

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_S	Adani Hybrid Energy Jaisalmer Two Limited (Solar)
AHEJ3L_S	Adani Hybrid Energy Jaisalmer Three Limited (Solar)
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
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
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
DGEN MEGA POWER	DGEN Mega Power Project
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	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
MAHOBA_SLR	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_TCN	Mytrah Energy (India) Private Limited,Tuticorin
MU	Million Units
NAPP	Narora Atomic Power Plant
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_TCN	Orange Renewable Power Pvt. Ltd,Tuticorin
OSTRO	Ostro Energy Private Limited
OTC	Over The Counter
PARAM_PVGD	Parampujya Solar Energy Private Ltd
PARE HEP	Pare hydroelectric project, Arunachal Pradesh
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	Renew Solar
RENEW_SLR_BKN	Renew Solar Bikaner
RENEWJH_SLR	Renew Solar Energy (Jharkhand Three) Private Limited
RENEWSW_SLR	Renew Sun Waves 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
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
SHREE CEMENT	Shree Cement Limited
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SINGOLI BHATWARI HEP	Singoli-Bhatwari Hydroelectric Project, Uttarakhand
SPECTRUM	Spectrum Power Generation Ltd
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
THERMAL POWERTECH	Thermal Powertech Corporation India Limited
TPREL_RADHANESDA	Tata Power Renewable Energy Limited, Radhanesda
URI-II	Uri-II Hydropower Project
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 **November 2021** is presented in the following sections.

2. Volume of Short-term Transactions of Electricity

2.1. During November 2021, total electricity generation, excluding generation from renewable and captive power plants in India was 96749.51 MU (Table-1). Of the total electricity generation, 13.22% was transacted through short-term, comprising of 6.39% through Day Ahead Market (DAM) and Real Time Market (RTM) of power exchanges, followed by 4.82% through bilateral (through traders and term-ahead contracts on power exchanges and directly between distribution companies) and 2.02% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions (12791.94 MU), 48.31% was transacted through DAM and RTM of power exchanges, followed by 36.43% through bilateral (22.41% through traders and term-ahead contracts on power exchanges, and 14.02% directly between distribution companies) and 15.25% 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, 67.64% of the volume was transacted in DAM (including G-DAM), followed by 18.22% in RTM and 14.15% in Term Ahead Market (TAM) (including G-TAM) (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 37 trading licensees as of November 2021. Of which, 26 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Tata Power Trading Company (P) Ltd., Adani Enterprises Ltd. and Manikaran Power Ltd. had a share of 84.23% 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 0.2415 for the month of November 2021, which indicates moderate concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX and PXIL was 4718.76 MU and 0.74 MU respectively. The volume of total buy bids and sell bids was 5787.25 MU and 8455.17 MU respectively in IEX, while the same was 6.73 MU and 120.85 MU respectively in PXIL.

2.7. G-DAM was introduced only on IEX in October 2021. The volume of electricity transacted in the G-DAM of IEX was 149.47 MU. The volume of total buy bids and sell bids was 496.11 MU and 465.26 MU respectively in IEX.

2.8. The volume of electricity transacted in the RTM of IEX was 1311.35 MU, while no electricity was transacted in the RTM of PXIL. The volume of total buy bids and sell bids was 1821.80 MU and 2715.16 MU respectively in IEX, while there were no bids 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.

2.9. The volume of electricity transacted in the TAM of IEX and PXIL was 302.75 MU and 276.37 MU respectively (Table-8 & Table-9). The volume of electricity transacted in the Green

Term Ahead Market (G-TAM) of IEX and PXIL was 307.48 MU and 131.91 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 ₹2.42/kWh, ₹6.77/kWh and ₹3.79/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 ₹3.83/kWh and ₹3.14/kWh respectively. There were no transactions through traders in Peak periods in November 2021 (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 ₹1.37/kWh, ₹20.00/kWh and ₹3.26/kWh respectively. These prices in the DAM of PXIL were ₹2.99/kWh, ₹5.99/kWh and ₹3.74/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹0.80/kWh, ₹13.30/kWh and ₹3.71/kWh respectively. (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.50/kWh, ₹20.00/kWh and ₹3.60/kWh respectively (Table-7). The weighted average price of electricity transacted in the TAM of IEX and PXIL was ₹3.14/kWh and ₹3.25/kWh respectively (Table-8 and Table-9). The price of electricity transacted in the G-TAM of IEX and PXIL was ₹3.66/kWh and ₹3.65/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 ₹3.22/kWh respectively (Table-12).

3.4. The comparison of prices of electricity transacted through trading licensees, power exchanges & 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 ₹0.026/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 34.13% of the volume. These were Delhi, Punjab, Raipur Energen Limited, Karnataka, Jindal India Thermal Power Ltd. and Raigarh Energy Generation Limited (Table-13). Top 5 regional entities/states purchased 63.97 % of the volume, and these were Madhya Pradesh, Gujarat, Odisha, Maharashtra, and Haryana (Table-14).

5.2. Of the total DAM transactions of power exchanges, top 5 regional entities/states sold 54.02% of the volume, and these were West Bengal, Bihar, Chhattisgarh, Kerala and Teesta Stage 3 Hydro Power Project (Table-15). Top 5 regional entities/states purchased 64.77% of the volume, and these were Gujarat, Maharashtra, Andhra Pradesh, Tamil Nadu and Rajasthan (Table-16).

5.3. Of the total G-DAM transactions of power exchanges, top 5 regional entities/states sold 96.67% of the volume, and these were Karnataka, Telangana, Azure Power Forty Three Private Limited, Andhra Pradesh and Madhya Pradesh (Table-17). Top 5 regional entities/states purchased 76.44% of the volume, and these were Delhi, Dadra & Nagar Haveli, Maharashtra, Odisha and West Bengal (Table-18).

5.4. Of the total RTM transactions of power exchanges, top 5 regional entities/states sold 41.98% of the volume, and these were Karnataka, West Bengal, Odisha, Telangana and NEEPCO Stations (Table-19). Top 5 regional entities/states purchased 67.32% of the volume, and these were Jammu & Kashmir, Maharashtra, Rajasthan, Tamil Nadu and Gujarat (Table-20).

5.5. Of the total DSM transactions, top 5 regional entities/states under drew 25.12% of the volume, and these were Maharashtra, NTPC Stations (Western Region), Chhukha

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.

Hydroelectric Project Bhutan, Gujarat and Madhya Pradesh (Table-21). Top 5 regional entities/states overdrew 26.21% of the volume, and these were Tala Hydroelectric Project Bhutan, NTPC Stations (Western Region), Rajasthan, NTPC Stations (Northern Region) and Gujarat (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 West Bengal, Chhattisgarh, Karnataka, Bihar and Jindal India Thermal Power Ltd. Top 5 electricity purchasing regional entities/states were Gujarat, Maharashtra, Madhya Pradesh, Tamil Nadu and Andhra Pradesh.

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 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

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

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.

cleared volume and actual cleared volume. During the month of November 2021, there was no congestion experienced on both IEX and PXIL (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 November 2021 are shown in Table-28. The market clearing volume of solar RECs transacted on IEX and PXIL were 253118 and 63126 respectively and the weighted average market clearing price of these RECs was ₹2000/MWh in IEX and ₹2000/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 2190431 and 1010589 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 1.21 and 0.51 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids was 0.76 and 0.66 in IEX and PXIL respectively.

8. Inferences:

- a) The percentage of short-term transactions of electricity to total electricity generation was 13.22%.
- b) Of the total short-term transactions (12791.94 MU), 48.31% was transacted through DAM and RTM of power exchanges, followed by 36.43% through bilateral (22.41% through

traders and term-ahead contracts on power exchanges, and 14.02% directly between distribution companies) and 15.25% through DSM.

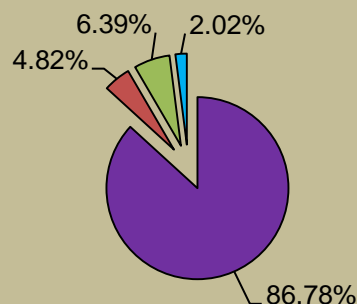
- c) Of the total volume of electricity transacted through power exchanges, 67.64% of the volume was transacted in DAM (including G-DAM), followed by 18.22% in RTM and 14.15% in Term Ahead Market (TAM) (including G-TAM).
- d) Top 5 trading licensees had a share of 84.23% in the total volume traded by all the trading licensees.
- e) The Herfindahl Hirschman Index computed for the volume of electricity traded by trading licensees was 0.2415, indicating moderate concentration of market power.
- f) The weighted average price of electricity transacted through trading licensees was ₹3.79/kWh.
- g) The weighted average price of electricity transacted in the TAM of IEX and PXIL was ₹3.14/kWh and ₹3.25/kWh respectively. The weighted average price of electricity transacted in the G-TAM of IEX and PXIL was ₹3.66/kWh and ₹3.65/kWh respectively.
- h) The weighted average price of electricity transacted in DAM of IEX and PXIL was ₹3.26/kWh and ₹3.74/kWh. The weighted average price of electricity transacted in G-DAM of IEX was ₹3.71/kWh. The weighted average price of electricity transacted in RTM of IEX was ₹3.60/kWh. No electricity was transacted in the RTM of PXIL.
- i) The average price of electricity transacted through DSM was ₹3.22/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.026/kWh, which was in line with the Trading Licence Regulations 2020.
- k) Top 5 electricity selling regional entities/states were West Bengal, Chhattisgarh, Karnataka, Bihar and Jindal India Thermal Power Ltd. Top 5 electricity purchasing regional entities/states were Gujarat, Maharashtra, Madhya Pradesh, Tamil Nadu and Andhra Pradesh.
- l) During the month, no congestion was experienced on both IEX and PXIL.

- m) The market clearing volume of solar RECs transacted on IEX and PXIL were 253118 and 63126 respectively and the weighted average market clearing price of these RECs was ₹2000/MWh in IEX and ₹2000/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 2190431 and 1010589 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), NOVEMBER 2021				
Sr.No	Short-term transactions	Volume (MU)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	4660.68	36.43	4.82
	(i) Through Traders and PXs	2867.29	22.41	2.96
	(ii) Direct	1793.38	14.02	1.85
2	Through Power Exchanges	6180.31	48.31	6.39
	(i) IEX			
	(a) DAM	4718.76	36.89	4.88
	(b) RTM	1311.35	10.25	1.36
	(c) GDAM	149.47	1.17	0.15
	(ii)PXIL			
	(a) DAM	0.74	0.01	0.001
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
3	Through DSM	1950.96	15.25	2.02
	Total	12791.94	-	13.22
	Total Generation	96749.51	-	-

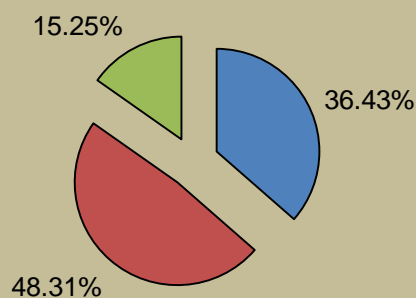
Source: NLDC

Figure-1: Volume of Various Kinds of Electricity Transactions in Total Electricity Generation, November 2021



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

Figure-2: Volume of Short-term Transactions of Electricity, November 2021



■ Bilateral ■ Power Exchanges ■ DSM

Figure-3: Volume transacted in different markets segments on Power Exchanges, November 2021

