

Monthly Report on Short-term Transactions of Electricity in India

September 2022



Economics Division
Central Electricity Regulatory Commission
36, Janpath, Chanderlok Building



Contents

S.No.	Contents	Page No
	Contents	i
	List of Tables	ii
	List of Figures	iii
	Abbreviations	iv
1	Introduction	1
2	Volume of Short-term Transactions of Electricity	1
3	Price of Short-term Transactions of Electricity	3
3.1	<i>Price of electricity transacted through Traders</i>	3
3.2	<i>Price of electricity transacted through Power Exchanges</i>	3
3.3	<i>Price of electricity transacted through DSM</i>	4
4	Trading Margin	4
5	Volume of Short-term Transactions of Electricity (Regional Entity-wise)	4
6	Congestion on Inter-State Transmission Corridor for Day-Ahead Market and Real Time Market on Power Exchanges	5
7	Volume and Price of Renewable Energy Certificates (RECs)	6
8	Inferences	7

S.No.	List of Tables	Page No.
Table-1	Volume of Short-term Transactions of Electricity in India	10
Table-2	Percentage Share of Electricity Transacted by Trading Licensees	12
Table-3	Price of Electricity Transacted through Traders	13
Table-4	Price of Electricity Transacted through Traders (Time-wise)	13
Table-5	Price of Electricity Transacted in Day Ahead Market through Power Exchanges	13
Table-6	Price of Electricity Transacted in Green Day Ahead Market through Power Exchanges	13
Table-7	Price of Electricity Transacted in Real Time Market through Power Exchanges	13
Table-8	Volume and Price of Electricity in Term Ahead Market of IEX	14
Table-9	Volume and Price of Electricity in Term Ahead Market of PXIL	14
Table-10	Volume and Price of Electricity in Term Ahead Market of HPX	14
Table-11	Volume and Price of Electricity in Green Term Ahead Market of IEX	14
Table-12	Volume and Price of Electricity in Green Term Ahead Market of PXIL	14
Table-13	Price of Electricity Transacted through DSM	14
Table-14	Volume of Electricity Sold through Bilateral	16
Table-15	Volume of Electricity Purchased through Bilateral	18
Table-16	Volume of Electricity Sold in Day Ahead Market through Power Exchanges	19
Table-17	Volume of Electricity Purchased in Day Ahead Market through Power Exchanges	21
Table-18	Volume of Electricity Sold in Green Day Ahead Market through Power Exchanges	22
Table-19	Volume of Electricity Purchased in Green Day Ahead Market through Power Exchanges	23
Table-20	Volume of Electricity Sold in Real Time Market through Power Exchanges	24
Table-21	Volume of Electricity Purchased in Real Time Market through Power Exchanges	26
Table-22	Volume of Electricity Under drawal through DSM	27
Table-23	Volume of Electricity Over drawal through DSM	31
Table-24	Total Volume of Net Short-term Transactions of Electricity (Regional Entity-wise)	35
Table-25	Details of Congestion in Power Exchanges	39
Table-26	Volume of Short-term Transactions of Electricity in India (Day-wise)	40
Table-27(a)	Price of Day Ahead Transactions of Electricity (Day-Wise)	41
Table-27(b)	Price of Green Day Ahead Transactions of Electricity (Day-Wise)	42
Table-27(c)	Price of Real Time Transactions and DSM (Day-Wise)	43
Table-28	Volume of Short-term Transactions of Electricity (Regional Entity-wise)	44
Table-29	Volume and Price of Renewable Energy Certificates (RECs) Transacted through Power Exchanges	48
Table-30	Volume and Price of Cross Border Trade through Day Ahead Market at IEX	48

S. No.	List of Figures	Page No.
Figure-1	Volume of various kinds of Electricity Transactions in Total Electricity Generation	10
Figure-2	Volume of Short-term Transactions of Electricity	10
Figure-3	Volume transacted in different markets segments on Power Exchanges	11
Figure-4	Volume of Short-term Transactions of Electricity (Day-wise)	11
Figure-5	Percentage Share of Electricity Transacted by Trading Licensees	12
Figure-6	Weighted Average Price of Short-term Transactions Electricity	15
Figure-7	Weighted Average Price of Short-term Transactions Electricity (Day-wise)	15

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	ChuzachenHydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
CLEANSPL_SLR	Clean Solar Jodhpur Pvt Ltd
COASTGEN	Coastal Energen Private Limited
DAGACHU	Dagachhu Hydro Power Corporation
DAM	Day Ahead Market
DB POWER	Diligent Power Pvt. Ltd.
DCPP	Donga Mahua Captive Power Plant
DD&DNH	Daman and Diu & Dadar Nagar Haveli
DGEN MEGA POWER	DGEN Mega Power Project
DGPCL Bhutan	Druk Green Power Corporation Ltd., Bhutan
DHARIWAL POWER	Dhariwal Power Station
DIKCHU HEP	Dikchu Hydro-electric Project, Sikkim
DOYANG HEP	DoyangHydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EDEN_SLR	Eden RE Cite Private limited
EMCO	EMCO Energy Limited
ESPL_RADHANESDA	Electro Solaire Private Limited, Radhanesda
ESSAR POWER	Essar Power Limited
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
HPX	Hindustan Power Exchange Limited
HVDC ALPD	AlipurduarHigh Voltage Direct Current Link
HVDC CHAMPA	Champa-Kurukshetra High Voltage Direct Current Link
HVDC PUS	PasauliHigh 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
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_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_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 Six Private Limited, Pokaran
SBG_CLEANTECH_SLR	SBG Cleantech Ltd
SBG_NPK	SB Energy Solar Private Limited, NP Kunta
SBG_PVGD	SB Energy Solar Private Limited, Pavagada
SBSR_SLR	SBSR Power Cleantech Eleven Private Limited
SEMBCORP	Sembcorp Gayatri Power Ltd
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SESPL	Srijan Energy Systems Pvt. Ltd.
SINGOLI BHATWARI HEP	Singoli-Bhatwari Hydroelectric Project, Uttarakhand
SKRPL	Sitac Kabini Renewables Pvt. Ltd.
SPRNG_NPKUNTA	Sprng Energy, NP Kunta
SPRING_PUGALUR	Spring Solar Power Private Limited, Pugalur
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), Power Exchange India Ltd (PXIL) and Hindustan Power Exchange Ltd (HPX)), 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 **September 2022** is presented in the following sections.

2. Volume of Short-term Transactions of Electricity

2.1. During September 2022, total electricity generation, excluding generation from renewable and captive power plants in India was 119931.02 MU (Table-1). Of the total electricity generation, 14.22% was transacted through short-term, comprising of 6.68% through bilateral (through traders and term-ahead contracts on power exchanges, and directly between distribution companies), followed by 5.49% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)} and 2.05% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions (17053.80 MU), 46.98% was transacted through bilateral (28.48% through traders and term-ahead contracts on power exchanges, and 18.50% directly between distribution companies), followed by 38.59% through power exchanges {DAM (including G-DAM) and RTM} and 14.43% through DSM (Table-1 & Figure-2). Daily volume of short-term transactions is shown in Table-26 & Figure-4.

2.3. Of the total volume of electricity transacted through power exchanges, 53.49% of the volume was transacted in DAM (including G-DAM), followed by 26.74% in RTM and 19.77% 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 46 trading licensees as of September 2022. Of which, 31 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Tata Power Trading Company (P) Ltd., Manikaran Power Ltd. and Adani Enterprises Ltd. had a share of 82.82% 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 0.2048 for the month of September 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 4049.64 MU, and 12.89 MU respectively. No electricity was transacted through DAM of HPX. The volume of total buy bids and sell bids was 6865.04 MU and 7550.91 MU respectively in IEX, while the same was 67.04 MU and 127.92 MU respectively in PXIL. The volume of total sell bids was 0.78 MU in HPX, while no buy bids were received.

2.7. Of the total volume of electricity transacted in the DAM of IEX, volume sold by the neighboring countries of India was 254.28 MU, while no volume was purchased, under the Cross Border Trade of electricity through power exchange (Table-30). No Cross Border transaction of electricity was undertaken through PXIL and HPX.

2.8. The volume of electricity transacted in the G-DAM of IEX and PXIL was 324.39 MU and 0.25 MU, while no electricity was transacted in the G-DAM of HPX. The volume of total

buy bids and sell bids was 1555.21 MU and 515.65 MU respectively in IEX, while the same was 5.42 MU and 2.19 MU respectively in PXIL. No bids were received at HPX.

2.9. The volume of electricity transacted in the RTM of IEX and PXIL was 2192.70 MU and 0.55 MU respectively, while no electricity was transacted in the RTM of HPX. The volume of total buy bids and sell bids was 3271.09 MU and 3422.95 MU respectively in IEX, while the same was 0.55 MU and 0.60 MU respectively in PXIL. No bids were received in HPX. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

2.10. The volume of electricity transacted in the TAM of IEX, PXIL and HPX was 879.75 MU, 480.07 MU and 106.94 MU respectively (Table-8, Table-9 & Table-10). The volume of electricity transacted in the Green Term Ahead Market (G-TAM) of IEX and PXIL was 129.70 MU and 25.47 MU respectively (Table-11 & Table-12). No electricity was transacted in G-TAM of HPX.

