71	89.78	136.71	2.59	11.59	0.00	77.03	0.00	67.60	4161.54
13-Jun-22	200.90	89.40	140.27	3.19	9.46	0.00	79.95	0.00	72.09	4351.20
14-Jun-22	199.77	91.89	132.02	2.16	9.40	0.00	96.43	0.00	75.17	4428.86
15-Jun-22	202.74	86.42	140.86	1.59	9.82	0.00	95.33	0.00	75.20	4341.68
16-Jun-22	198.77	100.74	134.35	2.81	10.49	0.00	70.78	0.23	69.85	4200.02
17-Jun-22	194.61	98.07	120.19	2.33	10.64	0.00	83.38	0.00	77.63	4090.87
18-Jun-22	176.23	100.91	109.30	8.25	11.19	0.00	86.73	0.00	68.91	4007.67
19-Jun-22	153.18	103.29	127.00	8.88	12.21	0.00	77.88	0.00	76.54	3763.32
20-Jun-22	159.82	100.21	125.42	2.43	14.08	0.00	70.09	0.00	74.48	3740.79
21-Jun-22	164.56	90.15	137.12	2.54	14.37	0.00	57.36	0.00	78.21	3738.93
22-Jun-22	158.91	87.59	147.16	2.31	13.94	0.00	64.26	0.00	66.59	3974.85
23-Jun-22	167.95	89.42	149.49	2.98	13.88	0.00	64.82	0.00	64.29	4118.26
24-Jun-22	179.90	83.61	121.78	2.64	12.19	0.00	65.56	0.00	64.72	4081.51
25-Jun-22	175.00	82.08	123.53	2.47	9.27	0.00	76.31	0.00	64.70	4064.90
26-Jun-22	157.36	90.76	116.22	1.39	13.90	0.00	75.31	0.27	69.44	3995.09
27-Jun-22	178.29	98.17	135.33	1.81	22.42	0.00	73.97	0.00	62.60	4234.77
28-Jun-22	181.50	98.99	144.03	2.17	22.13	0.00	79.27	0.00	64.80	4308.34
29-Jun-22	185.02	100.64	140.90	1.61	22.27	0.00	79.24	0.00	65.54	4147.19
30-Jun-22	175.31	97.28	101.28	2.31	19.55	0.00	92.23	0.00	76.12	3822.37
Total	5410.06	2530.69	4084.99	116.20	362.23	0.00	2213.66	1.03	2070.53	124231.00

Source: NLDC

* Gross Electricity Generation excluding electricity generation from renewables and captive power plants.

** The volume of bilateral through PXs represents the volume transacted through term-ahead contracts.

Scheduled volume of all the bid areas.