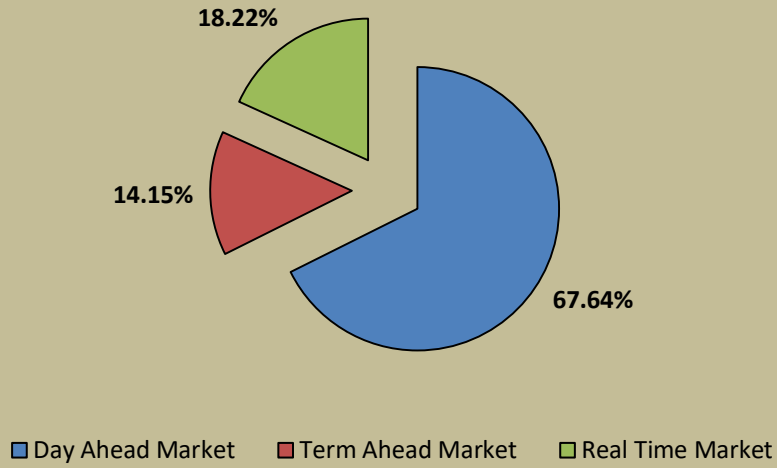


Figure-4: Volume of Short-term Transactions of Electricity, November 2021 (Day-wise)

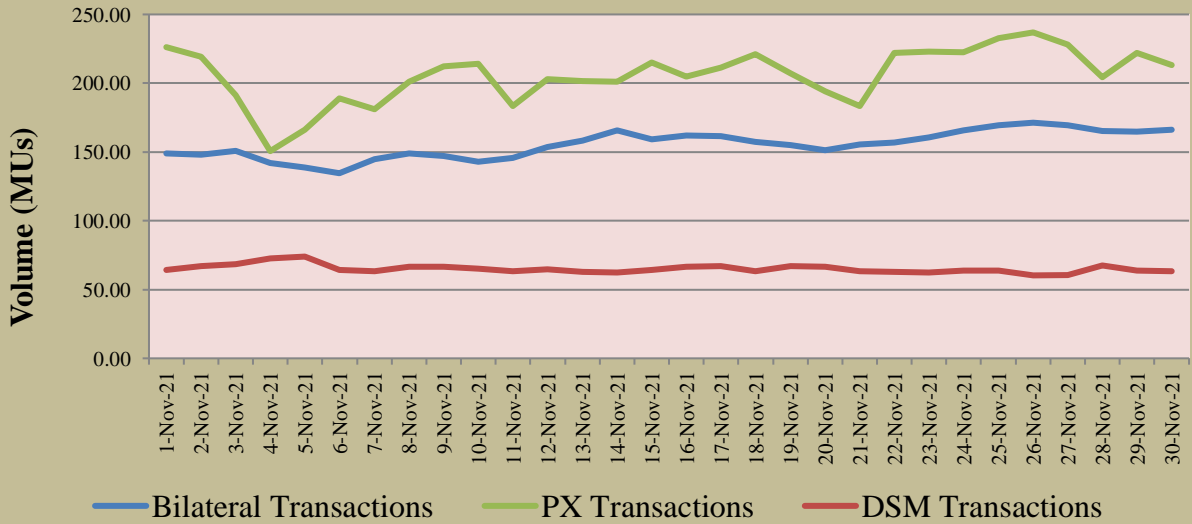


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, NOVEMBER 2021			
Sr. No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	44.36	0.1968
2	NTPC Vidyut Vyapar Nigam Ltd.	13.25	0.0176
3	Tata Power Trading Company (P) Ltd.	9.91	0.0098
4	Adani Enterprises Ltd.	9.01	0.0081
5	Manikaran Power Ltd.	7.71	0.0059
6	Kreate Energy (I) Pvt. Ltd.	3.14	0.0010
7	Arunachal Pradesh Power Corporation (P) ltd	3.04	0.0009
8	GMR Energy Trading Ltd.	2.88	0.0008
9	Instinct Infra & Power Ltd.	1.40	0.0002
10	Essar Electric Power Development Corp. Ltd.	1.05	0.0001
11	RPG Power Trading Company Ltd.	0.92	0.0001
12	National Energy Trading & Services Ltd.	0.87	0.0001
13	Knowledge Infrastructure Systems (P) Ltd	0.66	0.0000
14	Statkraft Markets Pvt. Ltd.	0.51	0.0000
15	JSW Power Trading Company Ltd	0.37	0.0000
16	Abja Power Private Limited	0.27	0.0000
17	Greenko Energies Pvt Ltd	0.19	0.0000
18	Refex Energy Limited	0.18	0.0000
19	NLC India Ltd.	0.10	0.0000
20	Shree Cement Ltd.	0.10	0.0000
21	Customized Energy Solutions India (P) Ltd.	0.06	0.0000
22	Altilium Energie Private Limited	0.02	0.0000
23	Saranyu Power Trading Private Limited	0.01	0.0000
24	Phillip Commodities India (P) Ltd.	0.00	0.0000
25	Gita Power & Infrastructure Private Limited	0.00	0.0000
26	Shubheksha Advisors Pvt. Ltd.	0.00	0.0000
TOTAL		100.00%	0.2415
Top 5 trading licensees		84.23%	
<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>			

Figure 5: Percentage Share of Electricity Transacted by Trading Licensees, November 2021

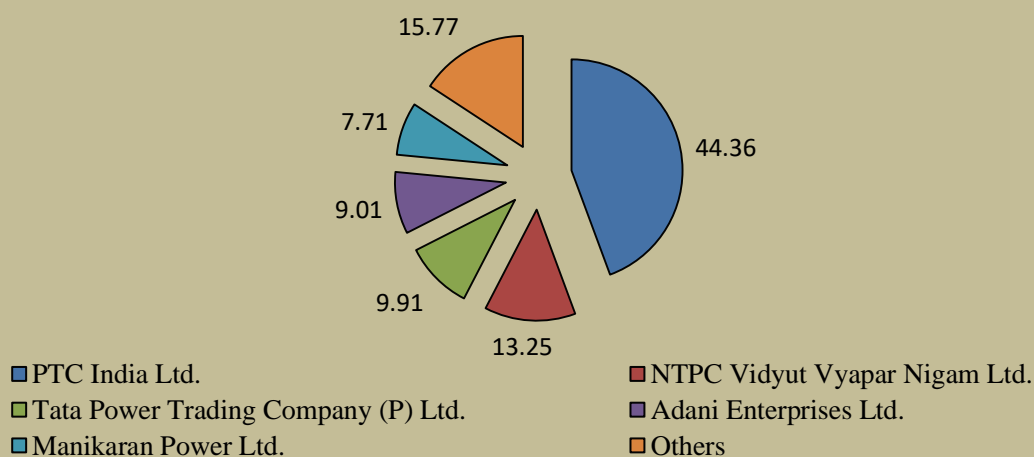


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, NOVEMBER 2021		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	2.42
2	Maximum	6.77
3	Weighted Average	3.79

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), NOVEMBER 2021		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	3.83
2	PEAK	-
3	OFF PEAK	3.14

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	1.37	2.99
2	Maximum	20.00	5.99
3	Weighted Average	3.26	3.74

Source: IEX and PXIL

Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	0.80	-
2	Maximum	13.30	-
3	Weighted Average	3.71	-

Source: IEX and PXIL

Table-7: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	0.50	-
2	Maximum	20.00	-
3	Weighted Average	3.60	-

Source: IEX and PXIL

Table-8: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, NOVEMBER 2021			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.15	11.15
2	Day Ahead Contingency Contracts	107.24	3.02
3	Daily Contracts	195.36	3.20
	Total	302.75	3.14

Source: IEX

Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, NOVEMBER 2021			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	1.66	4.55
2	Day Ahead Contingency Contracts	241.12	3.22
3	Any Day(s) Contracts	33.60	3.40
	Total	276.37	3.25

Source: PXIL

Table-10: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, NOVEMBER 2021			
Sr.No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	1.95	3.53
2	Day Ahead Contingency Contracts	304.76	3.66
3	Daily Contracts	0.43	4.65
4	Weekly Contracts	0.34	4.65
	Total	307.48	3.66

Source: IEX

Table-11: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, NOVEMBER 2021			
Sr.No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	66.65	3.77
2	Any Day(s) Contracts	65.26	3.52
	Total	131.91	3.65

Source: PXIL

Table-12: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, NOVEMBER 2021		
Sr.No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	3.22

Source: NLDC

Figure-6: Price of Short-term Transactions of Electricity, November 2021

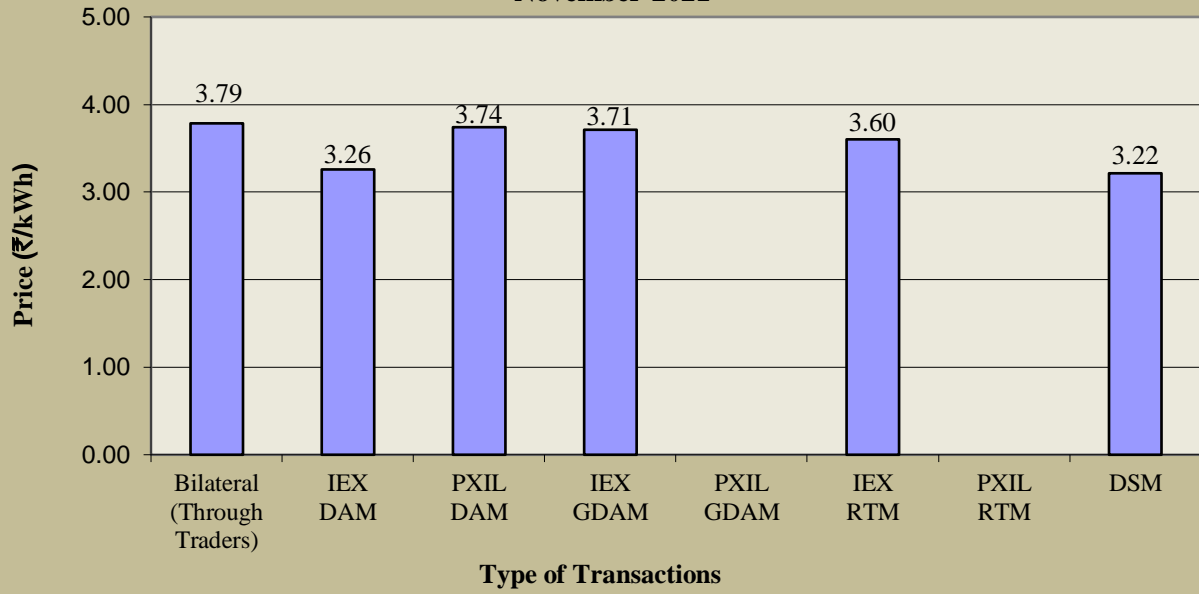
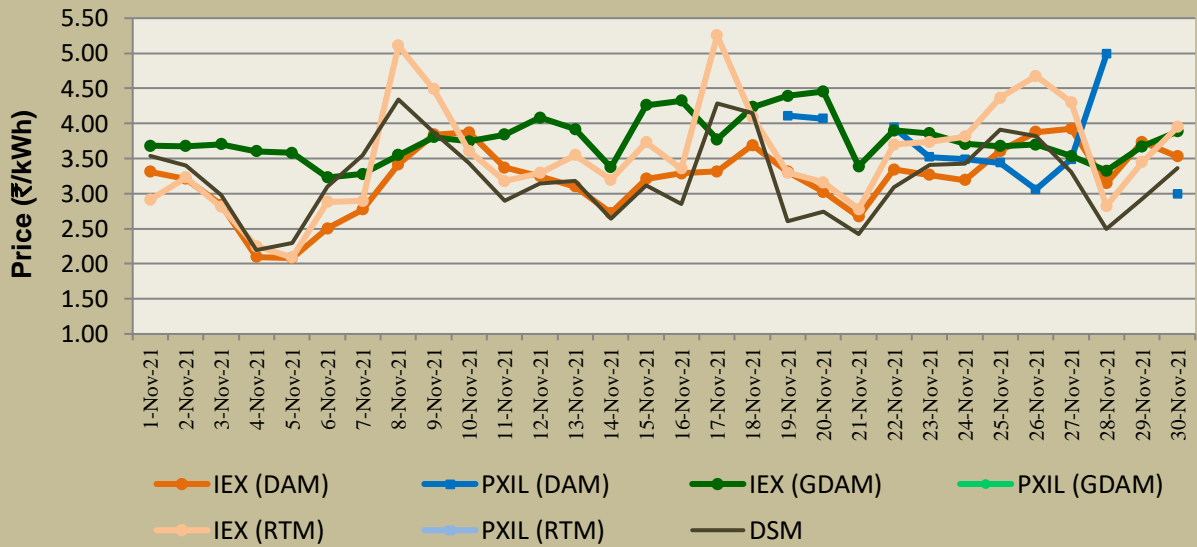


Figure-7: Weighted Average Price of Short-term Transactions of Electricity, November 2021 (Day-wise)



Note: On PXIL, electricity was transacted in DAM on 19th – 20th, 22nd – 28th and 30th November 2021, while no electricity was transacted in RTM during November 2021. GDAM contracts were available for transactions only on IEX.