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 ₹2.70/kWh, ₹8.42/kWh and ₹5.19/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 ₹5.24/kWh, ₹7.84/kWh and ₹4.75/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 ₹1.20/kWh, ₹12.00/kWh and ₹5.87/kWh respectively. These prices in the DAM of PXIL were ₹2.99/kWh, ₹12.00/kWh and ₹7.44/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹2.88/kWh, ₹12.00/kWh and ₹5.42/kWh respectively. These prices in the G-DAM of PXIL were ₹5.84/kWh, ₹5.88/kWh and ₹5.87/kWh respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.12/kWh, ₹12.00/kWh and ₹4.68/kWh respectively. These prices in the RTM of PXIL were ₹12.00/kWh,

₹12.00/kWh and ₹12.00/kWh respectively (Table-7). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹6.95/kWh, ₹6.47/kWh and ₹7.77/kWh respectively (Table-8, Table-9 and Table-10). The price of electricity transacted in the G-TAM of IEX and PXIL was ₹5.72/kWh and ₹5.87/kWh respectively (Table-11 and Table-12). No electricity was transacted in DAM, G-DAM, RTM & G-TAM of HPX.

3.3. **Price of electricity transacted through DSM:** The minimum, maximum and average price of DSM was ₹0.00/kWh, ₹8.00/kWh and ₹4.95/kWh respectively (Table-13).

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-27(a), (b) & (c) 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 ₹0.029/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 40.15% of the volume. These were Madhya Pradesh, Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Sembcorp Gayatri Power Ltd. and Raipur Energen Limited (Table-14). Top 5 regional entities/states purchased 63.48% of the volume, and these were Punjab, Haryana, Maharashtra, Delhi and Gujarat (Table-15).

5.2. Of the total DAM transactions at power exchanges, top 5 regional entities/states sold 39.24% of the volume, and these were Telangana, Uttar Pradesh, Karnataka, Nepal (through

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.

NVVN) and Kerala (Table-16). Top 5 regional entities/states purchased 58.45% of the volume, and these were Gujarat, Rajasthan, Uttar Pradesh, Punjab and Haryana (Table-17).

5.3. Of the total G-DAM transactions at power exchanges, top 5 regional entities/states sold 73.77% of the volume, and these were Andhra Pradesh, Karnataka, Telangana, Adani Wind Energy and Adani Hybrid Energy Jaisalmer Three Limited (Solar) (Table-18). Top 5 regional entities/states purchased 61.07% of the volume, and these were Gujarat, DVC, Punjab, Delhi and Assam (Table-19).

5.4. Of the total RTM transactions at power exchanges, top 5 regional entities/states sold 48.80% of the volume, and these were Madhya Pradesh, Bihar, Odisha, Kerala and Himachal Pradesh (Table-20). Top 5 regional entities/states purchased 55.69% of the volume, and these were Rajasthan, Telangana, Uttar Pradesh, Punjab and Maharashtra (Table-21).

5.5. Of the total under drawal in September 2022, top 5 regional entities/states under drew 27.07% of the volume, and these were Kakrapar Atomic Power Station Unit 3 & 4, Chhukha Hydroelectric Project Bhutan, Gujarat, NHPC Stations and Madhya Pradesh (Table-22). Top 5 regional entities/states over drew 25.40% of the total over drawal volume, and these were NTPC Stations (Western Region), Tala Hydroelectric Project Bhutan, NTPC Stations (Northern Region), Haryana and Rajasthan (Table-23).

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-24 & 28. Top 5 electricity selling regional entities/states were Madhya Pradesh, Himachal Pradesh, Karnataka, Teesta Stage 3 Hydro Power Project and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Punjab, Haryana, Gujarat, Rajasthan and Maharashtra.

6. Congestion² on Inter-State Transmission Corridor for Day-Ahead Market and Real Time Market on Power Exchanges

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

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 cleared volume and actual cleared volume. During the month of September 2022, congestion was experienced in RTM of IEX and DAM of PXIL (Table-25).

6.3. The volume of electricity that could not be cleared due to congestion in RTM of IEX was 0.26% of the unconstrained cleared volume. In terms of time, congestion occurred was 3.13% during the month. The volume of electricity that could not be cleared due to congestion in DAM of PXIL was 0.34% of the unconstrained cleared volume. In terms of time, congestion occurred was 0.69% during the month (Table-25).

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

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.

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 September 2022 are shown in Table-29. The market clearing volume of solar RECs transacted on IEX, PXIL and HPX were 390477, 178029 and 680 respectively, and the weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX. Market clearing volume of non-solar RECs transacted on IEX, PXIL and HPX were 197709, 118960 and 2232 respectively, and the weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX.

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 0.08, 0.10 and 0.72 in IEX, PXIL and HPX respectively. For non-solar RECs, the ratio of buy bids to sell bids 0.04, 0.08 and 0.72 in IEX, PXIL and HPX respectively.

8. Inferences:

- a) The percentage of short-term transactions of electricity to total electricity generation was 14.22%.
- b) Of the total short-term transactions (17053.80 MU), 46.98% was transacted through bilateral (28.48% through traders and term-ahead contracts on power exchanges, and 18.50% directly between distribution companies), followed by 38.59% through power exchanges {DAM (including G-DAM) and RTM} and 14.43% through DSM.
- c) Of the total volume of electricity transacted through power exchanges, 53.49% of the volume was transacted in DAM (including G-DAM), followed by 26.74% in RTM and 19.77% in Term Ahead Market (TAM) (including G-TAM)
- d) Top 5 trading licensees had a share of 82.82% 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 0.2048, indicating moderate concentration of market power.

- f) The weighted average sale price of electricity transacted through trading licensees was ₹5.19/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX and PXIL was ₹5.87/kWh and ₹7.44/kWh respectively, while no electricity was transacted in DAM of HPX. The weighted average price of electricity transacted in G-DAM of IEX and PXIL was ₹5.42/kWh and ₹5.87/kWh, while no electricity was transacted in G-DAM of HPX. The weighted average price of electricity transacted in RTM of IEX and PXIL was ₹4.68/kWh and ₹12.00/kWh respectively. No electricity was transacted in the RTM of HPX.
- h) The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹6.95/kWh, ₹6.47/kWh and ₹7.77/kWh respectively. The weighted average price of electricity transacted in the G-TAM of IEX and PXIL was ₹5.72/kWh and ₹5.87/kWh respectively. No electricity was transacted in G-TAM of HPX.
- i) The average price of electricity transacted through DSM was ₹4.95/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.029/kWh, which was in line with the Trading Licence Regulations 2020.
- k) Top 5 electricity selling regional entities/states were Madhya Pradesh, Himachal Pradesh, Karnataka, Teesta Stage 3 Hydro Power Project and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Punjab, Haryana, Gujarat, Rajasthan and Maharashtra.
- l) During the month of September 2022, congestion was experienced in RTM of IEX and DAM of PXIL. The volume of electricity that could not be cleared due to congestion in RTM of IEX was 0.26% of the unconstrained cleared volume. In terms of time, congestion occurred was 3.13% during the month. The volume of electricity that could not be cleared due to congestion in DAM of PXIL was 0.34% of the unconstrained cleared volume. In terms of time, congestion occurred was 0.69% during the month
- m) The market clearing volume of solar RECs transacted on IEX, PXIL and HPX were 390477, 178029 and 680 respectively, and the weighted average market clearing price of

these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX. Market clearing volume of non-solar RECs transacted on IEX, PXIL and HPX were 197709, 118960 and 2232 respectively, and the weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), SEPTEMBER 2022				
Sr. No	Short-term transactions	Volume (MU)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	8011.73	46.98	6.68
	(i) Through Traders and PXs	4856.35	28.48	4.05
	(ii) Direct	3155.38	18.50	2.63
2	Through Power Exchanges	6580.43	38.59	5.49
	(i) IEX			
	(a) DAM	4049.64	23.75	3.38
	(b) RTM	2192.70	12.86	1.83
	(c) GDAM	324.39	1.90	0.27
	(ii) PXIL			
	(a) DAM	12.89	0.08	0.01
	(b) RTM	0.55	0.00	0.00
	(c) GDAM	0.25	0.00	0.00
	(ii) HPX			
	(a) DAM	0.00	0.00	0.000
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
3	Through DSM	2461.64	14.43	2.05
	Total Short-term transactions	17053.80	-	14.22
	Total Generation	119931.02	-	-

Source: NLDC

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

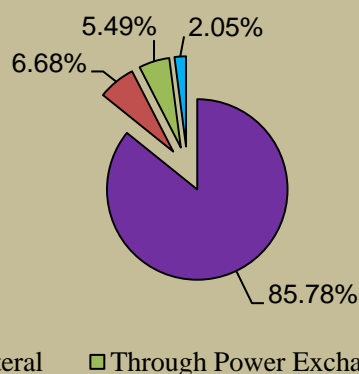


Figure-2: Volume of Short-term Transactions of Electricity, September 2022

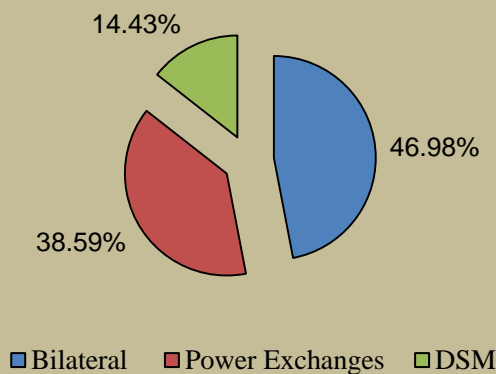


Figure-3: Volume transacted in different markets segments on Power Exchanges, September 2022

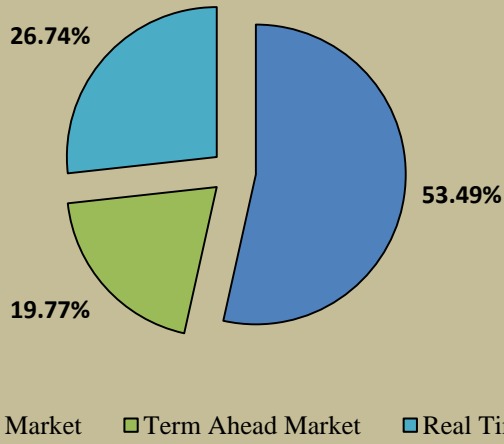


Figure-4: Volume of Short-term Transactions of Electricity, September 2022 (Day-wise)