Table-26(a): PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JUNE 2022												
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Green Day ahead market of IEX			Green Day ahead market of PXIL		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Jun-22	2.80	12.00	7.06	4.00	5.50	4.40	4.00	12.00	5.06	-	-	-
2-Jun-22	2.50	12.00	7.87	2.17	8.00	5.30	4.00	12.00	4.63	-	-	-
3-Jun-22	2.50	12.00	7.40	4.70	12.00	7.55	4.00	12.00	5.36	-	-	-
4-Jun-22	2.55	12.00	8.23	4.50	12.00	7.22	4.00	12.00	5.44	-	-	-
5-Jun-22	1.50	12.00	7.66	3.40	12.00	6.99	3.60	12.00	7.50	-	-	-
6-Jun-22	2.50	12.00	8.48	4.50	12.00	8.06	3.90	12.00	7.68	-	-	-
7-Jun-22	2.20	12.00	6.65	2.17	12.00	6.10	4.00	12.00	6.21	-	-	-
8-Jun-22	2.50	12.00	7.04	3.80	12.00	6.89	3.89	12.00	5.36	-	-	-
9-Jun-22	2.50	12.00	7.39	4.80	12.00	6.78	4.00	12.00	6.57	-	-	-
10-Jun-22	2.50	12.00	7.57	4.80	12.00	7.67	3.96	12.00	5.53	-	-	-
11-Jun-22	3.05	12.00	8.24	4.10	12.00	7.98	4.20	12.00	6.56	-	-	-
12-Jun-22	1.00	12.00	6.86	4.46	12.00	8.39	4.00	12.00	5.73	-	-	-
13-Jun-22	3.36	12.00	8.62	4.36	12.00	8.23	5.00	12.00	6.66	-	-	-
14-Jun-22	4.50	12.00	9.51	6.50	12.00	9.03	6.00	12.00	8.12	-	-	-
15-Jun-22	4.47	12.00	10.05	6.30	12.00	9.93	12.00	12.00	12.00	-	-	-
16-Jun-22	3.50	12.00	8.71	6.30	12.00	10.20	12.00	12.00	12.00	-	-	-
17-Jun-22	2.53	12.00	6.93	1.99	12.00	7.58	4.50	12.00	6.73	-	-	-
18-Jun-22	1.28	11.50	5.36	3.00	5.99	4.10	4.09	12.00	6.34	-	-	-
19-Jun-22	2.06	8.62	4.43	2.27	5.99	3.66	3.55	10.13	4.69	-	-	-
20-Jun-22	2.57	8.47	4.52	3.25	12.00	5.58	4.00	7.50	5.06	-	-	-
21-Jun-22	2.00	7.00	3.53	1.90	6.10	4.08	3.76	6.10	4.62	-	-	-
22-Jun-22	2.95	7.50	4.29	2.30	7.50	4.30	3.54	6.42	4.34	-	-	-
23-Jun-22	3.05	8.90	5.17	2.50	12.00	4.80	3.80	6.50	4.50	-	-	-
24-Jun-22	3.56	12.00	7.20	3.25	12.00	6.38	4.00	9.00	5.13	-	-	-
25-Jun-22	3.40	11.62	5.63	3.35	12.00	7.26	4.00	12.00	6.76	-	-	-
26-Jun-22	2.06	9.00	5.22	1.99	11.52	4.90	2.97	12.00	4.26	-	-	-
27-Jun-22	3.30	11.78	6.41	1.99	10.50	6.62	3.60	12.00	4.96	-	-	-
28-Jun-22	3.40	12.00	6.85	1.99	12.00	6.75	3.60	12.00	5.64	-	-	-
29-Jun-22	3.79	12.00	7.73	1.99	12.00	6.13	3.60	12.00	5.96	-	-	-
30-Jun-22	1.99	8.50	3.72	3.00	12.00	6.81	3.50	12.00	4.88	-	-	-
	1.00#	12.00#	6.88	1.90#	12.00#	6.42	2.97#	12.00#	5.94	-	-	-

Source: IEX and PXIL

Note: GDAM was introduced at IEX on 27.10.2021 and at PXIL on 20.12.2021

* 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-26(b): PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JUNE 2022