Table-13: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, NOVEMBER 2021

Name of the Entity	Volume of Sale (MUs)	% of Volume
DELHI	417.31	8.95
PUNJAB	328.37	7.05
RPREL	314.37	6.75
JITPL	266.67	5.72
REGL	263.81	5.66
JAYPEE NIGRIE	258.33	5.54
DB POWER	257.46	5.52
KARNATAKA	239.68	5.14
UTTAR PRADESH	229.80	4.93
CHHATTISGARH	164.14	3.52
SKS POWER	158.51	3.40
RKM POWER	148.80	3.19
ADHUNIK POWER LTD	129.75	2.78
HARYANA	113.56	2.44
DVC	112.79	2.42
MB POWER	109.69	2.35
ODISHA	93.66	2.01
TELANGANA	84.98	1.82
SEMBCORP	79.08	1.70
J & K	74.76	1.60
WEST BENGAL	72.60	1.56
KERALA	55.18	1.18
AHEJOL_S_FTG2	53.60	1.15
DAGACHU	43.22	0.93
RENEWJH_SLR	42.86	0.92
ARERJL_SLR	41.53	0.89
MP	40.82	0.88
TEESTA STG3	37.10	0.80
ONGC PALATANA	33.56	0.72
NEEPCO STATIONS	32.20	0.69
NTPC STATIONS-SR	28.29	0.61
UTTARAKHAND	27.48	0.59
TATA_SLR	26.51	0.57
AHEJ3L_SOLAR	22.44	0.48
TASHIDENG HEP	22.35	0.48
GMR KAMALANGA	21.55	0.46
JORETHANG	21.19	0.45
AHEJ2L_SOLAR	17.48	0.37
ADANIHB_SLR	16.85	0.36
HIMACHAL PRADESH	16.49	0.35
JINDAL POWER	15.86	0.34
DIKCHU HEP	14.43	0.31
SINGOLI BHATWARI HEP	13.38	0.29
ASEJTL_SLR	9.12	0.20
MAHARASHTRA	8.34	0.18
NTPC STATIONS-NER	7.38	0.16
ADANI_WIND	7.35	0.16
AZURE43_SLR	7.27	0.16

ADANI_SLR 4	6.55	0.14
ADANIHB_WIND	6.04	0.13
SBSR_SLR	5.77	0.12
SORANG HEP	5.37	0.12
LANKO_AMK	5.04	0.11
ESSAR POWER	4.16	0.09
MEGHALAYA	3.96	0.08
EDEN_SLR	3.84	0.08
ANDHRA PRADESH	3.08	0.07
ARUNACHAL PRADESH	1.89	0.04
AHEJ3L_WIND	1.86	0.04
RAJASTHAN	1.64	0.04
BALCO	1.42	0.03
RENEWSB	1.32	0.03
JHARKHAND	1.30	0.03
JINDAL STAGE-II	1.26	0.03
AHEJ2L_WIND	1.21	0.03
GUJARAT	1.03	0.02
CONTINNUM PT	1.03	0.02
RENEWSW	0.55	0.01
NAGALAND	0.02	0.0004
Total	4660.29	100.00
Volume Sold by top 5 Regional Entities	1590.52	34.13

Table-14: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, NOVEMBER 2021

Name of the Entity	Volume of Purchase (MUs)	% of Volume
MP	920.73	19.76
GUJARAT	801.31	17.19
ODISHA	466.35	10.01
MAHARASHTRA	400.21	8.59
HARYANA	392.78	8.43
HIMACHAL PRADESH	297.56	6.38
WEST BENGAL	205.49	4.41
JHARKHAND	177.38	3.81
UTTARAKHAND	172.18	3.69
RAJASTHAN	132.67	2.85
TAMIL NADU	110.40	2.37
DELHI	86.05	1.85
UTTAR PRADESH	80.35	1.72
BIHAR	79.11	1.70
AMPS Hazira	58.97	1.27
MEGHALAYA	55.47	1.19
PUNJAB	41.56	0.89
CHHATTISGARH	41.32	0.89
ANDHRA PRADESH	41.27	0.89
GOA	29.85	0.64
SIKKIM	28.39	0.61
KARNATAKA	25.75	0.55
NAGALAND	10.80	0.23
TELANGANA	2.70	0.06
ASSAM	2.02	0.04
TOTAL	4660.68	100.00
Volume Purchased by top 5 Regional Entities	2981.38	63.97

Table-15: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021		
Name of the Entity	Volume of Sale (MUs)	% of Volume
WEST BENGAL	1175.36	24.90
BIHAR	515.08	10.91
CHHATTISGARH	383.31	8.12
KERALA	243.11	5.15
TEESTA STG3	232.53	4.93
ODISHA	205.42	4.35
RAJASTHAN	182.81	3.87
ASSAM	142.16	3.01
HIMACHAL PRADESH	134.10	2.84
JITPL	124.67	2.64
KARNATAKA	122.63	2.60
MB POWER	119.20	2.53
JINDAL POWER	116.61	2.47
ESSAR POWER	81.16	1.72
TELANGANA	67.44	1.43
MP	66.82	1.42
DB POWER	58.16	1.23
NTPC STATIONS-SR	57.40	1.22
DELHI	44.52	0.94
ACBIL	39.46	0.84
JINDAL STAGE-II	39.29	0.83
JAYPEE NIGRIE	38.72	0.82
SEMBCORP	36.96	0.78
MARUTI COAL	26.81	0.57
NEPAL(NVVN)	26.21	0.56
MAHARASHTRA	25.88	0.55
UTTAR PRADESH	25.37	0.54
AD HYDRO	24.14	0.51
SIKKIM	23.44	0.50
KARCHAM WANGTOO	22.31	0.47
RKM POWER	21.18	0.45
GMR KAMALANGA	20.89	0.44
GOA	19.47	0.41
JHARKHAND	19.25	0.41
HARYANA	17.33	0.37
ANDHRA PRADESH	16.49	0.35
TRIPURA	15.71	0.33
SAINJ HEP	15.24	0.32
JORETHANG	15.04	0.32
ADHUNIK POWER LTD	15.04	0.32
TASHIDENG HEP	14.97	0.32
JHABUA POWER_MP	12.39	0.26
REGL	11.50	0.24
ARUNACHAL PRADESH	11.03	0.23
RPREL	10.85	0.23
DVC	10.81	0.23
ONGC PALATANA	10.35	0.22

EMCO	8.72	0.18
GUJARAT	8.20	0.17
DIKCHU HEP	6.59	0.14
SINGOLI BHATWARI HEP	6.20	0.13
RGPPL	4.68	0.10
TAMIL NADU	4.63	0.10
J & K	3.70	0.08
CHUZACHEN HEP	3.66	0.08
NAGALAND	3.64	0.08
SKS POWER	2.63	0.06
SORANG HEP	2.62	0.06
NLC	2.52	0.05
NTPC STATIONS-NER	1.26	0.03
AYANA_RP1	0.41	0.01
NTPC STATIONS-ER	0.38	0.01
MIZORAM	0.36	0.01
PUNJAB	0.33	0.01
RENEWJH_SLR	0.17	0.004
DHARIWAL POWER	0.14	0.003
DADRA & NAGAR HAVELI	0.06	0.001
Total	4719.49	100.00
Volume sold by top 5 Regional Entities	2549.39	54.02

Table-16: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
GUJARAT	926.87	19.64
MAHARASHTRA	630.89	13.37
ANDHRA PRADESH	627.01	13.29
TAMIL NADU	522.00	11.06
RAJASTHAN	349.91	7.41
PUNJAB	250.00	5.30
HVDC RAIGARH	224.64	4.76
HARYANA	212.74	4.51
UTTAR PRADESH	212.20	4.50
TELANGANA	136.14	2.88
J & K	124.06	2.63
UTTARAKHAND	98.16	2.08
MP	90.32	1.91
ODISHA	71.99	1.53
DELHI	66.72	1.41
KARNATAKA	46.47	0.98
DADRA & NAGAR HAVELI	26.15	0.55
ASSAM	24.02	0.51
KERALA	21.59	0.46
HIMACHAL PRADESH	17.40	0.37
MEGHALAYA	13.96	0.30
RAIL	11.01	0.23
DAMAN AND DIU	8.01	0.17
GOA	3.47	0.07
BIHAR	2.10	0.04
JHARKHAND	1.68	0.04
TOTAL	4719.49	100.00
Volume purchased by top 5 Regional Entities	3056.69	64.77

Table-17: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021		
Name of the Entity	Volume of Sale (MUs)	% of Volume
KARNATAKA	65.26	43.66
TELANGANA	64.40	43.09
AZURE43_SLR	6.33	4.23
ANDHRA PRADESH	5.22	3.49
MP	3.29	2.20
RENEWJH_SLR	2.10	1.41
J & K	1.25	0.84
RAJASTHAN	0.95	0.63
HIMACHAL PRADESH	0.29	0.20
UTTARAKHAND	0.20	0.13
CONTINNUM PT	0.17	0.11
UTTAR PRADESH	0.01	0.01
Total	149.47	100.00
Volume sold by top 5 Regional Entities	144.49	96.67

Table-18: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
DELHI	40.40	27.03
DADRA & NAGAR HAVELI	28.12	18.81
MAHARASHTRA	21.49	14.38
ODISHA	14.36	9.61
WEST BENGAL	9.87	6.60
HARYANA	9.21	6.16
ASSAM	7.93	5.31
KERALA	5.41	3.62
TAMIL NADU	4.33	2.90
PUNJAB	3.31	2.22
HIMACHAL PRADESH	2.40	1.60
DAMAN AND DIU	1.66	1.11
TELANGANA	0.47	0.32
UTTAR PRADESH	0.42	0.28
BIHAR	0.04	0.03
GUJARAT	0.01	0.01
GOA	0.01	0.01
ANDHRA PRADESH	0.01	0.01
TOTAL	149.47	100.00
Volume purchased by top 5 Regional Entities	114.25	76.44

Table-19: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021		
Name of the Entity	Volume of Sale (MUs)	% of Volume
KARNATAKA	121.73	9.28
WEST BENGAL	121.33	9.25
ODISHA	113.52	8.66
TELANGANA	106.33	8.11
NEEPCO STATIONS	87.59	6.68
MP	81.73	6.23
RAJASTHAN	80.47	6.14
KERALA	73.28	5.59
TRIPURA	50.55	3.85
NLC	47.11	3.59
CHHATTISGARH	44.90	3.42
DELHI	40.34	3.08
MB POWER	27.36	2.09
RKM POWER	26.37	2.01
NTPC STATIONS-SR	24.35	1.86
JINDAL STAGE-II	23.06	1.76
NTPC STATIONS-WR	20.44	1.56
ASSAM	19.54	1.49
BIHAR	19.34	1.48
HIMACHAL PRADESH	15.13	1.15
SEMBCORP	12.29	0.94
JHABUA POWER_MP	11.84	0.90
DB POWER	11.41	0.87
ANDHRA PRADESH	11.28	0.86
UTTAR PRADESH	11.05	0.84
NTPC STATIONS-NER	10.46	0.80
JINDAL POWER	10.13	0.77
REGL	9.77	0.74
RPREL	9.31	0.71
SIKKIM	9.17	0.70
EMCO	6.90	0.53
SASAN UMPP	6.69	0.51
GMR KAMALANGA	6.09	0.46
MAHARASHTRA	4.26	0.32
MANIPUR	4.07	0.31
NPGC	3.63	0.28
GUJARAT	3.55	0.27
ACBIL	2.98	0.23
JHARKHAND	2.88	0.22
NTPC STATIONS-ER	2.81	0.21
ONGC PALATANA	2.79	0.21
HARYANA	2.73	0.21
SINGOLI BHATWARI HEP	1.55	0.12
MARUTI COAL	1.37	0.10
BALCO	1.03	0.08
AZURE43_SLR	1.01	0.08
ADHUNIK POWER LTD	0.88	0.07
TAMIL NADU	0.86	0.07