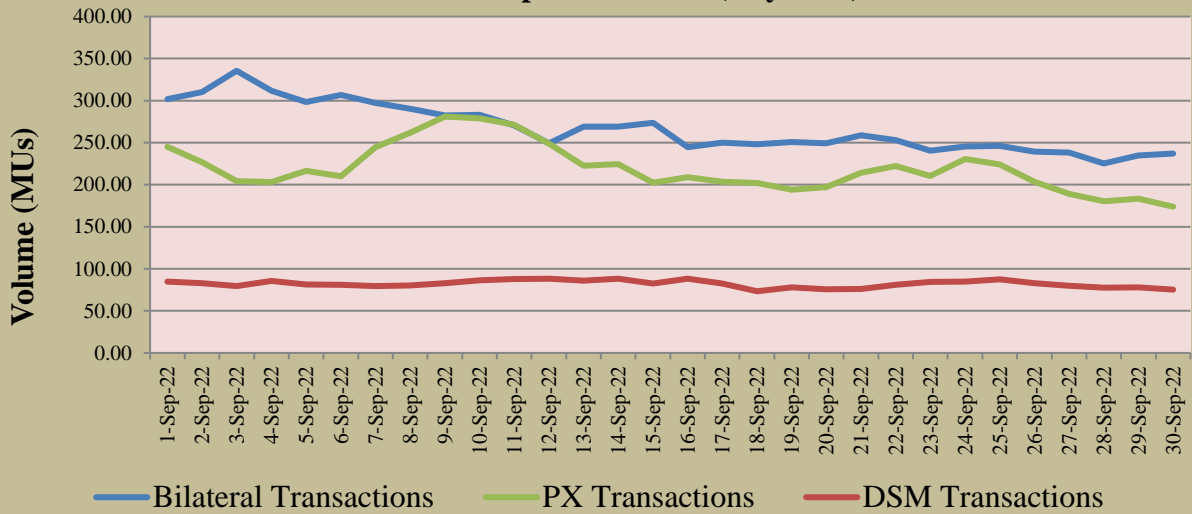


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, SEPTEMBER 2022			
Sr. No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	36.84	0.1357
2	NTPC Vidyut Vyapar Nigam Ltd.	20.35	0.0414
3	Tata Power Trading Company (P) Ltd.	12.19	0.0149
4	Manikaran Power Ltd.	6.98	0.0049
5	Adani Enterprises Ltd.	6.47	0.0042
6	Arunachal Pradesh Power Corporation (P) Ltd	4.36	0.0019
7	GMR Energy Trading Ltd.	2.96	0.0009
8	Kreate Energy (I) Pvt. Ltd.	1.72	0.0003
9	Greenko Energies Pvt Ltd	1.50	0.0002
10	JSW Power Trading Company Ltd	1.15	0.0001
11	NHPC Limited	1.14	0.0001
12	Instinct Infra & Power Ltd.	0.81	0.0001
13	NTPC Ltd.	0.73	0.0001
14	RPG Power Trading Company Ltd.	0.59	0.0000
15	Statkraft Markets Pvt. Ltd.	0.54	0.0000
16	Knowledge Infrastructure Systems (P) Ltd	0.29	0.0000
17	Shubheksha Advisors Pvt. Ltd.	0.28	0.0000
18	Kundan International Pvt. Ltd.	0.28	0.0000
19	Abja Power Private Limited	0.22	0.0000
20	Ambitious Power Trading Company Ltd.	0.19	0.0000
21	NLC India Ltd.	0.13	0.0000
22	Instant Venture Pvt. Ltd.	0.07	0.0000
23	Saranyu Power Trading Private Limited	0.07	0.0000
24	Shree Cement Ltd.	0.05	0.0000
25	Gita Power & Infrastructure Private Limited	0.05	0.0000
26	Ideal Energy Solution Private Limited	0.01	0.0000
27	Phillip Commodities India (P) Ltd.	0.01	0.0000
28	Altilium Energie Private Limited	0.003	0.0000
29	Shell Energy Marketing & Trading India Pvt. Ltd.	0.002	0.0000
30	Renurja Power LLP	0.001	0.0000
31	Customized Energy Solutions India (P) Ltd.	0.0003	0.0000
TOTAL		100.00%	0.2048
Top 5 trading licensees		82.82%	
<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, September 2022

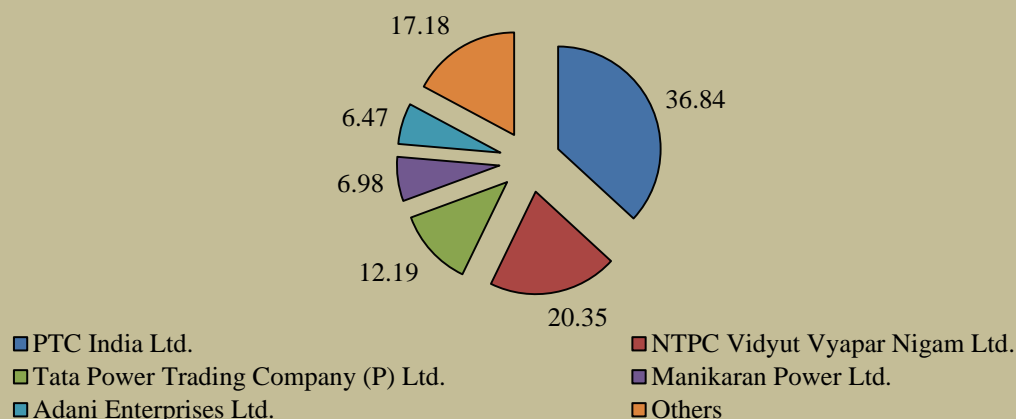


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, SEPTEMBER 2022		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	2.70
2	Maximum	8.42
3	Weighted Average	5.19

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), SEPTEMBER 2022		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	5.24
2	PEAK	7.84
3	OFF PEAK	4.75

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	1.20	2.99	-
2	Maximum	12.00	12.00	-
3	Weighted Average	5.87	7.44	-

Source: IEX, PXIL and HPX

Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	2.88	5.84	-
2	Maximum	12.00	5.88	-
3	Weighted Average	5.42	5.87	-

Source: IEX, PXIL and HPX

Table-7: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	0.12	12.00	-
2	Maximum	12.00	12.00	-
3	Weighted Average	4.68	12.00	-

Source: IEX, PXIL and HPX

Table-8: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, SEPTEMBER 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	6.23	11.37
2	Day Ahead Contingency Contracts	729.28	6.89
3	Daily Contracts	28.80	7.00
4	Weekly Contracts	111.12	7.08
5	Monthly Contracts	4.32	5.80
	Total	879.75	6.95

Note: Trading of Monthly Contracts was introduced on IEX from 20.07.2022 for contracts up to next 3 months
Source: IEX

Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, SEPTEMBER 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	6.79	9.08
2	Day Ahead Contingency Contracts	473.27	6.43
	Total	480.07	6.47

Source: PXIL

Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, SEPTEMBER 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.12	12.00
2	Day Ahead Contingency Contracts	106.83	7.77
	Total	106.94	7.77

Source: HPX

Table-11: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, SEPTEMBER 2022			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	125.01	5.76
2	Daily Contracts	3.90	4.56
3	Weekly Contracts	0.80	5.70
	Total	129.70	5.72

Source: IEX

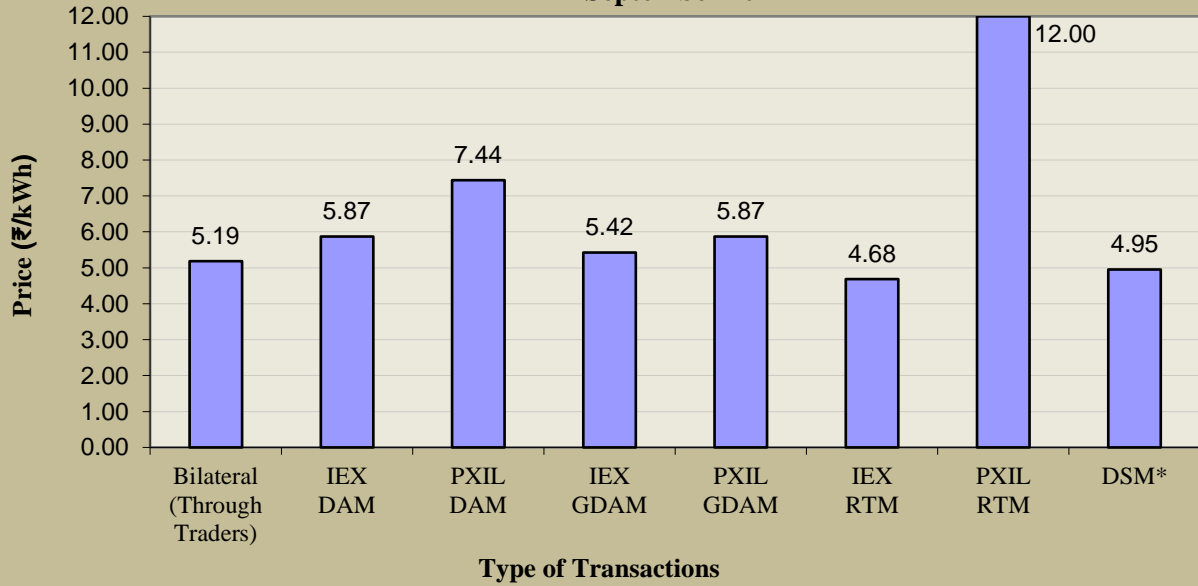
Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, SEPTEMBER 2022			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	25.47	5.87
	Total	25.47	5.87