Market Segment	Real Time market of IEX			Real Time market of PXIL			Under Drawl/Over Drawl from the Grid (DSM)		
	Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	All India Grid	
Minimum Price								Maximum Price	Average Price**
1-Jun-22	1.51	12.00	7.28	2.82	6.50	4.92	0.00	8.00	5.37
2-Jun-22	2.94	12.00	8.37	5.00	5.50	5.05	0.00	8.00	6.27
3-Jun-22	0.98	12.00	7.83	-	-	-	0.00	8.00	6.42
4-Jun-22	2.00	12.00	8.44	-	-	-	0.00	8.00	7.44
5-Jun-22	2.00	12.00	8.15	-	-	-	0.00	8.00	6.19
6-Jun-22	1.51	12.00	7.81	-	-	-	0.00	8.00	6.62
7-Jun-22	1.67	12.00	6.52	-	-	-	0.00	8.00	5.19
8-Jun-22	1.00	12.00	6.95	-	-	-	0.00	7.30	4.65
9-Jun-22	0.82	12.00	6.31	-	-	-	0.00	8.00	5.05
10-Jun-22	2.67	12.00	8.90	-	-	-	0.00	7.64	5.91
11-Jun-22	2.30	12.00	7.87	-	-	-	0.00	8.00	6.05
12-Jun-22	2.00	12.00	6.17	-	-	-	0.00	8.00	5.34
13-Jun-22	5.00	12.00	9.35	-	-	-	1.60	8.00	7.63
14-Jun-22	5.97	12.00	10.34	-	-	-	0.00	8.00	6.78
15-Jun-22	2.19	12.00	8.21	-	-	-	0.00	8.00	5.15
16-Jun-22	2.12	12.00	6.31	12.00	12.00	12.00	0.00	8.00	6.62
17-Jun-22	2.20	12.00	5.19	-	-	-	0.00	7.82	5.17
18-Jun-22	2.05	7.00	4.23	-	-	-	0.00	8.00	4.38
19-Jun-22	0.50	6.00	3.07	-	-	-	0.00	8.00	3.67
20-Jun-22	1.56	6.00	3.09	-	-	-	0.00	8.00	3.67
21-Jun-22	1.56	6.50	3.43	-	-	-	0.00	8.00	3.84
22-Jun-22	2.90	12.00	5.86	-	-	-	0.00	8.00	5.00
23-Jun-22	2.91	12.00	6.83	-	-	-	0.00	8.00	5.06
24-Jun-22	1.80	12.00	5.64	-	-	-	0.00	8.00	6.13
25-Jun-22	1.97	12.00	6.06	-	-	-	0.00	8.00	5.70
26-Jun-22	2.29	12.00	6.59	12.00	12.00	12.00	0.00	8.00	4.88
27-Jun-22	3.24	12.00	9.08	-	-	-	1.23	8.00	6.82
28-Jun-22	3.00	12.00	9.19	-	-	-	0.00	8.00	5.46
29-Jun-22	1.55	12.00	3.90	-	-	-	0.00	7.85	5.13
30-Jun-22	1.50	12.00	2.79	-	-	-	0.00	7.21	2.93
	0.50#	12.00#	6.67	2.82#	12.00#	8.41	0.00#	8.00#	5.84

Source: Data on price of PX transactions from IEX and PXIL and data on DSM Price from NLDC.

* 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.

** Simple average price of DSM of 96 time blocks of 15 minutes each in a day. DSM price includes Ceiling DSM Rate +40% additional DSM charge.