SORANG HEP	0.77	0.06
SKS POWER	0.57	0.04
J & K	0.54	0.04
JORETHANG	0.47	0.04
DIKCHU HEP	0.34	0.03
RGPPL_IR	0.28	0.02
KARCHAM WANGTOO	0.23	0.02
PUNJAB	0.21	0.02
SAINJ HEP	0.20	0.02
TASHIDENG HEP	0.18	0.01
RGPPL_Others	0.09	0.01
RENEWJH_SLR	0.07	0.01
RGPPL	0.07	0.01
DHARIWAL POWER	0.03	0.002
UTTARAKHAND	0.02	0.002
DVC	0.01	0.001
NAGALAND	0.01	0.001
CHUZACHEN HEP	0.004	0.0003
AD HYDRO	0.003	0.0002
Total	1311.35	100.00
Volume sold by top 5 Regional Entities	550.51	41.98

Table-20: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, NOVEMBER 2021		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
J & K	460.67	35.13
MAHARASHTRA	124.59	9.50
RAJASTHAN	116.78	8.91
TAMIL NADU	91.73	6.99
GUJARAT	89.08	6.79
ANDHRA PRADESH	78.65	6.00
UTTAR PRADESH	78.13	5.96
TELANGANA	56.61	4.32
PUNJAB	37.59	2.87
DELHI	34.01	2.59
HARYANA	33.25	2.54
ODISHA	32.65	2.49
WEST BENGAL	16.60	1.27
HIMACHAL PRADESH	15.95	1.22
ASSAM	13.82	1.05
BIHAR	7.49	0.57
UTTARAKHAND	5.83	0.44
KARNATAKA	4.47	0.34
KERALA	3.65	0.28
MANIPUR	3.56	0.27
MP	3.32	0.25
DADRA & NAGAR HAVELI	0.86	0.07
AMPS Hazira	0.66	0.05
DAMAN AND DIU	0.57	0.04
RAIL	0.24	0.02
GOA	0.22	0.02
TEESTA STG3	0.15	0.01
MEGHALAYA	0.12	0.01
SIKKIM	0.08	0.01
CHHATTISGARH	0.03	0.002
TOTAL	1311.35	100.00
Volume purchased by top 5 Regional Entities	882.84	67.32

Table-21: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, NOVEMBER 2021

Name of the Entity	Volume of Under drawal (MUs)	% of Volume
MAHARASHTRA	139.58	7.01
NTPC STATIONS-WR	100.47	5.05
CHUKHA HEP	90.52	4.55
GUJARAT	85.34	4.29
MP	83.99	4.22
NHPC STATIONS	79.76	4.01
KARNATAKA	78.00	3.92
TAMIL NADU	77.08	3.87
UTTAR PRADESH	75.73	3.81
TELANGANA	62.31	3.13
PUNJAB	56.59	2.84
SASAN UMPP	53.29	2.68
RAJASTHAN	52.48	2.64
ANDHRA PRADESH	49.32	2.48
NTPC STATIONS-ER	45.72	2.30
WEST BENGAL	42.67	2.14
KERALA	39.75	2.00
NTPC STATIONS-NR	39.30	1.98
DELHI	32.69	1.64
NTPC STATIONS-SR	25.19	1.27
HARYANA	24.05	1.21
ODISHA	23.90	1.20
BIHAR	22.63	1.14
NLC	22.49	1.13
AMPS Hazira	21.54	1.08
JHARKHAND	20.73	1.04
CHHATTISGARH	20.22	1.02
GIWEL_BHUJ	19.73	0.99
CHANDIGARH	19.35	0.97
DVC	17.06	0.86
PONDICHERRY	16.47	0.83
J & K	15.69	0.79
BBMB	14.47	0.73
TRIPURA	13.09	0.66
HIMACHAL PRADESH	12.95	0.65
ALFANAR_BHUJ	12.60	0.63
OSTRO	11.00	0.55
RENEW_BHUJ	10.76	0.54
RENEW_BHACHAU	10.44	0.52
UTTARAKHAND	10.03	0.50
GOA	9.73	0.49
AGEMPL BHUJ	9.38	0.47
NEEPCO STATIONS	8.45	0.42
BRBCL,NABINAGAR	8.24	0.41
MAITHON POWER LTD	8.08	0.41
ASSAM	7.80	0.39
BETAM_TCN	7.65	0.38
MB POWER	7.36	0.37
NJPC	6.94	0.35
SIKKIM	6.01	0.30
ACBIL	5.48	0.28
SBG_NPK	5.32	0.27
NPGC	5.26	0.26
TATA_PVGD	4.98	0.25
ADANIHB_SLR	4.97	0.25
GIWEL_TCN	4.91	0.25
MANGDECHU HEP	4.77	0.24
TEHRI	4.75	0.24
GMR KAMALANGA	4.60	0.23
JAYPEE NIGRIE	4.57	0.23
JHABUA POWER_MP	4.51	0.23
MIZORAM	4.51	0.23
RKM POWER	4.44	0.22

ORANGE_TCN	4.27	0.21
FORTUM2_PVGD	4.22	0.21
LANKO_AMK	4.18	0.21
RAMPUR HEP	4.15	0.21
JINDAL POWER	4.06	0.20
SPRNG_NPKUNTA	4.01	0.20
DADRA & NAGAR HAVELI	3.90	0.20
AZURE43_SLR	3.83	0.19
KARCHAM WANGTOO	3.61	0.18
JINDAL STAGE-II	3.59	0.18
JITPL	3.40	0.17
BARC	3.32	0.17
SPRING_PUGALUR	3.29	0.17
AYANA_NPKUNTA	3.29	0.17
RPREL	3.23	0.16
INOX_BHUJ	3.12	0.16
MEGHALAYA	3.08	0.15
MRPL	3.05	0.15
RAIL	3.02	0.15
TEESTA HEP	2.90	0.15
NTPC_ANTP	2.87	0.14
OSTRO Hiriyur	2.87	0.14
BALCO	2.83	0.14
SBG_PVGD	2.82	0.14
MTPS II	2.80	0.14
ACME_SLR	2.79	0.14
SBSR_SLR	2.77	0.14
EDEN_SLR	2.74	0.14
RENEWSW_SLR	2.70	0.14
NSPCL	2.66	0.13
BANGLADESH	2.60	0.13
CGPL	2.60	0.13
NTPC STATIONS-NER	2.50	0.13
IGSTPS	2.40	0.12
DB POWER	2.27	0.11
RGPPL	2.26	0.11
NAGALAND	2.17	0.11
AVAADA2_PVGD	2.17	0.11
MANIPUR	2.10	0.11
ARUNACHAL PRADESH	2.07	0.10
MYTRAH_TCN	2.05	0.10
ARINSUM_RUMS	2.04	0.10
AZURE_PVGD	2.03	0.10
KOTESHWAR	1.92	0.10
AVAADA1_PVGD	1.81	0.09
RENEWJH_SLR	1.76	0.09
NETCL VALLUR	1.75	0.09
PARAM_PVGD	1.74	0.09
TATA_ANTP	1.71	0.09
SKS POWER	1.70	0.09
CLEAN_SLR	1.67	0.08
RAP B	1.61	0.08
ESPL_RADHANESDA	1.59	0.08
MAHINDRA_RUMS	1.57	0.08
NAPP	1.46	0.07
ACME_RUMS	1.46	0.07
RENEW_SLR_BKN	1.45	0.07
SEMBCORP	1.43	0.07
SB6_POKARAN	1.42	0.07
ADHUNIK POWER LTD	1.41	0.07
ADY2_PVGD	1.24	0.06
ADY1_PVGD	1.23	0.06
ONGC PALATANA	1.22	0.06
FORTUM1_PVGD	1.21	0.06
RANGIT HEP	1.09	0.05
SAINJ HEP	1.06	0.05

EMCO	1.03	0.05
ADY10_PVGD	1.02	0.05
FRV_NPK	1.01	0.05
ESSAR POWER	0.99	0.05
ADY6_PVGD	0.98	0.05
RANGANADI HEP	0.95	0.05
DIKCHU HEP	0.95	0.05
AZURE_ANTP	0.94	0.05
DAMAN AND DIU	0.90	0.05
ADY13_PVGD	0.90	0.05
THERMAL POWERTECH	0.90	0.05
ADY3_PVGD	0.89	0.04
CHUZACHEN HEP	0.88	0.04
AZURE_SLR	0.87	0.04
RONGNICHU HEP	0.86	0.04
KSK MAHANADI	0.86	0.04
TEESTA STG3	0.86	0.04
ASEJTL_SLR	0.82	0.04
SORANG HEP	0.81	0.04
ARS_PVGD	0.79	0.04
AKSP_ANTP	0.79	0.04
FRV_ANTP	0.74	0.04
AHSP_ANTP	0.73	0.04
TPREL_RADHANESDA	0.72	0.04
ABSP_ANTP	0.71	0.04
AKS_PVGD	0.70	0.04
YARROW_PVGD	0.70	0.04
RENEWSW	0.69	0.03
AD HYDRO	0.67	0.03
SB_SLR	0.64	0.03
AVAADASN_SLR	0.63	0.03
GIPCL_RADHANESDA	0.62	0.03
COASTGEN	0.61	0.03
RENEW_PVGD	0.60	0.03
SINGOLI BHATWARI HEP	0.58	0.03
LOKTAK	0.57	0.03
KREDL_PVGD	0.49	0.02
AHEJ3L_SOLAR	0.47	0.02
PARE HEP	0.45	0.02
DOYANG HEP	0.39	0.02
DHARIWAL POWER	0.39	0.02
RENEW_SLR	0.38	0.02
HVDC ALPD	0.36	0.02
ARERJL_SLR	0.35	0.02
AZURE34_SLR	0.32	0.02
AZURE41_SLR	0.30	0.02
RAP C	0.28	0.01
BHADRAVATHI HVDC	0.28	0.01
TATA_SLR	0.26	0.01
TASHIDENG HEP	0.24	0.01
JORETHANG	0.23	0.01
VINDHYACHAL HVDC	0.22	0.01
NTPL	0.18	0.01
NEPAL(NVVN)	0.17	0.01
DAGACHU	0.16	0.01
NFF	0.08	0.004
HVDC PUS	0.05	0.003
HVDC RAIGARH	0.03	0.001
DCPP	0.01	0.0004
HVDC CHAMPA	0.002	0.0001
Total	1989.82	100.00
Volume Exported by top 5 Regional Entities	499.89	25.12