Source: PXIL

Table-13: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, SEPTEMBER 2022		
Sr. No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	4.95

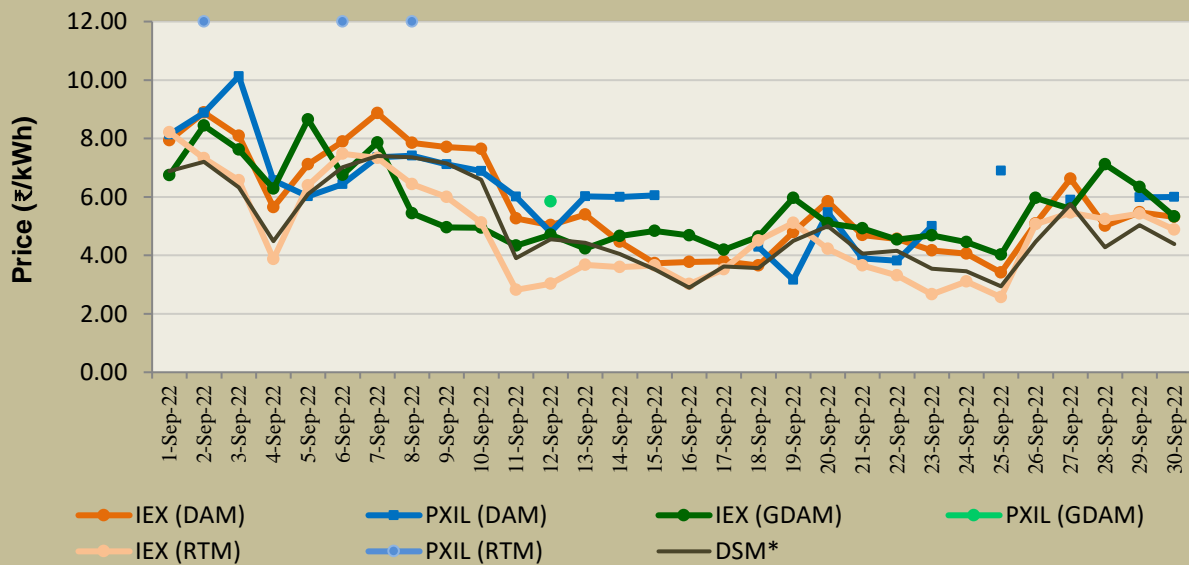
Source: NLDC

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



*Note: No electricity was transacted in DAM, G-DAM & RTM of HPX during September 2022.
* Simple average price of DSM of the month*

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



Note: On PXIL, transactions were recorded in RTM only on 2nd, 6th and 8th September 2022 and in G-DAM only on 12th September 2022. In case of DAM at PXIL, no transactions took place on 16th - 17th, 24th, 26th and 28th September 2022. Further, no electricity was transacted in DAM, G-DAM & RTM of HPX during September 2022.

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

Table-14: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, SEPTEMBER 2022		
Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	1295.85	16.17
HIMACHAL PRADESH	723.06	9.02
TEESTA STG3	495.00	6.18
SEMBCORP	353.22	4.41
RPREL	349.37	4.36
KARNATAKA	292.35	3.65
J & K	291.72	3.64
ESSAR POWER	242.84	3.03
MAHARASHTRA	226.05	2.82
ADHUNIK POWER LTD	211.05	2.63
JITPL	210.24	2.62
JAYPEE NIGRIE	207.62	2.59
JINDAL STAGE-II	187.13	2.34
NEEPCO STATIONS	181.63	2.27
AHEJ4L_SOLAR	149.48	1.87
TELANGANA	139.34	1.74
MEGHALAYA	108.26	1.35
MB POWER	91.71	1.14
AHEJ4L_WIND	90.76	1.13
SKS POWER	88.44	1.10
JINDAL POWER	88.00	1.10
DAGACHU	83.10	1.04
TASHIDENG HEP	75.90	0.95
JORETHANG	75.12	0.94
DVC	71.56	0.89
SINGOLI BHATWARI HEP	70.11	0.88
DIKCHU HEP	67.01	0.84
UTTARAKHAND	66.71	0.83
KARCHAM WANGTOO	66.10	0.83
WEST BENGAL	65.30	0.82
ABC_BHDL2	64.70	0.81
AHEJ2L_SOLAR	58.87	0.73
KSK MAHANADI	57.46	0.72
CLEANSR_SLR	55.78	0.70
UTTAR PRADESH	52.23	0.65
KOLYAT_SLR	52.19	0.65
SORANG HEP	52.18	0.65
GUJARAT	52.00	0.65
ANDHRA PRADESH	51.89	0.65
RAJASTHAN	48.54	0.61
AD HYDRO	47.90	0.60
DB POWER	47.75	0.60
TATA_GREEN	46.71	0.58
ACME_HEERGARH	46.68	0.58
AHEJ3L_SOLAR	43.88	0.55
SIKKIM	37.37	0.47
GMR KAMALANGA	35.12	0.44
SHREE CEMENT	34.53	0.43
TATA_SLR	34.00	0.42
ODISHA	32.82	0.41
JHABUA POWER_MP	32.01	0.40
MANIPUR	31.43	0.39
THAR1_SLR	29.31	0.37
SAINJ HEP	29.05	0.36
BIHAR	28.17	0.35

ARUNACHAL PRADESH	25.64	0.32
KERALA	25.47	0.32
GOA	20.83	0.26
COASTGEN	19.40	0.24
RENEWSW_SLR	18.81	0.23
AHEJ3L_WIND	18.05	0.23
TAMIL NADU	15.24	0.19
AHEJ2L_WIND	15.19	0.19
JHARKHAND	12.74	0.16
AVAADASN_SLR	11.08	0.14
NTPC STATIONS-SR	8.58	0.11
CHHATTISGARH	7.69	0.10
DELHI	7.61	0.09
TRN ENERGY	6.72	0.08
REGL	6.59	0.08
ONGC PALATANA	6.57	0.08
LANKO_AMK	4.70	0.06
OSTRO	4.45	0.06
ADANI_WIND	3.39	0.04
HARYANA	1.90	0.02
NAGALAND	1.62	0.02
SBSR_SLR	1.50	0.02
PUNJAB	0.78	0.01
AMPS Hazira	0.43	0.01
DD&DNH	0.29	0.004
THERMAL POWERTECH	0.10	0.001
Total	8011.94	100.00
Volume Sold by top 5 Regional Entities	3216.50	40.15

Table-15: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, SEPTEMBER 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
PUNJAB	1787.70	22.31
HARYANA	1152.21	14.38
MAHARASHTRA	866.71	10.82
DELHI	767.41	9.58
GUJARAT	511.45	6.38
UTTAR PRADESH	481.24	6.01
ODISHA	472.94	5.90
TELANGANA	352.51	4.40
ANDHRA PRADESH	331.18	4.13
WEST BENGAL	249.65	3.12
JHARKHAND	191.75	2.39
ADHUNIK POWER LTD	144.00	1.80
AMPS Hazira	127.15	1.59
BIHAR	85.18	1.06
MP	81.82	1.02
RAJASTHAN	64.15	0.80
DD&DNH	56.18	0.70
ASSAM	55.07	0.69
GOA	53.62	0.67
MEGHALAYA	47.18	0.59
CHHATTISGARH	31.58	0.39
SIKKIM	27.66	0.35
PONDICHERRY	21.57	0.27
UTTARAKHAND	15.94	0.20
KARNATAKA	10.02	0.13
NCR ALLAHABAD	8.39	0.10
BALCO	5.98	0.07
DVC	5.61	0.07
TAMIL NADU	4.71	0.06
HIMACHAL PRADESH	0.46	0.01
TRIPURA	0.40	0.01
MANIPUR	0.31	0.004
TOTAL	8011.73	100.00
Volume Purchased by top 5 Regional Entities	5085.48	63.48

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

Name of the Entity	Volume of Sale (MUs)	% of Volume
TELANGANA	430.51	10.60
UTTAR PRADESH	371.40	9.14
KARNATAKA	308.08	7.58
NEPAL(NVVN)	254.28	6.26
KERALA	230.02	5.66
BIHAR	216.64	5.33
TEESTA HEP	193.42	4.76
JINDAL STAGE-II	160.27	3.95
WEST BENGAL	138.76	3.42
MP	133.86	3.29
HIMACHAL PRADESH	122.68	3.02
THERMAL POWERTECH	119.04	2.93
ODISHA	95.26	2.34
JITPL	91.71	2.26
RPREL	83.67	2.06
MAHARASHTRA	63.20	1.56
J & K	60.92	1.50
JINDAL POWER	58.04	1.43
DELHI	55.97	1.38
TAMIL NADU	55.54	1.37
UTTARAKHAND	54.79	1.35
SEMBCORP	46.74	1.15
CHHATTISGARH	46.30	1.14
HARYANA	45.74	1.13
ESSAR POWER	44.90	1.11
DB POWER	38.85	0.96
MIZORAM	35.59	0.88
CHANDIGARH	35.34	0.87
GOA	34.73	0.85
JHARKHAND	34.48	0.85
ARUNACHAL PRADESH	34.35	0.85
JAYPEE NIGRIE	29.37	0.72
SAINJ HEP	27.98	0.69
ANDHRA PRADESH	22.36	0.55
COASTGEN	21.83	0.54
ASSAM	19.87	0.49
NEEPCO STATIONS	17.28	0.43
AD HYDRO	16.56	0.41
GUJARAT	15.42	0.38
ONGC PALATANA	13.86	0.34
KARCHAM WANGTOO	12.73	0.31
MB POWER	12.12	0.30
RENEW_SR_SLR	11.90	0.29
ACBIL	11.74	0.29
SKS POWER	11.59	0.29
ASEJTL_SLR	11.25	0.28
CHUZACHEN HEP	9.93	0.24
NJPC	9.26	0.23
ADANI_WIND	8.83	0.22
SHREE CEMENT	8.50	0.21
SIKKIM	8.17	0.20
NLC	7.38	0.18
NAGALAND	6.85	0.17
DIKCHU HEP	6.27	0.15