Maximum/Minimum in the month

Table-27: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), JUNE 2022

Name of the Entity	Through Bilateral			Through Power Exchange (DAM + GDAM + RTM)			Through DSM with Regional Grid			Total Net***
	Sale	Purchase	Net**	Sale	Purchase	Net**	Import (Over Drawl)	Export (Under Drawl)	Net**	
PUNJAB	0.00	1347.28	1347.28	35.35	449.83	414.48	31.31	83.44	-52.13	1709.63
HARYANA	0.00	561.56	561.56	24.16	516.83	492.67	88.80	38.17	50.63	1104.86
RAJASTHAN	177.74	13.47	-164.27	126.94	383.30	256.36	107.39	68.94	38.45	130.54
DELHI	0.00	1167.56	1167.56	393.53	105.68	-287.86	39.51	22.49	17.03	896.73
U P	40.27	652.50	612.23	84.74	832.79	748.05	139.80	51.27	88.53	1448.81
UTTARAKHAND	19.66	189.12	169.47	5.94	84.29	78.35	40.92	12.76	28.16	275.98
H P	781.31	2.76	-778.55	78.62	193.24	114.62	29.74	12.68	17.06	-646.87
J & K	136.02	0.00	-136.02	95.07	0.00	-95.07	42.72	40.17	2.55	-228.54
CHANDIGARH	0.00	0.00	0.00	10.89	11.88	0.98	10.70	5.85	4.86	5.84
MP	607.53	120.83	-486.69	660.37	92.11	-568.27	35.01	112.93	-77.92	-1132.88
MAHARASHTRA	166.19	717.48	551.29	189.51	445.46	255.95	59.32	95.24	-35.91	771.33
GUJARAT	53.72	1126.47	1072.75	92.98	544.51	451.54	65.07	163.29	-98.22	1426.06
CHHATTISGARH	0.00	149.92	149.92	198.97	42.66	-156.30	28.14	25.24	2.91	-3.48
GOA	3.78	52.00	48.22	36.75	5.10	-31.65	9.60	6.16	3.44	20.00
DD&DNH	0.00	59.38	59.38	1.28	105.13	103.85	12.17	4.01	8.16	171.39
ANDHRA P	11.30	89.17	77.86	163.00	904.84	741.84	85.04	72.75	12.30	832.00
KARNATAKA	404.23	0.03	-404.20	557.53	48.84	-508.69	39.03	124.52	-85.49	-998.38
KERALA	9.88	15.40	5.52	75.74	55.28	-20.46	23.43	15.04	8.40	-6.54
TAMIL NADU	287.95	0.38	-287.57	143.65	340.55	196.90	75.03	137.77	-62.75	-153.42
PONDICHERRY	0.00	18.06	18.06	0.00	0.00	0.00	3.17	9.15	-5.99	12.07
TELANGANA	272.33	92.22	-180.11	114.89	364.44	249.55	57.17	50.59	6.58	76.02
WEST BENGAL	59.21	163.94	104.73	155.92	521.19	365.28	0.00	0.00	0.00	470.01
ODISHA	40.99	626.88	585.89	68.15	246.93	178.78	0.00	0.00	0.00	764.66
BIHAR	5.35	43.84	38.49	482.82	25.14	-457.67	0.00	0.00	0.00	-419.18
JHARKHAND	0.75	208.18	207.44	55.46	61.84	6.38	0.00	0.00	0.00	213.82
SIKKIM	3.08	21.53	18.44	35.55	0.56	-34.99	0.00	0.00	0.00	-16.55
DVC	207.35	4.97	-202.38	25.05	60.03	34.98	0.00	0.00	0.00	-167.40
ARUNACHAL P	18.40	0.00	-18.40	47.26	1.18	-46.08	5.25	4.60	0.64	-63.84
ASSAM	0.00	0.00	0.00	177.28	125.94	-51.34	13.18	14.45	-1.27	-52.61
MANIPUR	31.70	0.00	-31.70	3.45	9.52	6.06	2.71	2.18	0.53	-25.11
MEGHALAYA	82.37	1.04	-81.33	5.93	6.98	1.05	8.76	4.48	4.27	-76.01
MIZORAM	0.00	0.00	0.00	6.95	0.00	-6.95	0.49	5.78	-5.29	-12.24
NAGALAND	6.84	0.00	-6.84	11.95	0.00	-11.95	0.68	2.83	-2.15	-20.94
TRIPURA	0.00	0.00	0.00	14.31	13.43	-0.87	7.65	5.68	1.96	1.09
NTPC STATIONS-NR	0.00	0.00	0.00	63.66	0.00	-63.66	152.76	57.19	95.58	31.92
NHPC STATIONS	0.00	0.00	0.00	0.00	0.00	0.00	10.77	113.66	-102.89	-102.89
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.17	0.06	0.06
RAIL	0.00	0.00	0.00	0.00	28.43	28.43	15.12	0.46	14.66	43.09
NEP	0.00	0.00	0.00	0.00	27.97	27.97	13.60	0.90	12.70	40.67
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	9.37	3.74	5.63	5.63
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	0.82	2.11	-1.29	-1.29
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	2.77	23.14	-20.37	-20.37
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	2.07	1.91	0.16	0.16
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	3.66	14.00	-10.34	-10.34
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	4.03	1.48	2.55	2.55
AD HYDRO	55.82	0.00	-55.82	12.67	0.00	-12.67	7.68	2.67	5.01	-63.48
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	22.72	6.78	15.95	15.95
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.70	-2.12	-2.12
KARCHAM WANGTOO	40.54	0.00	-40.54	29.95	0.00	-29.95	4.97	16.68	-11.71	-82.20
SHREE CEMENT	17.63	0.00	-17.63	5.43	0.00	-5.43	1.75	0.58	1.17	-21.88
LANCO BUDHIL	0.00	0.00	0.00	3.79	0.00	-3.79	0.64	1.11	-0.47	-4.26
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.57	10.02	-9.45	-9.45
SORANG HEP	30.26	0.00	-30.26	6.16	0.00	-6.16	2.11	0.76	1.35	-35.07
SAINJ HEP	13.51	0.00	-13.51	24.24	0.00	-24.24	3.02	0.99	2.04	-35.71
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.96	-0.46	-0.46
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.63	3.43	-1.80	-1.80