Table-22: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, NOVEMBER 2021		
Name of the Entity	Volume of Over drawal (MUs)	% of Volume
TALA HEP	137.36	7.18
NTPC STATIONS-WR	134.35	7.03
RAJASTHAN	90.53	4.73
NTPC STATIONS-NR	71.54	3.74
GUJARAT	67.47	3.53
NTPC STATIONS-ER	58.18	3.04
UTTAR PRADESH	53.73	2.81
MP	51.88	2.71
HARYANA	50.06	2.62
TAMIL NADU	49.43	2.59
KARNATAKA	45.15	2.36
DVC	42.81	2.24
J & K	39.65	2.07
BIHAR	39.46	2.06
ODISHA	38.84	2.03
NTPC STATIONS-SR	38.46	2.01
NLC	37.81	1.98
ANDHRA PRADESH	30.17	1.58
TELANGANA	29.24	1.53
KURICHU HEP	28.93	1.51
MAHARASHTRA	28.78	1.50
UTTARAKHAND	27.92	1.46
PUNJAB	22.67	1.19
HIMACHAL PRADESH	22.52	1.18
CHHATTISGARH	21.84	1.14
AMPS Hazira	21.63	1.13
NETCL VALLUR	20.63	1.08
NEPAL(NVVN)	17.05	0.89
WEST BENGAL	16.76	0.88
BALCO	16.52	0.86
THERMAL POWERTECH	15.65	0.82
NHPC STATIONS	15.03	0.79
CGPL	14.41	0.75
MYTRAH_TCN	12.76	0.67
GIWEL_TCN	12.68	0.66
KERALA	12.12	0.63
JHARKHAND	11.21	0.59
ASSAM	10.80	0.57
ADANIHB_SLR	10.39	0.54
ORANGE_TCN	10.11	0.53
SEMBCORP	9.97	0.52
AGEMPL BHUJ	9.63	0.50
TATA_PVGD	8.47	0.44
TEESTA STG3	8.10	0.42
CLEAN_SLR	7.98	0.42
KAPP 3&4	7.86	0.41
DAMAN AND DIU	7.82	0.41
NPGC	7.81	0.41
NTPL	7.59	0.40
JHABUA POWER_MP	7.49	0.39
MB POWER	7.23	0.38
TATA_SLR	7.17	0.38
DELHI	7.14	0.37
DB POWER	7.12	0.37
JITPL	6.88	0.36
GIWEL_BHUJ	6.76	0.35
DADRA & NAGAR HAVELI	6.66	0.35
AHEJ3L_SOLAR	6.59	0.34
SPRNG_NPKUNTA	6.42	0.34
ARERJL_SLR	6.28	0.33
RAIL	6.11	0.32
RENEW_BHUJ	6.02	0.31
NTPC STATIONS-NER	5.89	0.31
ARUNACHAL PRADESH	5.84	0.31
GOA	5.67	0.30
NSPCL	5.60	0.29

NAPP	5.57	0.29
SPRING_PUGALUR	5.54	0.29
RPREL	5.47	0.29
EMCO	5.28	0.28
NTPC_ANTP	5.12	0.27
BETAM_TCN	5.10	0.27
IGSTPS	4.95	0.26
OSTRO Hiriyur	4.78	0.25
AYANA_NPKUNTA	4.66	0.24
RENEW_BHACHAU	4.61	0.24
MANGDECHU HEP	4.50	0.24
IL&FS	4.50	0.24
JORETHANG	4.49	0.23
SB6_POKARAN	4.08	0.21
SBG_PVGD	4.04	0.21
JINDAL STAGE-II	3.97	0.21
PARAM_PVGD	3.88	0.20
SBG_NPK	3.88	0.20
MAITHON POWER LTD	3.83	0.20
RGPPL	3.80	0.20
FORTUM2_PVGD	3.73	0.20
BRBCL,NABINAGAR	3.58	0.19
TASHIDENG HEP	3.53	0.18
AZURE43_SLR	3.52	0.18
MTPS II	3.45	0.18
BBMB	3.43	0.18
INOX_BHUJ	3.40	0.18
COASTGEN	3.29	0.17
MEGHALAYA	3.15	0.16
ACME_RUMS	3.09	0.16
DAGACHU	3.08	0.16
OSTRO	3.06	0.16
AVAADA1_PVGD	2.97	0.16
GMR KAMALANGA	2.97	0.16
BANGLADESH	2.85	0.15
ARINSUM_RUMS	2.84	0.15
MANIPUR	2.78	0.15
PONDICHERRY	2.76	0.14
RKM POWER	2.68	0.14
AZURE_SLR	2.64	0.14
AVAADA2_PVGD	2.63	0.14
MAHINDRA_RUMS	2.61	0.14
KARCHAM WANGTOO	2.61	0.14
ESSAR POWER	2.60	0.14
RENEWJH_SLR	2.37	0.12
FORTUM1_PVGD	2.32	0.12
AVAADASN_SLR	2.30	0.12
ADHUNIK POWER LTD	2.21	0.12
ALFANAR_BHUJ	2.14	0.11
NJPC	2.14	0.11
CHANDIGARH	2.03	0.11
SB_SLR	1.99	0.10
MRPL	1.94	0.10
RENEW_SLR_BKN	1.91	0.10
SIKKIM	1.89	0.10
TATA_ANTP	1.89	0.10
NEEPCO STATIONS	1.86	0.10
JINDAL POWER	1.72	0.09
ESPL_RADHANESDA	1.65	0.09
KREDL_PVGD	1.61	0.08
RAP C	1.61	0.08
TEHRI	1.58	0.08
ABSP_ANTP	1.53	0.08
AHSP_ANTP	1.51	0.08
AKSP_ANTP	1.49	0.08
RENEWSW_SLR	1.48	0.08
GIPCL_RADHANESDA	1.48	0.08

AZURE_PVGD	1.45	0.08
RENEW_PVGD	1.36	0.07
YARROW_PVGD	1.31	0.07
AZURE34_SLR	1.31	0.07
ONGC PALATANA	1.29	0.07
AKS_PVGD	1.19	0.06
RANGANADI HEP	1.16	0.06
KSK MAHANADI	1.15	0.06
ADY3_PVGD	1.12	0.06
TPREL_RADHANESDA	1.10	0.06
RENEWSW	1.08	0.06
ADY6_PVGD	1.06	0.06
AZURE41_SLR	1.03	0.05
FRV_ANTP	1.01	0.05
DGEN MEGA POWER	0.98	0.05
ACME_SLR	0.97	0.05
ACBIL	0.96	0.05
EDEN_SLR	0.95	0.05
RANGIT HEP	0.93	0.05
AZURE_ANTP	0.93	0.05
ARS_PVGD	0.92	0.05
FRV_NPK	0.90	0.05
DHARIWAL POWER	0.84	0.04
ADY10_PVGD	0.78	0.04
RAP B	0.76	0.04
ADY13_PVGD	0.74	0.04
ASEJTL_SLR	0.74	0.04
ADY1_PVGD	0.74	0.04
SORANG HEP	0.72	0.04
ADY2_PVGD	0.72	0.04
HVDC CHAMPA	0.68	0.04
MEENAKSHI	0.67	0.04
TRIPURA	0.66	0.03
DIKCHU HEP	0.60	0.03
KOTESHWAR	0.59	0.03
NAGALAND	0.57	0.03
SAINJ HEP	0.56	0.03
AD HYDRO	0.49	0.03
SBSR_SLR	0.48	0.02
LANKO KONDAPALLI	0.48	0.02
CHUZACHEN HEP	0.43	0.02
SIMHAPURI	0.42	0.02
RENEW_SLR	0.41	0.02
SASAN UMPP	0.41	0.02
JAYPEE NIGRIE	0.38	0.02
RONGNICHU HEP	0.36	0.02
RAMPUR HEP	0.36	0.02
MIZORAM	0.36	0.02
HVDC RAIGARH	0.33	0.02
AYANA_RP1	0.31	0.02
DOYANG HEP	0.28	0.01
TRN ENERGY	0.22	0.01
LOKTAK	0.21	0.01
CHUKHA HEP	0.19	0.01
SKS POWER	0.19	0.01
SINGOLI BHATWARI HEP	0.14	0.01
NFF	0.13	0.01
LANKO_AMK	0.12	0.01
TEESTA HEP	0.09	0.005
NEP	0.06	0.003
PARE HEP	0.06	0.003
DCPP	0.05	0.003
HVDC PUS	0.03	0.002
HVDC ALPD	0.01	0.0004
BHADRAVATHI HVDC	0.0001	0.000004
TOTAL	1912.09	100.00
Volume Imported by top 5 Regional Entities	501.25	26.21

Table-23: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), NOVEMBER 2021		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	GUJARAT	1786.63
2	MAHARASHTRA	1027.91
3	MP	789.60
4	TAMIL NADU	695.32
5	ANDHRA PRADESH	691.73
6	HARYANA	540.38
7	J & K	528.43
8	RAJASTHAN	371.54
9	UTTARAKHAND	266.35
10	HVDC RAIGARH	224.94
11	ODISHA	187.68
12	HIMACHAL PRADESH	176.86
13	JHARKHAND	146.11
14	TALA HEP	137.36
15	UTTAR PRADESH	82.88
16	MEGHALAYA	65.67
17	AMPS Hazira	59.71
18	DADRA & NAGAR HAVELI	57.83
19	NTPC STATIONS-NR	32.23
20	KURICHU HEP	28.93
21	NETCL VALLUR	18.87
22	DAMAN AND DIU	17.15
23	THERMAL POWERTECH	14.75
24	RAIL	14.33
25	NTPC STATIONS-WR	13.44
26	CGPL	11.81
27	BALCO	11.24
28	MYTRAH_TCN	10.71
29	GOA	10.03
30	NTPC STATIONS-ER	9.28
31	KAPP 3&4	7.86
32	GIWEL_TCN	7.77
33	NTPL	7.41
34	CLEAN_SLR	6.31
35	ORANGE_TCN	5.84
36	NAGALAND	5.52
37	IL&FS	4.50
38	NAPP	4.12
39	TATA_PVGD	3.49
40	NSPCL	2.94
41	COASTGEN	2.68
42	SB6_POKARAN	2.65
43	IGSTPS	2.55
44	SPRNG_NPKUNTA	2.41
45	NTPC_ANTP	2.25
46	SPRING_PUGALUR	2.24
47	PARAM_PVGD	2.14
48	OSTRO Hiriyur	1.92
49	AZURE_SLR	1.77
50	AVAADASN_SLR	1.67
51	ACME_RUMS	1.64
52	AYANA_NPKUNTA	1.37
53	SB_SLR	1.35
54	RAP C	1.32
55	SBG_PVGD	1.22
56	AVAADAI_PVGD	1.16
57	KREDL_PVGD	1.12

58	FORTUM1_PVGD	1.11
59	MAHINDRA_RUMS	1.04
60	AZURE34_SLR	1.00
61	DGEN MEGA POWER	0.98
62	GIPCL_RADHANESDA	0.86
63	ABSP_ANTP	0.82
64	ARINSUM_RUMS	0.80
65	AHSP_ANTP	0.78
66	RENEW_PVGD	0.76
67	AZURE41_SLR	0.73
68	AKSP_ANTP	0.70
69	HVDC CHAMPA	0.68
70	MEENAKSHI	0.67
71	MTPS II	0.65
72	YARROW_PVGD	0.62
73	AKS_PVGD	0.49
74	LANKO KONDAPALLI	0.48
75	AVAADA2_PVGD	0.47
76	RENEW_SLR_BKN	0.46
77	SIMHAPURI	0.42
78	TPREL_RADHANESDA	0.37
79	KSK MAHANADI	0.29
80	DHARIWAL POWER	0.29
81	INOX_BHUJ	0.28
82	FRV_ANTP	0.27
83	AGEMPL BHUJ	0.25
84	BANGLADESH	0.24
85	ADY3_PVGD	0.23
86	TRN ENERGY	0.22
87	RANGANADI HEP	0.21
88	MANIPUR	0.18
89	TATA_ANTP	0.17
90	ARS_PVGD	0.13
91	ADY6_PVGD	0.08
92	NEP	0.06
93	ESPL_RADHANESDA	0.06
94	NFF	0.04
95	DCPP	0.04
96	RENEW_SLR	0.04
97	AZURE_ANTP	-0.01
98	HVDC PUS	-0.02
99	RGPPL_Others	-0.09
100	AYANA_RP1	-0.09
101	FRV_NPK	-0.11
102	DOYANG HEP	-0.12
103	ADY13_PVGD	-0.16
104	RENEWSW	-0.16
105	RANGIT HEP	-0.17
106	VINDHYACHAL HVDC	-0.22
107	ADY10_PVGD	-0.23
108	MANGDECHU HEP	-0.27
109	BHADRAVATHI HVDC	-0.28
110	RGPPL_IR	-0.28
111	HVDC ALPD	-0.35
112	LOKTAK	-0.36
113	PARE HEP	-0.39
114	FORTUM2_PVGD	-0.49
115	ADY1_PVGD	-0.49
116	RONGNICHU HEP	-0.50
117	ADY2_PVGD	-0.52
118	AZURE_PVGD	-0.57
119	RAP B	-0.85
120	NPGC	-1.07