IGSTPS	6.21	0.15
AMPS Hazira	5.31	0.13
SINGOLI BHATWARI HEP	4.84	0.12
ADHUNIK POWER LTD	4.05	0.10
LANCO BUDHIL	3.82	0.09
RAJASTHAN	3.24	0.08
NTPC STATIONS-SR	2.68	0.07
RAMPUR HEP	2.43	0.06
IL&FS	2.35	0.06
GMR KAMALANGA	2.05	0.05
PUNJAB	1.80	0.04
REGL	1.55	0.04
NHPC STATIONS	1.42	0.04
MEGHALAYA	1.04	0.03
NTPC STATIONS-NER	1.02	0.03
CGPL	0.66	0.02
OSTRO	0.52	0.01
AHEJ3L_SOLAR	0.50	0.01
DHARIWAL POWER	0.46	0.01
SBSR_SLR	0.21	0.01
AHEJ2L_SOLAR	0.17	0.004
DVC	0.06	0.001
TRIPURA	0.01	0.0002
Total	4062.53	100.00
Volume sold by top 5 Regional Entities	1594.29	39.24

Table-17: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022

Name of the Entity	Volume of Purchase (MUs)	% of Volume
GUJARAT	684.12	16.84
RAJASTHAN	540.16	13.30
UTTAR PRADESH	466.03	11.47
PUNJAB	360.38	8.87
HARYANA	323.71	7.97
WEST BENGAL	197.39	4.86
TELANGANA	189.25	4.66
ANDHRA PRADESH	188.23	4.63
DD&DNH	154.89	3.81
MAHARASHTRA	153.55	3.78
ODISHA	120.41	2.96
TAMIL NADU	117.35	2.89
ASSAM	103.51	2.55
AMPS Hazira	87.66	2.16
DVC	75.69	1.86
MP	66.50	1.64
DELHI	49.77	1.23
JHARKHAND	43.36	1.07
KARNATAKA	43.13	1.06
CHHATTISGARH	34.93	0.86
RAIL	30.17	0.74
KERALA	7.88	0.19
UTTARAKHAND	5.79	0.14
TRIPURA	5.39	0.13
GOA	3.36	0.08
BALCO	3.17	0.08
MEGHALAYA	2.30	0.06
BIHAR	2.01	0.05
CHANDIGARH	1.80	0.04
MANIPUR	0.37	0.01
HIMACHAL PRADESH	0.29	0.01
TOTAL	4062.53	100.00
Volume purchased by top 5 Regional Entities	2374.41	58.45

Table-18: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022		
Name of the Entity	Volume of Sale (MUs)	% of Volume
ANDHRA PRADESH	129.13	39.78
KARNATAKA	38.90	11.98
TELANGANA	28.91	8.91
ADANI_WIND	22.42	6.90
AHEJ3L_SOLAR	20.12	6.20
J & K	14.99	4.62
SBSR_SLR	11.83	3.65
NTPC STATIONS-SR	10.44	3.22
AHEJ2L_SOLAR	9.47	2.92
OSTRO	7.93	2.44
MAHARASHTRA	7.55	2.33
UTTAR PRADESH	5.76	1.77
RAJASTHAN	5.51	1.70
KERALA	5.24	1.62
HIMACHAL PRADESH	3.53	1.09
DELHI	1.63	0.50
SIKKIM	0.76	0.24
MP	0.52	0.16
Total	324.64	100.00
Volume sold by top 5 Regional Entities	239.47	73.77

Table-19: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022

Name of the Entity	Volume of Purchase (MUs)	% of Volume
GUJARAT	49.97	15.39
DVC	49.47	15.24
PUNJAB	40.46	12.46
DELHI	32.20	9.92
ASSAM	26.15	8.06
ODISHA	18.42	5.67
DD&DNH	17.03	5.25
MAHARASHTRA	15.85	4.88
AMPS Hazira	15.47	4.77
MP	15.24	4.69
KARNATAKA	12.89	3.97
JHARKHAND	8.46	2.60
RAIL	6.50	2.00
HARYANA	4.48	1.38
RAJASTHAN	4.18	1.29
WEST BENGAL	2.85	0.88
KERALA	1.44	0.44
TAMIL NADU	1.41	0.44
BALCO	1.03	0.32
UTTAR PRADESH	0.70	0.21
ANDHRA PRADESH	0.39	0.12
TELANGANA	0.05	0.01
TOTAL	324.64	100.00
Volume purchased by top 5 Regional Entities	198.25	61.07

Table-20: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022

Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	477.66	21.78
BIHAR	195.73	8.92
ODISHA	149.75	6.83
KERALA	128.36	5.85
HIMACHAL PRADESH	118.83	5.42
TELANGANA	113.24	5.16
KARNATAKA	81.56	3.72
UTTAR PRADESH	77.01	3.51
ANDHRA PRADESH	75.15	3.43
DELHI	73.97	3.37
TAMIL NADU	71.97	3.28
HARYANA	69.51	3.17
WEST BENGAL	64.70	2.95
PUNJAB	55.06	2.51
SASAN UMPP	51.39	2.34
MAHARASHTRA	37.92	1.73
NEEPCO STATIONS	34.48	1.57
J & K	34.03	1.55
ASSAM	32.22	1.47
CHHATTISGARH	26.95	1.23
NLC	21.56	0.98
JHARKHAND	20.57	0.94
MB POWER	18.45	0.84
JINDAL STAGE-II	16.59	0.76
UTTARAKHAND	13.84	0.63
RAJASTHAN	13.43	0.61
TRIPURA	9.81	0.45
SKS POWER	9.03	0.41
SAINJ HEP	8.68	0.40
THERMAL POWERTECH	7.42	0.34
DB POWER	7.36	0.34
RPREL	6.79	0.31
AD HYDRO	6.27	0.29
ARUNACHAL PRADESH	5.60	0.26
ESSAR POWER	5.30	0.24
GUJARAT	5.26	0.24
DD&DNH	5.01	0.23
SORANG HEP	4.83	0.22
SIKKIM	4.18	0.19
CGPL	3.69	0.17
ONGC PALATANA	3.48	0.16
MANIPUR	3.07	0.14
SEMBCORP	2.97	0.14
ACBIL	2.78	0.13
KARCHAM WANGTOO	2.78	0.13
NAGALAND	2.50	0.11
MEGHALAYA	2.17	0.10
TRN ENERGY	1.29	0.06
AMPS Hazira	1.08	0.05
ADANI_WIND	0.87	0.04
SINGOLI BHATWARI HEP	0.82	0.04
JINDAL POWER	0.79	0.04
CHANDIGARH	0.75	0.03
SHREE CEMENT	0.70	0.03

ADHUNIK POWER LTD	0.66	0.03
DIKCHU HEP	0.57	0.03
TEESTA HEP	0.51	0.02
OSTRO	0.41	0.02
LANCO BUDHIL	0.39	0.02
GMR KAMALANGA	0.38	0.02
JHABUA POWER_MP	0.38	0.02
JITPL	0.29	0.01
IL&FS	0.17	0.01
RENEW_SR_SLR	0.14	0.01
NTPC STATIONS-SR	0.06	0.003
REGL	0.06	0.003
IGSTPS	0.04	0.002
DVC	0.01	0.001
Total	2193.25	100.00
Volume sold by top 5 Regional Entities	1070.33	48.80

Table-21: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
RAJASTHAN	358.49	16.35
TELANGANA	290.30	13.24
UTTAR PRADESH	207.13	9.44
PUNJAB	188.43	8.59
MAHARASHTRA	177.08	8.07
ODISHA	120.39	5.49
DVC	116.18	5.30
WEST BENGAL	112.02	5.11
GUJARAT	97.33	4.44
HARYANA	89.47	4.08
TAMIL NADU	82.10	3.74
DELHI	58.88	2.68
ANDHRA PRADESH	58.15	2.65
MP	35.03	1.60
ASSAM	31.63	1.44
DD&DNH	23.76	1.08
J & K	22.40	1.02
AMPS Hazira	20.79	0.95
KARNATAKA	19.63	0.90
CHHATTISGARH	15.96	0.73
BALCO	13.49	0.62
HIMACHAL PRADESH	12.70	0.58
KERALA	7.49	0.34
UTTARAKHAND	6.98	0.32
TRIPURA	6.71	0.31
BIHAR	4.48	0.20
MEGHALAYA	4.19	0.19
JHARKHAND	4.15	0.19
RAIL	3.89	0.18
MANIPUR	1.46	0.07
GOA	1.06	0.05
JINDAL STAGE-II	0.45	0.02
SIKKIM	0.37	0.02
CHANDIGARH	0.37	0.02
SKS POWER	0.28	0.01
SINGOLI BHATWARI HEP	0.03	0.001
TOTAL	2193.25	100.00
Volume purchased by top 5 Regional Entities	1221.43	55.69