SB_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.71	-0.22	-0.22
ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.21	3.94	-1.74	-1.74
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.14	2.20	-1.06	-1.06
TATA_SLR	34.09	0.00	-34.09	0.00	0.00	0.00	4.05	1.57	2.48	-31.61
RENEW_SLR_BKN	29.02	0.00	-29.02	0.00	0.00	0.00	2.21	3.17	-0.95	-29.98
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.93	6.77	-3.84	-3.84
ARERJL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.26	2.32	-0.06	-0.06
ADANI GREEN	0.00	0.00	0.00	9.45	0.00	-9.45	0.00	0.00	0.00	-9.45
ASEJTL_SLR	2.31	0.00	-2.31	0.00	0.00	0.00	0.89	0.53	0.36	-1.95
SINGOLI BHATWARI HE	38.07	0.00	-38.07	8.01	0.00	-8.01	1.02	1.41	-0.39	-46.47
AZURE43_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.73	15.34	-11.62	-11.62
MRPL	0.00	0.00	0.00	0.00	0.00	0.00	2.04	4.21	-2.18	-2.18
SB6_POKARAN	0.00	0.00	0.00	0.00	0.00	0.00	1.35	0.89	0.46	0.46
EDEN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.04	4.20	-2.17	-2.17
SBSR_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.58	3.09	-1.51	-1.51
RENEWSW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.86	4.30	-2.45	-2.45
RENEWJH_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.63	4.58	-1.95	-1.95
ADANIHB_WIND	0.00	0.00	0.00	0.00	0.00	0.00	10.03	4.38	5.66	5.66
AHEJOL_S_FTG2	0.00	0.00	0.00	32.74	0.00	-32.74	0.00	0.00	0.00	-32.74
AHEJ2L_SOLAR	43.33	0.00	-43.33	0.00	0.00	0.00	0.00	0.00	0.00	-43.33
AHEJ2L_WIND	25.67	0.00	-25.67	0.00	0.00	0.00	0.00	0.00	0.00	-25.67
AHEJ3L_SOLAR	52.86	0.00	-52.86	25.96	0.00	-25.96	7.65	7.14	0.51	-78.32
AHEJ3L_WIND	24.82	0.00	-24.82	0.00	0.00	0.00	0.00	0.00	0.00	-24.82
AHEJ4L_WIND	94.21	0.00	-94.21	0.00	0.00	0.00	0.00	0.00	0.00	-94.21
AHEJ4L_SOLAR	85.29	0.00	-85.29	82.56	0.00	-82.56	18.40	25.74	-7.34	-175.19
RENEWSB	0.00	0.00	0.00	0.00	0.00	0.00	2.78	3.71	-0.93	-0.93
AZURE41_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.78	5.07	-3.29	-3.29
AYANA_RP1	0.00	0.00	0.00	0.00	0.00	0.00	2.79	4.75	-1.96	-1.96
AVAADASN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.14	5.17	-0.03	-0.03
RENEWURJA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.51	3.70	-0.20	-0.20
AVADARJHN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	7.69	6.45	1.23	1.23