121	MRPL	-1.11
122	CONTINNUM PT	-1.20
123	AHEJ2L_WIND	-1.21
124	RENEWSW_SLR	-1.22
125	RENEWSB	-1.32
126	KOTESHWAR	-1.33
127	SBG_NPK	-1.44
128	ACME_SLR	-1.82
129	AHEJ3L_WIND	-1.86
130	BETAM_TCN	-2.54
131	TEESTA HEP	-2.82
132	TEHRI	-3.17
133	RGPPL	-3.21
134	BARC	-3.32
135	RAMPUR HEP	-3.79
136	CHUZACHEN HEP	-4.11
137	MAITHON POWER LTD	-4.25
138	MIZORAM	-4.51
139	BRBCL,NABINAGAR	-4.66
140	RENEW_BHUI	-4.74
141	NJPC	-4.80
142	EDEN_SLR	-5.63
143	RENEW_BHACHAU	-5.83
144	ADANIHB_WIND	-6.04
145	ADANI_SLR 4	-6.55
146	ADANI_WIND	-7.35
147	OSTRO	-7.94
148	SBSR_SLR	-8.06
149	SIKKIM	-8.26
150	SORANG HEP	-8.85
151	LANKO_AMK	-9.10
152	ARUNACHAL PRADESH	-9.16
153	ASEJTL_SLR	-9.20
154	NEPAL(NVVN)	-9.33
155	ALFANAR_BHUI	-10.46
156	BBMB	-11.05
157	EMCO	-11.37
158	ADANIHB_SLR	-11.42
159	GIWEL_BHUI	-12.97
160	PONDICHERRY	-13.71
161	AZURE43_SLR	-14.91
162	NTPC STATIONS-NER	-15.70
163	SAINJ HEP	-15.94
164	AHEJ3L_SOLAR	-16.33
165	CHANDIGARH	-17.32
166	AHEJ2L_SOLAR	-17.48
167	TATA_SLR	-19.60
168	JHABUA POWER_MP	-21.25
169	SINGOLI BHATWARI HEP	-21.56
170	DIKCHU HEP	-21.70
171	KARCHAM WANGTOO	-23.53
172	AD HYDRO	-24.33
173	MARUTI COAL	-28.19
174	PUNJAB	-30.37
175	JORETHANG	-32.45
176	TASHIDENG HEP	-34.21
177	NLC	-34.31
178	ARERJL_SLR	-35.61
179	DAGACHU	-40.30
180	RENEWJH_SLR	-44.59
181	ONGC PALATANA	-46.63
182	ACBIL	-46.96
183	GMR KAMALANGA	-50.16

184	AHEJOL_S_FTG2	-53.60
185	SASAN UMPP	-59.58
186	JINDAL STAGE-II	-63.23
187	NHPC STATIONS	-64.73
188	TRIPURA	-78.69
189	ESSAR POWER	-83.71
190	CHUKHA HEP	-90.33
191	NTPC STATIONS-SR	-96.77
192	DVC	-97.86
193	ASSAM	-110.91
194	SEMBCORP	-119.78
195	NEEPCO STATIONS	-126.39
196	ADHUNIK POWER LTD	-144.87
197	JINDAL POWER	-144.94
198	TELANGANA	-160.30
199	SKS POWER	-163.22
200	RKM POWER	-198.11
201	MB POWER	-256.38
202	TEESTA STG3	-262.24
203	REGL	-285.07
204	DELHI	-300.55
205	JAYPEE NIGRIE	-301.23
206	DB POWER	-322.18
207	RPREL	-332.29
208	KERALA	-368.54
209	JITPL	-387.86
210	BIHAR	-428.86
211	KARNATAKA	-505.46
212	CHHATTISGARH	-549.39
213	WEST BENGAL	-1163.23
<i>* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral, power exchange and UI</i>		
<i>(-) indicates sale and (+) indicates purchase</i>		

Table-24: DETAILS OF CONGESTION IN POWER EXCHANGES, NOVEMBER 2021							
	Details of Congestion	Day Ahead Market		Green Day Ahead Market		Real Time Market	
		IEX	PXIL	IEX	PXIL	IEX	PXIL
A	Unconstrained Cleared Volume (MUs)	4719.17	0.74	149.47	0.00	1311.35	0.00
B	Actual Cleared Volume and hence scheduled (MUs)	4718.76	0.74	149.47	0.00	1311.35	0.00
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	0.00	0.00
D	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs) *	0.41	0.00	0.00	0.00	0.00	0.00
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.01%	0.00%	0.00%	0.00%	0.00%	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%	0.00%	0.00%
G	Congestion occurrence (%) time block wise						
	0.00 - 6.00 hours	0.00%	0.00%	0.00%	-	0.00%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%	0.00%	-	0.00%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%	0.00%	-	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	0.00%	0.00%	-	0.00%	0.00%
* There was real time curtailment of 0.41 MUs on 27.11.2021 in DAM at IEX							
Source: IEX, PXIL & NLDC							

**Table-25: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE)
(MUs), NOVEMBER 2021**

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-Nov-21	88.61	60.50	179.10	0.00	5.34	0.00	41.98	0.00	64.14	3359.63
2-Nov-21	91.07	56.75	169.01	0.00	6.62	0.00	43.60	0.00	66.97	3368.13
3-Nov-21	94.31	56.66	150.33	0.00	6.51	0.00	34.43	0.00	68.37	3310.83
4-Nov-21	86.13	55.98	108.16	0.00	2.84	0.00	39.65	0.00	72.50	3015.32
5-Nov-21	90.38	48.49	132.06	0.00	2.71	0.00	31.36	0.00	73.96	2846.66
6-Nov-21	85.49	49.09	147.31	0.00	3.33	0.00	38.14	0.00	64.41	2957.09
7-Nov-21	96.36	48.51	134.05	0.00	4.48	0.00	42.57	0.00	63.09	3001.66
8-Nov-21	93.32	55.42	146.10	0.00	5.61	0.00	49.41	0.00	66.76	3157.78
9-Nov-21	89.54	57.39	163.32	0.00	7.34	0.00	41.39	0.00	66.47	3257.19
10-Nov-21	82.51	60.18	161.10	0.00	5.36	0.00	47.49	0.00	65.03	3318.95
11-Nov-21	86.24	59.30	141.44	0.00	6.29	0.00	35.50	0.00	63.13	3255.73
12-Nov-21	94.75	58.68	158.60	0.00	3.90	0.00	40.42	0.00	64.63	3269.13
13-Nov-21	99.13	59.00	148.80	0.00	4.56	0.00	48.03	0.00	62.76	3312.13
14-Nov-21	108.03	57.49	145.29	0.00	6.73	0.00	49.12	0.00	62.59	3228.69
15-Nov-21	95.97	63.14	164.73	0.00	3.70	0.00	46.41	0.00	64.47	3302.90
16-Nov-21	100.06	61.85	162.09	0.00	3.16	0.00	39.35	0.00	66.53	3256.61
17-Nov-21	102.55	58.77	159.47	0.00	3.41	0.00	48.49	0.00	66.98	3295.13
18-Nov-21	95.51	62.02	161.44	0.00	3.52	0.00	56.17	0.00	63.21	3303.80
19-Nov-21	94.56	60.47	160.75	0.20	1.55	0.00	44.46	0.00	66.85	3182.43
20-Nov-21	94.08	57.02	147.24	0.05	1.67	0.00	45.18	0.00	66.55	3135.38
21-Nov-21	97.33	58.25	138.27	0.00	5.40	0.00	39.59	0.00	63.18	3043.76
22-Nov-21	95.53	61.22	165.23	0.07	4.44	0.00	52.39	0.00	62.96	3212.18
23-Nov-21	98.25	62.29	170.69	0.07	4.20	0.00	48.08	0.00	62.49	3342.12
24-Nov-21	102.36	63.33	166.25	0.08	6.25	0.00	49.82	0.00	63.73	3372.38
25-Nov-21	105.64	63.86	172.87	0.08	6.16	0.00	53.83	0.00	63.62	3355.44
26-Nov-21	103.19	68.11	180.05	0.11	6.67	0.00	50.10	0.00	60.29	3360.80
27-Nov-21	101.43	67.94	178.91	0.04	7.57	0.00	41.40	0.00	60.30	3329.02
28-Nov-21	99.23	66.25	163.91	0.04	7.27	0.00	32.94	0.00	67.67	3157.43
29-Nov-21	97.89	67.04	173.62	0.00	7.38	0.00	40.92	0.00	63.97	3210.66
30-Nov-21	97.84	68.41	168.58	0.02	5.51	0.00	39.14	0.00	63.34	3230.55
Total	2867.29	1793.38	4718.76	0.74	149.47	0.00	1311.35	0.00	1950.96	96749.51

Source: NLDC

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

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

Scheduled volume of all the bid areas.

**Table-26(a): PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh),
NOVEMBER 2021**

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
1-Nov-21	1.71	10.00	3.31	-	-	-	3.49	5.70	3.68	-	-	-
2-Nov-21	1.80	8.33	3.21	-	-	-	3.40	5.48	3.68	-	-	-
3-Nov-21	1.60	4.68	2.84	-	-	-	3.45	6.35	3.70	-	-	-
4-Nov-21	1.37	3.41	2.10	-	-	-	3.30	5.20	3.60	-	-	-
5-Nov-21	1.40	3.39	2.08	-	-	-	3.20	5.00	3.58	-	-	-
6-Nov-21	1.40	4.05	2.50	-	-	-	0.80	5.00	3.23	-	-	-
7-Nov-21	1.41	4.68	2.77	-	-	-	2.99	4.60	3.28	-	-	-
8-Nov-21	2.00	6.69	3.42	-	-	-	3.30	5.00	3.55	-	-	-
9-Nov-21	2.00	8.00	3.84	-	-	-	3.50	5.73	3.81	-	-	-
10-Nov-21	1.99	20.00	3.87	-	-	-	3.30	8.01	3.75	-	-	-
11-Nov-21	1.99	10.00	3.37	-	-	-	3.50	5.80	3.84	-	-	-
12-Nov-21	2.00	6.51	3.25	-	-	-	3.74	5.80	4.08	-	-	-
13-Nov-21	1.71	7.25	3.10	-	-	-	3.49	5.75	3.92	-	-	-
14-Nov-21	1.50	4.01	2.72	-	-	-	3.00	5.00	3.37	-	-	-
15-Nov-21	1.60	11.00	3.21	-	-	-	3.75	5.66	4.26	-	-	-
16-Nov-21	1.72	12.00	3.29	-	-	-	3.79	5.50	4.32	-	-	-
17-Nov-21	1.41	9.91	3.32	-	-	-	3.30	5.10	3.77	-	-	-
18-Nov-21	1.65	12.91	3.69	-	-	-	3.60	5.20	4.23	-	-	-
19-Nov-21	1.72	6.39	3.31	3.40	5.99	4.11	3.99	5.81	4.39	-	-	-
20-Nov-21	1.71	8.00	3.02	3.36	5.99	4.07	4.11	5.70	4.45	-	-	-
21-Nov-21	1.65	4.20	2.67	-	-	-	3.24	5.50	3.39	-	-	-
22-Nov-21	1.81	6.50	3.34	3.00	5.99	3.94	3.50	5.50	3.90	-	-	-
23-Nov-21	1.98	11.20	3.26	3.05	3.89	3.52	3.50	5.60	3.86	-	-	-
24-Nov-21	1.80	10.62	3.19	3.01	4.06	3.49	3.40	5.60	3.71	-	-	-
25-Nov-21	2.00	11.52	3.61	3.00	3.96	3.44	3.39	5.70	3.67	-	-	-
26-Nov-21	2.09	12.17	3.88	2.99	3.36	3.06	3.40	6.00	3.70	-	-	-
27-Nov-21	2.08	15.00	3.92	3.04	3.73	3.49	3.20	8.00	3.53	-	-	-
28-Nov-21	1.99	6.01	3.15	4.99	4.99	4.99	3.00	5.30	3.32	-	-	-
29-Nov-21	1.99	15.00	3.74	-	-	-	3.29	9.30	3.67	-	-	-
30-Nov-21	1.85	15.00	3.53	2.99	2.99	2.99	3.40	13.30	3.88	-	-	-
	1.37#	20.00#	3.26	2.99#	5.99#	3.74	0.80#	13.30#	3.71	-	-	-