Table-22: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, SEPTEMBER 2022

Name of the Entity	Volume of Under drawal (MUs)	% of Volume
KAPP 3&4	151.17	6.13
CHUKHA HEP	143.45	5.82
GUJARAT	135.82	5.51
NHPC STATIONS	121.36	4.92
MP	115.75	4.69
NTPC STATIONS-WR	99.78	4.05
TAMIL NADU	82.49	3.34
MAHARASHTRA	80.83	3.28
NTPC STATIONS-NR	62.41	2.53
UTTAR PRADESH	61.95	2.51
ANDHRA PRADESH	59.28	2.40
KARNATAKA	59.04	2.39
RAJASTHAN	52.75	2.14
TELANGANA	52.45	2.13
PUNJAB	50.65	2.05
DVC	49.75	2.02
WEST BENGAL	42.21	1.71
NTPC STATIONS-ER	40.22	1.63
ODISHA	37.10	1.50
BIHAR	36.39	1.48
KERALA	33.45	1.36
J & K	30.91	1.25
KURICHU HEP	30.32	1.23
DELHI	29.02	1.18
SASAN UMPP	26.99	1.09
CHHATTISGARH	24.90	1.01
UTTARAKHAND	23.80	0.96
NTPC STATIONS-SR	23.61	0.96
NLC	22.28	0.90
JHARKHAND	21.26	0.86
AHEJ4L_SOLAR	21.04	0.85
HARYANA	18.51	0.75
AMPS Hazira	16.97	0.69
NJPC	15.93	0.65
ASSAM	13.68	0.55
BBMB	13.09	0.53
KARCHAM WANGTOO	12.84	0.52
NEEPCO STATIONS	12.39	0.50
HIMACHAL PRADESH	11.68	0.47
RAMPUR HEP	11.63	0.47
GIWEL_BHUJ	11.50	0.47
SBESS	11.10	0.45
IGSTPS	10.93	0.44
AZURE43_SLR	10.92	0.44
AHEJ3L_SOLAR	10.84	0.44
MANGDECHU HEP	10.63	0.43
TEHRI	10.48	0.42
PONDICHERRY	10.33	0.42
NEPAL(NVVN)	10.23	0.41
ORANGE_TCN	9.39	0.38
TEESTA HEP	9.11	0.37
MAITHON POWER LTD	8.56	0.35
GIWEL_TCN	8.52	0.35
CHANDIGARH	8.42	0.34
AHEJ2L_SOLAR	7.67	0.31
CLEAN_SLR	7.49	0.30
RENEW_BHUJ	7.48	0.30
BRBCL,NABINAGAR	7.30	0.30
AVADARJHN_SLR	7.09	0.29
BETAM_TCN	7.02	0.28

NPGC	6.79	0.28
TRIPURA	6.74	0.27
OSTRO	6.71	0.27
DD&DNH	6.65	0.27
MYTRAH_TCN	6.56	0.27
AGEMPL BHUJ	6.40	0.26
MIZORAM	6.07	0.25
MB POWER	5.86	0.24
GOA	5.68	0.23
AYANA_RP1	5.62	0.23
ALFANAR_BHUJ	5.29	0.21
SBG_NPK	5.20	0.21
ACME_HEERGARH	5.17	0.21
ARINSUM_RUMS	5.13	0.21
JAYPEE NIGRIE	4.81	0.20
AD HYDRO	4.63	0.19
ARUNACHAL PRADESH	4.49	0.18
ACME_SLR	4.46	0.18
THARI_SLR	4.44	0.18
RENEW_BHACHAU	4.40	0.18
SKRPL	4.40	0.18
RENEWSB	4.33	0.18
AVAADASN_SLR	4.33	0.18
MAHINDRA_RUMS	4.27	0.17
EDEN_SLR	4.24	0.17
ACME_RUMS	4.19	0.17
MTPS II	4.16	0.17
AZURE41_SLR	3.91	0.16
RENEWSW_SLR	3.88	0.16
AVIKIRAN	3.87	0.16
SBG_PVGD	3.86	0.16
MEGHALAYA	3.74	0.15
RENEWJH_SLR	3.71	0.15
LANKO_AMK	3.68	0.15
NTPC_ANTP	3.61	0.15
RAP B	3.60	0.15
SB_SLR	3.57	0.14
SB6_POKARAN	3.34	0.14
ASEJTL_SLR	3.22	0.13
BARC	3.20	0.13
ESPL_RADHANESDA	3.20	0.13
NTPC STATIONS-NER	3.17	0.13
DB POWER	3.17	0.13
ARERJL_SLR	3.16	0.13
JINDAL STAGE-II	3.08	0.13
RENEWURJA_SLR	3.06	0.12
KOTESHWAR	2.98	0.12
TASHIDENG HEP	2.97	0.12
RENEW_SLR_BKN	2.92	0.12
MRPL	2.83	0.11
JINDAL POWER	2.78	0.11
SIKKIM	2.62	0.11
RENEW_SR_SLR	2.60	0.11
RKM POWER	2.53	0.10
NAGALAND	2.53	0.10
RONGNICHU HEP	2.52	0.10
AZURE_SLR	2.50	0.10
RAIL	2.48	0.10
DIKCHU HEP	2.47	0.10
MSUPL_BHDL2	2.37	0.10
MANIPUR	2.35	0.10
AZURE34_SLR	2.25	0.09
ABC_BHDL2	2.23	0.09

TRN ENERGY	2.19	0.09
SBSR_SLR	2.15	0.09
JHABUA POWER_MP	2.08	0.08
FORTUM1_PVGD	2.07	0.08
NSPCL	2.06	0.08
CLEANSR_SLR	1.97	0.08
EMCO	1.90	0.08
THERMAL POWERTECH	1.87	0.08
GIPCL_RADHANESDA	1.85	0.08
NETCL VALLUR	1.83	0.07
TPREL_RADHANESDA	1.80	0.07
SPRING_PUGALUR	1.67	0.07
TATA_PVGD	1.65	0.07
TATA_SLR	1.59	0.06
TATA_ANTP	1.59	0.06
BALCO	1.59	0.06
SESPL	1.58	0.06
TATA_GREEN	1.58	0.06
OSTRO Hiriyur	1.57	0.06
SORANG HEP	1.53	0.06
CGPL	1.53	0.06
SKS POWER	1.52	0.06
NAPP	1.52	0.06
RANGIT HEP	1.46	0.06
JITPL	1.42	0.06
AZURE_MAPLE_SLR	1.42	0.06
RANGANADI HEP	1.40	0.06
SAINJ HEP	1.34	0.05
AYANA_NPKUNTA	1.29	0.05
CHUZACHEN HEP	1.25	0.05
SPRNG_NPKUNTA	1.16	0.05
KSK MAHANADI	1.10	0.04
SHREE CEMENT	1.06	0.04
ABSP_ANTP	1.05	0.04
AKSP_ANTP	1.04	0.04
AHSP_ANTP	1.01	0.04
ADY1_PVGD	0.99	0.04
PARE HEP	0.99	0.04
FORTUM2_PVGD	0.97	0.04
RGPPL	0.96	0.04
KSMPL_SLR	0.95	0.04
FRV_NPK	0.94	0.04
ONGC PALATANA	0.91	0.04
AZURE_ANTP	0.87	0.04
ESSAR POWER	0.86	0.03
FRV_ANTP	0.83	0.03
GSECL_Radhanesda	0.83	0.03
RENEW_SLR	0.81	0.03
TEESTA STG3	0.74	0.03
RPREL	0.69	0.03
AVAADA1_PVGD	0.68	0.03
ADANI GREEN	0.64	0.03
AVAADA2_PVGD	0.64	0.03
RAP C	0.62	0.03
NEP	0.61	0.02
GRT_JPL	0.60	0.02
LOKTAK	0.60	0.02
COASTGEN	0.50	0.02
SEMBCORP	0.49	0.02
AZURE_PVGD	0.47	0.02
DOYANG HEP	0.47	0.02
PARAM_PVGD	0.42	0.02
NTPL	0.40	0.02

ACBIL	0.38	0.02
LANCO BUDHIL	0.37	0.02
TALA HEP	0.36	0.01
DAGACHU	0.33	0.01
GMR KAMALANGA	0.32	0.01
KREDL_PVGD	0.25	0.01
POWERICA	0.25	0.01
RSTPS_FSPP	0.25	0.01
DHARIWAL POWER	0.24	0.01
ARS_PVGD	0.23	0.01
AKS_PVGD	0.22	0.01
RENEW_PVGD	0.21	0.01
YARROW_PVGD	0.20	0.01
HVDC CHAMPA	0.19	0.01
HVDC PUS	0.18	0.01
ADHUNIK POWER LTD	0.18	0.01
BANGLADESH	0.17	0.01
NFF	0.15	0.01
VINDHYACHAL HVDC	0.14	0.01
SINGOLI BHATWARI HEP	0.14	0.01
HVDC RAIGARH	0.08	0.003
IL&FS	0.07	0.003
HVDC ALPD	0.06	0.002
BHADRAVATHI HVDC	0.02	0.001
DCPP	0.01	0.0004
Total	2466.30	100.00
Volume Exported by top 5 Regional Entities	667.56	27.07