NCR ALLAHABAD	0.00	10.13	10.13	0.00	0.00	0.00	0.00	0.00	0.00	10.13
RENEW_SR_SLR	0.00	0.00	0.00	1.79	0.00	-1.79	2.27	2.26	0.01	-1.79
AZURE_MAPLE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.42	3.13	-1.71	-1.71
THAR1_SLR	12.67	0.00	-12.67	0.00	0.00	0.00	0.94	2.39	-1.44	-14.11
CLEANSR_SLR	50.20	0.00	-50.20	0.00	0.00	0.00	3.66	3.63	0.03	-50.17
ACME_HEERGARH	52.88	0.00	-52.88	0.00	0.00	0.00	6.28	1.74	4.54	-48.34
ABC_BHDL2	54.87	0.00	-54.87	0.00	0.00	0.00	4.25	4.95	-0.70	-55.57
MSUPL_BHDL2	35.02	0.00	-35.02	0.00	0.00	0.00	3.13	2.93	0.20	-34.82
NTPC STATIONS-WR	0.00	0.00	0.00	6.71	0.00	-6.71	194.05	72.33	121.72	115.01
BHADRAVATHI HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.09	0.09
VINDHYACHAL HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	-0.14	-0.14
JINDAL POWER	243.14	0.00	-243.14	35.61	0.00	-35.61	2.02	3.43	-1.41	-280.16
LANKO_AMK	5.04	0.00	-5.04	0.00	0.00	0.00	0.98	4.43	-3.45	-8.49
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	5.70	1.37	4.33	4.33
ACBIL	1.08	0.00	-1.08	74.13	0.24	-73.89	1.97	1.73	0.24	-74.73
BALCO	0.00	121.86	121.86	0.00	20.72	20.72	9.37	2.27	7.10	149.68
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00	4.97	0.29	4.68	4.68
CGPL	0.00	0.00	0.00	43.78	0.00	-43.78	11.54	3.44	8.10	-35.68
DCPP	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.02	0.04	0.04
EMCO	6.53	0.00	-6.53	17.27	0.00	-17.27	2.04	1.78	0.26	-23.54
KSK MAHANADI	17.38	0.00	-17.38	0.00	0.00	0.00	0.60	2.08	-1.486	-18.871
ESSAR POWER	224.67	0.00	-224.67	132.60	0.00	-132.60	10.78	1.04	9.74	-347.53
JINDAL STAGE-II	254.38	0.00	-254.38	214.58	0.20	-214.38	2.13	5.93	-3.80	-472.57
DB POWER	186.09	0.00	-186.09	135.46	0.00	-135.46	2.61	2.98	-0.38	-321.93
DHARIWAL POWER	0.00	0.00	0.00	0.96	0.00	-0.96	0.96	0.20	0.76	-0.20
JAYPEE NIGRIE	424.42	0.00	-424.42	53.34	0.00	-53.34	0.70	4.84	-4.14	-481.89
DGEN MEGA POWER	0.00	0.00	0.00	0.00	0.00	0.00	2.30	0.00	2.30	2.30
MB POWER	1.33	0.00	-1.33	163.80	0.00	-163.80	7.31	7.26	0.05	-165.08
MARUTI COAL	0.00	0.00	0.00	32.21	0.00	-32.21	0.00	0.00	0.00	-32.21
JHABUA POWER_MP	99.37	0.00	-99.37	0.00	0.00	0.00	7.30	1.81	5.49	-93.89
SASAN UMPP	0.00	0.00	0.00	19.65	0.00	-19.65	2.67	33.94	-31.27	-50.91
TRN ENERGY	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.49	0.33	0.33