Source: IEX and PXIL

Note: GDAM was introduced on only IEX from 27th October 2021 onwards

* 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-26(b): PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), NOVEMBER 2021

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-Nov-21	1.28	4.00	2.91	-	-	-	0.00	7.08	3.54
2-Nov-21	1.50	5.01	3.23	-	-	-	0.00	8.00	3.40
3-Nov-21	0.50	4.52	2.81	-	-	-	0.00	8.00	2.98
4-Nov-21	0.50	4.44	2.25	-	-	-	0.00	8.00	2.20
5-Nov-21	0.80	3.68	2.09	-	-	-	0.00	8.00	2.30
6-Nov-21	1.00	5.85	2.88	-	-	-	0.00	8.00	3.10
7-Nov-21	0.99	4.50	2.90	-	-	-	0.00	7.33	3.55
8-Nov-21	1.50	20.00	5.11	-	-	-	0.00	8.00	4.34
9-Nov-21	1.70	8.52	4.49	-	-	-	0.00	8.00	3.88
10-Nov-21	1.50	8.00	3.61	-	-	-	0.00	8.00	3.44
11-Nov-21	1.80	4.15	3.18	-	-	-	0.00	8.00	2.90
12-Nov-21	0.50	7.50	3.29	-	-	-	0.00	8.00	3.15
13-Nov-21	1.97	8.34	3.55	-	-	-	0.00	8.00	3.18
14-Nov-21	1.60	4.10	3.20	-	-	-	0.00	8.00	2.64
15-Nov-21	1.62	18.66	3.73	-	-	-	0.00	8.00	3.12
16-Nov-21	1.50	7.00	3.36	-	-	-	0.00	5.86	2.85
17-Nov-21	1.50	20.00	5.25	-	-	-	0.00	8.00	4.29
18-Nov-21	1.78	9.12	4.09	-	-	-	0.00	8.00	4.14
19-Nov-21	1.69	9.00	3.30	-	-	-	0.00	7.40	2.60
20-Nov-21	1.40	5.80	3.16	-	-	-	0.00	7.68	2.74
21-Nov-21	1.40	3.50	2.78	-	-	-	0.00	4.96	2.42
22-Nov-21	1.50	11.00	3.70	-	-	-	0.00	7.40	3.09
23-Nov-21	1.70	11.00	3.73	-	-	-	0.00	8.00	3.41
24-Nov-21	2.16	9.01	3.81	-	-	-	0.00	7.69	3.43
25-Nov-21	1.70	20.00	4.36	-	-	-	0.00	8.00	3.91
26-Nov-21	2.36	20.00	4.68	-	-	-	0.00	7.22	3.82
27-Nov-21	2.00	19.99	4.30	-	-	-	0.00	8.00	3.31
28-Nov-21	1.49	3.50	2.82	-	-	-	0.00	8.00	2.50
29-Nov-21	1.40	8.33	3.45	-	-	-	0.00	8.00	2.92
30-Nov-21	1.61	20.00	3.95	-	-	-	0.00	7.13	3.36
	0.50#	20.00#	3.60	-	-	-	0.00#	8.00#	3.22

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.

Maximum/Minimum in the month

Table-27: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), NOVEMBER 2021

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	328.37	41.56	-286.81	0.55	290.90	290.36	22.67	56.59	-33.92	-30.37
HARYANA	113.56	392.78	279.22	20.06	255.20	235.14	50.06	24.05	26.02	540.38
RAJASTHAN	1.64	132.67	131.03	264.23	466.69	202.46	90.53	52.48	38.05	371.54
DELHI	417.31	86.05	-331.26	84.87	141.13	56.26	7.14	32.69	-25.55	-300.55
UTTAR PRADESH	229.80	80.35	-149.44	36.43	290.76	254.33	53.73	75.73	-22.01	82.88
UTTARAKHAND	27.48	172.18	144.69	0.22	103.98	103.76	27.92	10.03	17.89	266.35
HIMACHAL PRADESH	16.49	297.56	281.07	149.52	35.74	-113.78	22.52	12.95	9.57	176.86
J & K	74.76	0.00	-74.76	5.49	584.72	579.23	39.65	15.69	23.96	528.43
CHANDIGARH	0.00	0.00	0.00	0.00	0.00	0.00	2.03	19.35	-17.32	-17.32
MP	40.82	920.73	879.91	151.84	93.63	-58.20	51.88	83.99	-32.11	789.60
MAHARASHTRA	8.34	400.21	391.88	30.14	776.97	746.84	28.78	139.58	-110.80	1027.91
GUJARAT	1.03	801.31	800.28	11.75	1015.97	1004.22	67.47	85.34	-17.87	1786.63
CHHATTISGARH	164.14	41.32	-122.82	428.22	0.03	-428.19	21.84	20.22	1.62	-549.39
GOA	0.00	29.85	29.85	19.47	3.70	-15.77	5.67	9.73	-4.06	10.03
DAMAN AND DIU	0.00	0.00	0.00	0.00	10.23	10.23	7.82	0.90	6.92	17.15
DADRA & NAGAR HAVELI	0.00	0.00	0.00	0.06	55.13	55.07	6.66	3.90	2.76	57.83
ANDHRA PRADESH	3.08	41.27	38.19	32.98	705.67	672.69	30.17	49.32	-19.15	691.73
KARNATAKA	239.68	25.75	-213.93	309.62	50.94	-258.68	45.15	78.00	-32.85	-505.46
KERALA	55.18	0.00	-55.18	316.39	30.66	-285.73	12.12	39.75	-27.63	-368.54
TAMIL NADU	0.00	110.40	110.40	5.49	618.06	612.57	49.43	77.08	-27.65	695.32
PONDICHERRY	0.00	0.00	0.00	0.00	0.00	0.00	2.76	16.47	-13.71	-13.71
TELANGANA	84.98	2.70	-82.28	238.17	193.22	-44.95	29.24	62.31	-33.07	-160.30
WEST BENGAL	72.60	205.49	132.90	1296.69	26.47	-1270.22	16.76	42.67	-25.90	-1163.23
ODISHA	93.66	466.35	372.69	318.95	119.01	-199.94	38.84	23.90	14.94	187.68
BIHAR	0.00	79.11	79.11	534.42	9.63	-524.80	39.46	22.63	16.83	-428.86
JHARKHAND	1.30	177.38	176.08	22.13	1.68	-20.45	11.21	20.73	-9.52	146.11
SIKKIM	0.00	28.39	28.39	32.61	0.08	-32.53	1.89	6.01	-4.12	-8.26
DVC	112.79	0.00	-112.79	10.82	0.00	-10.82	42.81	17.06	25.75	-97.86
ARUNACHAL PRADESH	1.89	0.00	-1.89	11.03	0.00	-11.03	5.84	2.07	3.77	-9.16
ASSAM	0.00	2.02	2.02	161.70	45.77	-115.93	10.80	7.80	3.00	-110.91
MANIPUR	0.00	0.00	0.00	4.07	3.56	-0.51	2.78	2.10	0.69	0.18
MEGHALAYA	3.96	55.47	51.51	0.00	14.08	14.08	3.15	3.08	0.07	65.67
MIZORAM	0.00	0.00	0.00	0.36	0.00	-0.36	0.36	4.51	-4.15	-4.51
NAGALAND	0.02	10.80	10.78	3.65	0.00	-3.65	0.57	2.17	-1.61	5.52
TRIPURA	0.00	0.00	0.00	66.26	0.00	-66.26	0.66	13.09	-12.43	-78.69
NTPC STNS-NR	0.00	0.00	0.00	0.00	0.00	0.00	71.54	39.30	32.23	32.23
NHPC STNS	0.00	0.00	0.00	0.00	0.00	0.00	15.03	79.76	-64.73	-64.73
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.08	0.04	0.04
RAIL	0.00	0.00	0.00	0.00	11.24	11.24	6.11	3.02	3.09	14.33
NEP	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.06	0.06
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	5.57	1.46	4.12	4.12
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	0.76	1.61	-0.85	-0.85
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	2.14	6.94	-4.80	-4.80
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	1.58	4.75	-3.17	-3.17
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	3.43	14.47	-11.05	-11.05
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	1.61	0.28	1.32	1.32
AD HYDRO	0.00	0.00	0.00	24.15	0.00	-24.15	0.49	0.67	-0.19	-24.33
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	4.95	2.40	2.55	2.55
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	0.59	1.92	-1.33	-1.33
KARCHAM WANGTOO	0.00	0.00	0.00	22.53	0.00	-22.53	2.61	3.61	-1.00	-23.53
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.36	4.15	-3.79	-3.79
SORANG HEP	5.37	0.00	-5.37	3.39	0.00	-3.39	0.72	0.81	-0.09	-8.85
SAINJ HEP	0.00	0.00	0.00	15.44	0.00	-15.44	0.56	1.06	-0.50	-15.94
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.38	0.04	0.04
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.64	0.87	1.77	1.77
SB_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.99	0.64	1.35	1.35

ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.97	2.79	-1.82	-1.82
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.32	1.00	1.00
TATA_SLR	26.51	0.00	-26.51	0.00	0.00	0.00	7.17	0.26	6.91	-19.60
RENEW_SLR_BKN	0.00	0.00	0.00	0.00	0.00	0.00	1.91	1.45	0.46	0.46
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	7.98	1.67	6.31	6.31
ARERJL_SLR	41.53	0.00	-41.53	0.00	0.00	0.00	6.28	0.35	5.93	-35.61
ASEJTL_SLR	9.12	0.00	-9.12	0.00	0.00	0.00	0.74	0.82	-0.08	-9.20
SINGOLI BHATWARI HVDC	13.38	0.00	-13.38	7.75	0.00	-7.75	0.14	0.58	-0.43	-21.56
AZURE43_SLR	7.27	0.00	-7.27	7.34	0.00	-7.34	3.52	3.83	-0.31	-14.91
MRPL	0.00	0.00	0.00	0.00	0.00	0.00	1.94	3.05	-1.11	-1.11
SB6_POKARAN	0.00	0.00	0.00	0.00	0.00	0.00	4.08	1.42	2.65	2.65
EDEN_SLR	3.84	0.00	-3.84	0.00	0.00	0.00	0.95	2.74	-1.79	-5.63
SBSR_SLR	5.77	0.00	-5.77	0.00	0.00	0.00	0.48	2.77	-2.30	-8.06
RENEWSW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.48	2.70	-1.22	-1.22
ADANIHB_SLR	16.85	0.00	-16.85	0.00	0.00	0.00	10.39	4.97	5.427	-11.421
RENEWJH_SLR	42.86	0.00	-42.86	2.35	0.00	-2.35	2.37	1.76	0.61	-44.59
ADANIHB_WIND	6.04	0.00	-6.04	0.00	0.00	0.00	0.00	0.00	0.00	-6.04
ADANI_SLR 4	6.55	0.00	-6.55	0.00	0.00	0.00	0.00	0.00	0.00	-6.55
AHEJOL_S_FTG2	53.60	0.00	-53.60	0.00	0.00	0.00	0.00	0.00	0.00	-53.60
AHEJ2L_SOLAR	17.48	0.00	-17.48	0.00	0.00	0.00	0.00	0.00	0.00	-17.48
AHEJ2L_WIND	1.21	0.00	-1.21	0.00	0.00	0.00	0.00	0.00	0.00	-1.21
AHEJ3L_SOLAR	22.44	0.00	-22.44	0.00	0.00	0.00	6.59	0.47	6.11	-16.33
AHEJ3L_WIND	1.86	0.00	-1.86	0.00	0.00	0.00	0.00	0.00	0.00	-1.86
RENEWSW	0.55	0.00	-0.55	0.00	0.00	0.00	1.08	0.69	0.39	-0.16
RENEWSB	1.32	0.00	-1.32	0.00	0.00	0.00	0.00	0.00	0.00	-1.32
AZURE41_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.30	0.73	0.73
AYANA_RP1	0.00	0.00	0.00	0.41	0.00	-0.41	0.31	0.00	0.31	-0.09
AVAADASN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.30	0.63	1.67	1.67
NTPC STATIONS-WR	0.00	0.00	0.00	20.44	0.00	-20.44	134.35	100.47	33.88	13.44
BHADRAVATHI HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	-0.28	-0.28
VINDHYACHAL HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	-0.22	-0.22
JINDAL POWER	15.86	0.00	-15.86	126.74	0.00	-126.74	1.72	4.06	-2.34	-144.94
LANKO_AMK	5.04	0.00	-5.04	0.00	0.00	0.00	0.12	4.18	-4.06	-9.10
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	5.60	2.66	2.94	2.94
ACBIL	0.00	0.00	0.00	42.44	0.00	-42.44	0.96	5.48	-4.52	-46.96
BALCO	1.42	0.00	-1.42	1.03	0.00	-1.03	16.52	2.83	13.69	11.24
RGPPL	0.00	0.00	0.00	4.74	0.00	-4.74	3.80	2.26	1.53	-3.21
CGPL	0.00	0.00	0.00	0.00	0.00	0.00	14.41	2.60	11.81	11.81
DCPP	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.04	0.04
EMCO	0.00	0.00	0.00	15.62	0.00	-15.62	5.28	1.03	4.25	-11.37
KSK MAHANADI	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.86	0.29	0.29
ESSAR POWER	4.16	0.00	-4.16	81.16	0.00	-81.16	2.60	0.99	1.61	-83.71
JINDAL STAGE-II	1.26	0.00	-1.26	62.35	0.00	-62.35	3.97	3.59	0.38	-63.23
DB POWER	257.46	0.00	-257.46	69.57	0.00	-69.57	7.12	2.27	4.85	-322.18
DHARIWAL POWER	0.00	0.00	0.00	0.16	0.00	-0.16	0.84	0.39	0.45	0.29
JAYPEE NIGRIE	258.33	0.00	-258.33	38.72	0.00	-38.72	0.38	4.57	-4.19	-301.23
DGEN MEGA POWER	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.98	0.98
MB POWER	109.69	0.00	-109.69	146.56	0.00	-146.56	7.23	7.36	-0.13	-256.38
MARUTI COAL	0.00	0.00	0.00	28.19	0.00	-28.19	0.00	0.00	0.00	-28.19
JHABUA POWER_MP	0.00	0.00	0.00	24.23	0.00	-24.23	7.49	4.51	2.98	-21.25
SASAN UMPP	0.00	0.00	0.00	6.69	0.00	-6.69	0.41	53.29	-52.89	-59.58
TRN ENERGY	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.22	0.22
RKM POWER	148.80	0.00	-148.80	47.55	0.00	-47.55	2.68	4.44	-1.76	-198.11
SKS POWER	158.51	0.00	-158.51	3.19	0.00	-3.19	0.19	1.70	-1.51	-163.22
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	-3.32	-3.32
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	7.86	0.00	7.86	7.86
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.68	0.68
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	2.61	1.57	1.04	1.04
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	2.84	2.04	0.80	0.80
OSTRO	0.00	0.00	0.00	0.00	0.00	0.00	3.06	11.00	-7.94	-7.94
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.09	1.46	1.64	1.64
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	4.61	10.44	-5.83	-5.83
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	6.76	19.73	-12.97	-12.97

INOX_BHUI	0.00	0.00	0.00	0.00	0.00	0.00	3.40	3.12	0.28	0.28
AGEMPL BHUI	0.00	0.00	0.00	0.00	0.00	0.00	9.63	9.38	0.25	0.25
REGL	263.81	0.00	-263.81	21.26	0.00	-21.26	0.00	0.00	0.00	-285.07
RPREL	314.37	0.00	-314.37	20.16	0.00	-20.16	5.47	3.23	2.24	-332.29
AMPS Hazira	0.00	58.97	58.97	0.00	0.66	0.66	21.63	21.54	0.09	59.71
HVDC RAIGARH	0.00	0.00	0.00	0.00	224.64	224.64	0.33	0.03	0.30	224.94
RGPPL_IR	0.00	0.00	0.00	0.28	0.00	-0.28	0.00	0.00	0.00	-0.28
RGPPL_Others	0.00	0.00	0.00	0.09	0.00	-0.09	0.00	0.00	0.00	-0.09
ALFANAR_BHUI	0.00	0.00	0.00	0.00	0.00	0.00	2.14	12.60	-10.46	-10.46
RENEW_BHUI	0.00	0.00	0.00	0.00	0.00	0.00	6.02	10.76	-4.74	-4.74
ADANI_WIND	7.35	0.00	-7.35	0.00	0.00	0.00	0.00	0.00	0.00	-7.35
CONTINUM PT	1.03	0.00	-1.03	0.17	0.00	-0.17	0.00	0.00	0.00	-1.20
TPREL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.72	0.37	0.37
ESPL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.65	1.59	0.06	0.06
GIPCL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.62	0.86	0.86
NTPC STATIONS-SR	28.29	0.00	-28.29	81.75	0.00	-81.75	38.46	25.19	13.27	-96.77
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	0.42	0.00	0.42	0.42
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.67	0.67
COASTGEN	0.00	0.00	0.00	0.00	0.00	0.00	3.29	0.61	2.68	2.68
THERMAL POWERTECH	0.00	0.00	0.00	0.00	0.00	0.00	15.65	0.90	14.75	14.75
IL&FS	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	4.50	4.50
NLC	0.00	0.00	0.00	49.63	0.00	-49.63	37.81	22.49	15.32	-34.31
SEMBCORP	79.08	0.00	-79.08	49.25	0.00	-49.25	9.97	1.43	8.55	-119.78
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	20.63	1.75	18.87	18.87
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	7.59	0.18	7.41	7.41
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.51	0.73	0.78	0.78
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.49	0.79	0.70	0.70
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.71	0.82	0.82
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.94	-0.01	-0.01
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.89	1.71	0.17	0.17
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.74	0.27	0.27
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	5.12	2.87	2.25	2.25
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	12.68	4.91	7.77	7.77
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	12.76	2.05	10.71	10.71
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.01	-0.11	-0.11
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	10.11	4.27	5.84	5.84
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	5.10	7.65	-2.54	-2.54
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	4.04	2.82	1.22	1.22
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	3.88	5.32	-1.44	-1.44
FORTUM1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.32	1.21	1.11	1.11
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.88	1.74	2.14	2.14
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.70	0.62	0.62
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	8.47	4.98	3.49	3.49
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.36	0.60	0.76	0.76
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.70	0.49	0.49
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.79	0.13	0.13
AVAADA1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.97	1.81	1.16	1.16
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.74	1.23	-0.49	-0.49
ADY2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.72	1.24	-0.52	-0.52
ADY13_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.90	-0.16	-0.16
ADY3_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.89	0.23	0.23
ADY6_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.98	0.08	0.08
ADY10_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.78	1.02	-0.23	-0.23
AZURE_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.45	2.03	-0.57	-0.57
FORTUM2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.73	4.22	-0.49	-0.49
AVAADA2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.63	2.17	0.47	0.47
KREDL_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.61	0.49	1.12	1.12
AYANA_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	4.66	3.29	1.37	1.37
SPRNG_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	6.42	4.01	2.41	2.41
SPRING_PUGALUR	0.00	0.00	0.00	0.00	0.00	0.00	5.54	3.29	2.24	2.24
OSTRO Hiriyur	0.00	0.00	0.00	0.00	0.00	0.00	4.78	2.87	1.92	1.92
NTPC STNS-ER	0.00	0.00	0.00	3.18	0.00	-3.18	58.18	45.72	12.47	9.28

MAITHON POWER LTD	0.00	0.00	0.00	0.00	0.00	0.00	3.83	8.08	-4.25	-4.25
NPGC	0.00	0.00	0.00	3.63	0.00	-3.63	7.81	5.26	2.55	-1.07
ADHUNIK POWER LTD	129.75	0.00	-129.75	15.91	0.00	-15.91	2.21	1.41	0.80	-144.87
CHUZACHEN HEP	0.00	0.00	0.00	3.66	0.00	-3.66	0.43	0.88	-0.45	-4.11
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.93	1.09	-0.17	-0.17
GMR KAMALANGA	21.55	0.00	-21.55	26.98	0.00	-26.98	2.97	4.60	-1.63	-50.16
JITPL	266.67	0.00	-266.67	124.67	0.00	-124.67	6.88	3.40	3.48	-387.86
TEESTA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.90	-2.82	-2.82
DAGACHU	43.22	0.00	-43.22	0.00	0.00	0.00	3.08	0.16	2.92	-40.30
JORETHANG	21.19	0.00	-21.19	15.51	0.00	-15.51	4.49	0.23	4.25	-32.45
NEPAL(NVVN)	0.00	0.00	0.00	26.21	0.00	-26.21	17.05	0.17	16.88	-9.33
BANGLADESH	0.00	0.00	0.00	0.00	0.00	0.00	2.85	2.60	0.24	0.24
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	-0.02	-0.02
TEESTA STG3	37.10	0.00	-37.10	232.53	0.15	-232.38	8.10	0.86	7.24	-262.24
DIKCHU HEP	14.43	0.00	-14.43	6.92	0.00	-6.92	0.60	0.95	-0.34	-21.70
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.36	-0.35	-0.35
TASHIDENG HEP	22.35	0.00	-22.35	15.15	0.00	-15.15	3.53	0.24	3.29	-34.21
BRBCL, NABINAGAR	0.00	0.00	0.00	0.00	0.00	0.00	3.58	8.24	-4.66	-4.66
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	3.45	2.80	0.65	0.65
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	137.36	0.00	137.36	137.36
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.19	90.52	-90.33	-90.33
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	28.93	0.00	28.93	28.93
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	4.50	4.77	-0.27	-0.27
RONGNICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.86	-0.50	-0.50
NTPC STATIONS-NER	7.38	0.00	-7.38	11.72	0.00	-11.72	5.89	2.50	3.40	-15.70
NEEPCO STATIONS	32.20	0.00	-32.20	87.59	0.00	-87.59	1.86	8.45	-6.59	-126.39
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.95	0.21	0.21
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.39	-0.12	-0.12
ONGC PALATANA	33.56	0.00	-33.56	13.14	0.00	-13.14	1.29	1.22	0.07	-46.63
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.57	-0.36	-0.36
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.45	-0.39	-0.39

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, NOVEMBER 2021					
Sr. No.	Details of REC Transactions	IEX		PXIL	
		Solar	Non-Solar	Solar	Non-Solar
A	Volume of Buy Bid	974251	2317540	79456	1010589
B	Volume of Sell Bid	804339	3043178	157185	1534538
C	Ratio of Buy Bid to Sell Bid Volume	1.21	0.76	0.51	0.66
D	Market Clearing Volume (MWh)	253118	2190431	63126	1010589
E	Weighted average Market Clearing Price (₹/MWh)	2000	1000	2000	1000

Source: IEX and PXIL

Note 1: 1 REC = 1 MWh