Table-23: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, SEPTEMBER 2022

Name of the Entity	Volume of Over drawal (MUs)	% of Volume
NTPC STATIONS-WR	149.91	6.10
TALA HEP	139.20	5.67
NTPC STATIONS-NR	125.48	5.11
HARYANA	105.51	4.29
RAJASTHAN	104.01	4.23
UTTAR PRADESH	101.55	4.13
NTPC STATIONS-ER	97.91	3.99
TELANGANA	68.28	2.78
MAHARASHTRA	65.51	2.67
NTPC STATIONS-SR	65.14	2.65
TAMIL NADU	63.94	2.60
ANDHRA PRADESH	57.07	2.32
GUJARAT	52.31	2.13
J & K	52.09	2.12
KARNATAKA	51.78	2.11
MP	44.42	1.81
PUNJAB	38.84	1.58
NLC	33.92	1.38
BIHAR	31.47	1.28
AGEMPL BHUJ	28.57	1.16
SEMBCORP	27.67	1.13
AHEJ4L_SOLAR	27.00	1.10
CHHATTISGARH	26.21	1.07
ODISHA	25.79	1.05
NETCL VALLUR	24.31	0.99
JHARKHAND	23.93	0.97
WEST BENGAL	23.37	0.95
THERMAL POWERTECH	21.56	0.88
DELHI	21.46	0.87
DAGACHU	20.94	0.85
AMPS Hazira	19.52	0.79
ESSAR POWER	18.93	0.77
HIMACHAL PRADESH	18.82	0.77
NEPAL(NVVN)	17.94	0.73
RPREL	17.77	0.72
UTTARAKHAND	16.38	0.67
KERALA	15.16	0.62
ASSAM	14.41	0.59
NHPC STATIONS	13.80	0.56
GIWEL_BHUJ	13.64	0.56
IGSTPS	13.23	0.54
CGPL	12.85	0.52
MANGDECHU HEP	12.71	0.52
NPGC	12.24	0.50
DVC	11.37	0.46
OSTRO	10.23	0.42
NTPL	9.87	0.40
NTPC STATIONS-NER	9.52	0.39
RENEW_BHACHAU	9.03	0.37
IL&FS	9.00	0.37
BALCO	8.87	0.36
RENEW_BHUJ	8.81	0.36
AVADARJHN_SLR	8.53	0.35
AHEJ2L_SOLAR	8.44	0.34
JITPL	8.18	0.33
BRBCL,NABINAGAR	7.92	0.32
MB POWER	7.89	0.32
JORETHANG	7.73	0.31
AHEJ3L_SOLAR	7.43	0.30
ADHUNIK POWER LTD	7.41	0.30

ORANGE_TCN	7.39	0.30
ALFANAR_BHUJ	7.37	0.30
TRIPURA	7.18	0.29
GIWEL_TCN	7.13	0.29
ABC_BHDL2	7.11	0.29
NEP	6.89	0.28
RAP C	6.80	0.28
GOA	6.59	0.27
MAHINDRA_RUMS	6.38	0.26
ARUNACHAL PRADESH	6.37	0.26
BBMB	6.27	0.26
JAYPEE NIGRIE	6.11	0.25
ACME_RUMS	5.97	0.24
BETAM_TCN	5.80	0.24
ARINSUM_RUMS	5.74	0.23
TATA_GREEN	5.68	0.23
TEESTA STG3	5.63	0.23
TATA_SLR	5.60	0.23
DD&DNH	5.36	0.22
JHABUA POWER_MP	5.24	0.21
RENEWURJA_SLR	5.09	0.21
GMR KAMALANGA	5.04	0.21
MEGHALAYA	4.93	0.20
MTPS II	4.86	0.20
NTPC_ANTP	4.79	0.19
MYTRAH_TCN	4.76	0.19
SKRPL	4.72	0.19
CHANDIGARH	4.69	0.19
RAIL	4.67	0.19
AYANA_RP1	4.58	0.19
SBG_NPK	4.57	0.19
CLEANSR_SLR	4.53	0.18
JINDAL STAGE-II	4.53	0.18
BANGLADESH	4.49	0.18
RENEWSB	4.40	0.18
AZURE43_SLR	4.36	0.18
AVIKIRAN	4.35	0.18
KARCHAM WANGTOO	4.21	0.17
SBESS	4.03	0.16
ACME_SLR	3.97	0.16
SBG_PVGD	3.91	0.16
AZURE41_SLR	3.86	0.16
SBSR_SLR	3.80	0.15
KAPP 3&4	3.80	0.15
MANIPUR	3.63	0.15
RENEWSW_SLR	3.56	0.14
NSPCL	3.51	0.14
RENEW_SLR_BKN	3.44	0.14
AVAADASN_SLR	3.35	0.14
SB6_POKARAN	3.30	0.13
TEHRI	3.25	0.13
NAPP	3.20	0.13
DB POWER	3.20	0.13
COASTGEN	3.19	0.13
SHREE CEMENT	3.10	0.13
ASEJTL_SLR	3.05	0.12
RENEWJH_SLR	3.02	0.12
SPRING_PUGALUR	3.02	0.12
PONDICHERRY	3.00	0.12
MAITHON POWER LTD	2.95	0.12
SIKKIM	2.81	0.11
EDEN_SLR	2.70	0.11
JINDAL POWER	2.54	0.10

MSUPL_BHDL2	2.50	0.10
NJPC	2.30	0.09
ACBIL	2.29	0.09
RGPPL	2.22	0.09
SESPL	2.21	0.09
ESPL_RADHANESDA	2.17	0.09
TATA_ANTP	1.99	0.08
MRPL	1.93	0.08
ACME_HEERGARH	1.92	0.08
TATA_PVGD	1.84	0.07
AZURE_MAPLE_SLR	1.81	0.07
OSTRO Hiriyur	1.72	0.07
TASHIDENG HEP	1.72	0.07
GIPCL_RADHANESDA	1.70	0.07
RENEW_SR_SLR	1.68	0.07
AZURE_SLR	1.67	0.07
TPREL_RADHANESDA	1.65	0.07
FORTUM1_PVGD	1.63	0.07
LANKO_AMK	1.60	0.07
RKM POWER	1.58	0.06
CLEAN_SLR	1.58	0.06
SKS POWER	1.55	0.06
RANGANADI HEP	1.51	0.06
ADY1_PVGD	1.48	0.06
SASAN UMPP	1.47	0.06
KOTESHWAR	1.46	0.06
SORANG HEP	1.41	0.06
AYANA_NPKUNTA	1.38	0.06
AZURE34_SLR	1.35	0.05
EMCO	1.30	0.05
SPRNG_NPKUNTA	1.28	0.05
THARI_SLR	1.27	0.05
RSTPS_FSPP	1.19	0.05
SB_SLR	1.15	0.05
DHARIWAL POWER	1.14	0.05
ARERJL_SLR	1.13	0.05
AVAADA2_PVGD	1.06	0.04
AD HYDRO	1.01	0.04
DGEN MEGA POWER	0.98	0.04
FORTUM2_PVGD	0.98	0.04
SINGOLI BHATWARI HEP	0.94	0.04
ABSP_ANTP	0.93	0.04
KSK MAHANADI	0.93	0.04
AVAADA1_PVGD	0.89	0.04
AHSP_ANTP	0.85	0.03
AKSP_ANTP	0.82	0.03
FRV_NPK	0.82	0.03
CHUZACHEN HEP	0.82	0.03
FRV_ANTP	0.81	0.03
NAGALAND	0.81	0.03
NEEPCO STATIONS	0.80	0.03
AZURE_ANTP	0.78	0.03
LANCO BUDHIL	0.77	0.03
TRN ENERGY	0.71	0.03
RENEW_SLR	0.69	0.03
RONGNICHU HEP	0.67	0.03
MIZORAM	0.65	0.03
GRT_JPL	0.55	0.02
AZURE_PVGD	0.53	0.02
POWERICA	0.53	0.02
ONGC PALATANA	0.51	0.02
MEENAKSHI	0.51	0.02
SIMHAPURI	0.47	0.02

LANKO KONDAPALLI	0.46	0.02
PARAM_PVGD	0.43	0.02
DIKCHU HEP	0.38	0.02
RENEW_PVGD	0.38	0.02
ADANI GREEN	0.37	0.02
RANGIT HEP	0.34	0.01
SAINJ HEP	0.34	0.01
PARE HEP	0.33	0.01
KSMPL_SLR	0.30	0.01
KREDL_PVGD	0.29	0.01
DOYANG HEP	0.28	0.01
RAP B	0.27	0.01
HVDC RAIGARH	0.26	0.01
YARROW_PVGD	0.25	0.01
RAMPUR HEP	0.25	0.01
AKS_PVGD	0.23	0.01
ARS_PVGD	0.22	0.01
LOKTAK	0.19	0.01
GSECL_Radhanesda	0.18	0.01
NFF	0.15	0.01
BHADRAVATHI HVDC	0.10	0.004
HVDC ALPD	0.05	0.002
DCPP	0.05	0.002
KURICHU HEP	0.05	0.002
HVDC CHAMPA	0.03	0.001
TEESTA HEP	0.01	0.001
VINDHYACHAL HVDC	0.001	0.0001
HVDC PUS	0.001	0.00003
TOTAL	2456.99	100.00
Volume Imported by top 5 Regional Entities	624.10	25.40