RKM POWER	168.00	0.00	-168.00	43.07	0.00	-43.07	4.80	3.73	1.07	-210.01
SKS POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.58	0.00	1.58	1.58
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.10	-3.10	-3.10
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	13.76	0.00	13.76	13.76
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.04	0.11	0.11
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	4.66	5.75	-1.09	-1.09
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.93	5.60	-1.67	-1.67
OSTRO	13.26	0.00	-13.26	5.30	0.00	-5.30	13.60	5.92	7.68	-10.88
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	4.01	6.35	-2.34	-2.34
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	8.45	7.61	0.84	0.84
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	16.42	8.27	8.15	8.15
INOX_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	6.87	4.69	2.18	2.18
AGEMPL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	14.50	10.65	3.85	3.85
REGL	232.93	0.00	-232.93	71.70	0.00	-71.70	0.00	0.00	0.00	-304.62
RPREL	332.70	0.00	-332.70	237.65	0.54	-237.11	16.48	1.78	14.70	-555.11
AMPS Hazira	0.00	221.61	221.61	6.08	100.00	93.92	22.42	24.38	-1.96	313.56
HVDC RAIGARH	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.10	-0.03	-0.03
ALFANAR_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	6.90	6.47	0.43	0.43
RENEW_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	9.16	7.13	2.03	2.03
ADANI_WIND	2.99	0.00	-2.99	30.65	0.00	-30.65	0.00	0.00	0.00	-33.64
CONTINNUM PT	2.99	0.00	-2.99	1.16	0.00	-1.16	0.00	0.00	0.00	-4.16
TPREL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.23	-0.04	-0.04
ESPL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.46	2.67	-1.21	-1.21
GIPCL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	0.94	1.56	-0.62	-0.62
GSECL_Radhanesda	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.56	-0.50	-0.50
AVIKIRAN	0.00	0.00	0.00	0.00	0.00	0.00	3.60	3.37	0.23	0.23
NTPC STATIONS-SR	0.00	0.00	0.00	26.01	0.00	-26.01	56.82	21.91	34.91	8.90
LANKO KONDAPALLI	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.48	0.48
SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.49	0.49
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.44	0.44
COASTGEN	0.00	0.00	0.00	0.00	0.00	0.00	3.66	0.81	2.85	2.85
THERMAL POWERTECH	9.34	0.00	-9.34	1.88	0.00	-1.88	18.22	0.20	18.03	6.81
IL&FS	0.00	0.00	0.00	3.78	0.00	-3.78	10.37	0.03	10.34	6.56
NLC	0.00	0.00	0.00	27.90	0.00	-27.90	28.45	18.18	10.27	-17.62
SEMBCORP	320.37	0.00	-320.37	158.57	0.00	-158.57	26.85	0.50	26.35	-452.59
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	27.14	1.29	25.85	25.85
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	10.75	0.35	10.40	10.40
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.75	1.12	-0.37	-0.37
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.73	1.18	-0.45	-0.45
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.65	1.29	-0.64	-0.64
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.86	-0.32	-0.32
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.41	2.06	-0.65	-0.65
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.16	-0.52	-0.52
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	3.07	3.33	-0.26	-0.26
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	10.31	9.20	1.11	1.11
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.91	6.76	2.15	2.15
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.56	1.14	-0.58	-0.58
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.07	9.29	-0.22	-0.22
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.24	8.53	-0.29	-0.29
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.72	2.74	0.99	0.99
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	4.95	4.13	0.82	0.82
FORTUM1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.16	1.66	-0.49	-0.49
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.79	-0.36	-0.36
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.28	-0.11	-0.11
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.99	2.10	-1.12	-1.12
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.25	-0.02	-0.02
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.26	-0.10	-0.10
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.27	-0.13	-0.13
AVAADA1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.76	-0.18	-0.18
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.46	-0.56	-0.56
ADY2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.46	-0.56	-0.56
ADY13_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.46	-0.56	-0.56
ADY3_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.81	1.46	-0.65	-0.65

ADY6_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.81	1.46	-0.65	-0.65
ADY10_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.46	-0.56	-0.56
AZURE_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.57	-0.25	-0.25
FORTUM2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.72	1.18	-0.46	-0.46
AVAADA2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.51	0.04	0.04
KREDL_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.33	-0.19	-0.19
AYANA_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	1.13	1.78	-0.65	-0.65
SPRNG_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.06	0.38	0.38
SPRING_PUGALUR	0.00	0.00	0.00	0.00	0.00	0.00	2.76	2.40	0.36	0.36
OSTRO Hiriyur	0.00	0.00	0.00	0.00	0.00	0.00	2.11	1.41	0.69	0.69
RSTPS_FSPP	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.25	0.47	0.47
GRT_JPL	0.00	0.00	0.00	0.00	0.00	0.00	1.18	1.07	0.11	0.11
NTPC STATIONS-ER	0.00	0.00	0.00	8.66	0.00	-8.66	0.00	0.00	0.00	-8.66
ADHUNIK POWER LTD	245.32	0.00	-245.32	30.82	0.00	-30.82	0.00	0.00	0.00	-276.14
CHUZACHEN HEP	0.34	0.00	-0.34	9.29	0.00	-9.29	0.00	0.00	0.00	-9.63
GMR KAMALANGA	15.00	0.00	-15.00	6.01	0.00	-6.01	0.00	0.00	0.00	-21.02
JITPL	151.72	0.00	-151.72	119.03	0.00	-119.03	0.00	0.00	0.00	-270.75
TEESTA HEP	0.00	0.00	0.00	27.26	0.00	-27.26	0.00	0.00	0.00	-27.26
DAGACHU	74.03	0.00	-74.03	0.00	0.00	0.00	0.00	0.00	0.00	-74.03
JORETHANG	62.57	0.00	-62.57	3.33	0.00	-3.33	0.00	0.00	0.00	-65.90
NEPAL(NVVN)	0.00	0.00	0.00	178.19	0.52	-177.68	0.00	0.00	0.00	-177.68
BANGLADESH	0.00	141.17	141.17	0.00	0.00	0.00	0.00	0.00	0.00	141.17
TEESTA STG3	495.08	0.00	-495.08	144.53	0.00	-144.53	0.00	0.00	0.00	-639.60
DIKCHU HEP	67.68	0.00	-67.68	5.43	0.00	-5.43	0.00	0.00	0.00	-73.11
TASHIDENG HEP	61.20	0.00	-61.20	2.89	0.00	-2.89	0.00	0.00	0.00	-64.09
NTPC STATIONS-NER	0.00	0.00	0.00	0.00	0.00	0.00	8.41	2.05	6.36	6.36
NEEPCO STATIONS	0.00	0.00	0.00	200.03	0.00	-200.03	2.27	12.18	-9.91	-209.94
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.62	1.64	-1.02	-1.02
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.35	-0.28	-0.28
ONGC PALATANA	0.00	0.00	0.00	12.41	0.00	-12.41	1.93	0.89	1.04	-11.38
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.26	-0.08	-0.08
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.49	-0.25	-0.25

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 bilateral, power exchange and DSM

Table-28: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, JUNE 2022					
Sr. No.	Details of REC Transactions	IEX		PXIL	
		Solar	Non-Solar	Solar	Non-Solar
A	Volume of Buy Bid	343386	459200	20947	171622
B	Volume of Sell Bid	2024376	1493818	538178	682453
C	Ratio of Buy Bid to Sell Bid Volume	0.17	0.31	0.04	0.25
D	Market Clearing Volume (MWh)	214046	459200	20947	171622
E	Weighted average Market Clearing Price (₹/MWh)	1500	1000	1500	1000

Source: IEX and PXIL
Note 1: 1 REC = 1 MWh

Table-29: VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, JUNE 2022						
Sr. No.	Neighbouring Country	Volume (MU)			Weighted Average Price (₹/kWh)	
		Sale	Purchase	Net*	Sale	Purchase
1	Nepal	178.20	28.49	-149.71	6.52	5.54
2	Bhutan	-	-	-	-	-

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