Table-24: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), SEPTEMBER 2022		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	PUNJAB	2307.51
2	HARYANA	1539.72
3	GUJARAT	1186.68
4	RAJASTHAN	947.53
5	MAHARASHTRA	863.14
6	DELHI	761.52
7	UTTAR PRADESH	688.29
8	ODISHA	443.00
9	ANDHRA PRADESH	297.20
10	WEST BENGAL	274.32
11	AMPS Hazira	246.81
12	DD&DNH	245.28
13	JHARKHAND	182.60
14	ASSAM	165.01
15	TALA HEP	138.85
16	DVC	136.94
17	TELANGANA	135.94
18	NTPC STATIONS-NR	63.07
19	NTPC STATIONS-ER	57.69
20	NTPC STATIONS-WR	50.12
21	TAMIL NADU	44.29
22	RAIL	42.74
23	BALCO	30.95
24	NETCL VALLUR	22.48
25	AGEMPL BHUJ	22.17
26	NTPC STATIONS-SR	19.77
27	PONDICHERRY	14.24
28	NTPL	9.47
29	NCR ALLAHABAD	8.39
30	CGPL	6.97
31	IL&FS	6.41
32	NEP	6.29
33	RAP C	6.18
34	NPGC	5.45
35	NTPC STATIONS-NER	5.34
36	RENEW_BHACHAU	4.63
37	BANGLADESH	4.31
38	GOA	3.40
39	TRIPURA	3.12
40	CHHATTISGARH	2.84
41	GIWEL_BHUJ	2.14
42	MAHINDRA_RUMS	2.11
43	MANGDECHU HEP	2.08
44	ALFANAR_BHUJ	2.08
45	RENEWURJA_SLR	2.03
46	ACME_RUMS	1.78
47	NAPP	1.68
48	NSPCL	1.44
49	AVADARJHN_SLR	1.44
50	SPRING_PUGALUR	1.35
51	RENEW_BHUJ	1.33
52	RGPPL	1.27
53	NTPC_ANTP	1.18
54	DGEN MEGA POWER	0.98
55	RSTPS_FSPP	0.95
56	MTPS II	0.70
57	SESPL	0.63
58	BRBCL,NABINAGAR	0.62
59	ARINSUM_RUMS	0.61
60	RENEW_SLR_BKN	0.52
61	MEENAKSHI	0.51
62	ADY1_PVGD	0.49

63	AVIKIRAN	0.48
64	SIMHAPURI	0.47
65	LANKO KONDAPALLI	0.46
66	DHARIWAL POWER	0.43
67	AVAADA2_PVGD	0.42
68	TATA_ANTP	0.40
69	AZURE_MAPLE_SLR	0.38
70	SKRPL	0.33
71	POWERICA	0.28
72	AVAADA1_PVGD	0.21
73	HVDC RAIGARH	0.19
74	TATA_PVGD	0.18
75	RENEW_PVGD	0.17
76	OSTRO Hiriyur	0.16
77	MSUPL_BHDL2	0.12
78	SPRNG_NPKUNTA	0.12
79	RANGANADI HEP	0.11
80	AYANA_NPKUNTA	0.09
81	BHADRAVATHI HVDC	0.09
82	RENEWSB	0.07
83	AZURE_PVGD	0.06
84	SBG_PVGD	0.05
85	YARROW_PVGD	0.05
86	DCPP	0.04
87	KREDL_PVGD	0.04
88	PARAM_PVGD	0.01
89	FORTUM2_PVGD	0.01
90	AKS_PVGD	0.004
91	HVDC ALPD	-0.004
92	ARS_PVGD	-0.01
93	NFF	-0.01
94	FRV_ANTP	-0.02
95	SB6_POKARAN	-0.04
96	AZURE41_SLR	-0.05
97	GRT_JPL	-0.05
98	AZURE_ANTP	-0.08
99	FRV_NPK	-0.11
100	ABSP_ANTP	-0.12
101	RENEW_SLR	-0.13
102	VINDHYACHAL HVDC	-0.14
103	GIPCL_RADHANESDA	-0.15
104	TPREL_RADHANESDA	-0.15
105	AHSP_ANTP	-0.16
106	HVDC CHAMPA	-0.17
107	HVDC PUS	-0.18
108	DOYANG HEP	-0.19
109	AKSP_ANTP	-0.21
110	ADANI GREEN	-0.27
111	LOKTAK	-0.41
112	FORTUM1_PVGD	-0.44
113	ACME_SLR	-0.49
114	EMCO	-0.60
115	SBG_NPK	-0.63
116	GSECL_Radhanesda	-0.64
117	KSMPL_SLR	-0.66
118	PARE HEP	-0.67
119	RENEWJH_SLR	-0.69
120	AZURE_SLR	-0.83
121	MRPL	-0.90
122	AZURE34_SLR	-0.90
123	RKM POWER	-0.96
124	ESPL_RADHANESDA	-1.03
125	AYANA_RP1	-1.04
126	RANGIT HEP	-1.12
127	BETAM_TCN	-1.22
128	GIWEL_TCN	-1.39

129	KOTESHWAR	-1.52
130	EDEN_SLR	-1.54
131	MYTRAH_TCN	-1.79
132	RONGNICHU HEP	-1.84
133	ORANGE_TCN	-2.00
134	ARERJL_SLR	-2.03
135	SB_SLR	-2.42
136	BARC	-3.20
137	RAP B	-3.33
138	LANCO BUDHIL	-3.82
139	IGSTPS	-3.95
140	MAITHON POWER LTD	-5.61
141	CLEAN_SLR	-5.92
142	AZURE43_SLR	-6.56
143	LANKO_AMK	-6.79
144	BBMB	-6.82
145	SBESS	-7.07
146	TEHRI	-7.23
147	REGL	-8.20
148	TRN ENERGY	-9.49
149	OSTRO	-9.80
150	CHUZACHEN HEP	-10.37
151	ASEJTL_SLR	-11.41
152	SBSR_SLR	-11.89
153	AVAADASN_SLR	-12.06
154	ACBIL	-12.61
155	NAGALAND	-12.69
156	RENEW_SR_SLR	-12.96
157	RAMPUR HEP	-13.82
158	AHEJ2L_WIND	-15.19
159	NLC	-17.30
160	AHEJ3L_WIND	-18.05
161	RENEWSW_SLR	-19.13
162	SIKKIM	-22.26
163	NJPC	-22.90
164	ONGC PALATANA	-24.31
165	JHABUA POWER_MP	-29.23
166	TATA_SLR	-29.99
167	KURICHU HEP	-30.27
168	MANIPUR	-31.09
169	THARI_SLR	-32.48
170	GMR KAMALANGA	-32.81
171	ADANI_WIND	-35.50
172	CHANDIGARH	-37.65
173	COASTGEN	-38.55
174	MIZORAM	-41.00
175	SHREE CEMENT	-41.69
176	TATA_GREEN	-42.61
177	ACME_HEERGARH	-49.92
178	KOLYAT_SLR	-52.19
179	CLEANSR_SLR	-53.21
180	MEGHALAYA	-56.60
181	SORANG HEP	-57.13
182	KSK MAHANADI	-57.63
183	ABC_BHDL2	-59.82
184	DAGACHU	-62.49
185	ARUNACHAL PRADESH	-63.70
186	ADHUNIK POWER LTD	-64.53
187	SAINJ HEP	-66.71
188	JORETHANG	-67.39
189	AHEJ2L_SOLAR	-67.73
190	AHEJ3L_SOLAR	-67.90
191	AD HYDRO	-74.34
192	SINGOLI BHATWARI HEP	-74.94
193	DIKCHU HEP	-75.94
194	SASAN UMPP	-76.91

195	TASHIDENG HEP	-77.16
196	KARCHAM WANGTOO	-90.24
197	AHEJ4L_WIND	-90.76
198	DB POWER	-93.92
199	THERMAL POWERTECH	-106.87
200	SKS POWER	-108.77
201	NHPC STATIONS	-108.98
202	UTTARAKHAND	-114.04
203	MB POWER	-120.24
204	CHUKHA HEP	-143.45
205	AHEJ4L_SOLAR	-143.52
206	JINDAL POWER	-147.06
207	KAPP 3&4	-147.38
208	TEESTA HEP	-203.03
209	JAYPEE NIGRIE	-235.68
210	NEEPCO STATIONS	-244.97
211	NEPAL(NVVN)	-246.57
212	ESSAR POWER	-274.97
213	JITPL	-295.48
214	BIHAR	-353.80
215	J & K	-358.08
216	JINDAL STAGE-II	-362.10
217	SEMBCORP	-375.74
218	KERALA	-390.58
219	RPREL	-422.74
220	TEESTA STG3	-490.11
221	KARNATAKA	-642.46
222	HIMACHAL PRADESH	-947.50
223	MP	-1780.63
* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral, power exchanges and DSM		
(-) indicates sale and (+) indicates purchase		

Table-25: DETAILS OF CONGESTION IN POWER EXCHANGES, SEPTEMBER 2022										
	Details of Congestion	Day Ahead Market			Green Day Ahead Market			Real Time Market		
		IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX
A	Unconstrained Cleared Volume (MUs)	4049.64	12.93	0.00	324.39	0.25	0.00	2198.49	0.55	0.00
B	Actual Cleared Volume and hence scheduled (MUs)	4049.64	12.89	0.00	324.39	0.25	0.00	2192.70	0.55	0.00
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) *	0.00	0.04	0.00	0.00	0.00	0.00	5.79	0.00	0.00
D	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs)	0.00	0.00	0.00	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%	0.34%	0.00%	0.00%	0.00%	0.00%	0.26%	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%	0.69%	0.00%	0.00%	0.00%	0.00%	3.13%	0.00%	0.00%
G	Congestion occurrence (%) time block wise									
	0.00 - 6.00 hours	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	52.22%	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.78%	0.00%	0.00%
* This power would have been scheduled had there been no congestion										
Source: IEX, PXIL, HPX & NLDC										

Table-26: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), SEPTEMBER 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	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX		
1-Sep-22	197.26	104.72	157.93	1.40	0.00	10.97	0.00	0.00	74.67	0.00	0.00	84.86	4313.22
2-Sep-22	207.62	102.67	150.30	1.80	0.00	9.13	0.00	0.00	65.39	0.10	0.00	82.83	4364.90
3-Sep-22	221.60	113.95	121.48	1.28	0.00	13.29	0.00	0.00	68.33	0.00	0.00	79.46	4359.61
4-Sep-22	200.50	111.29	128.21	1.02	0.00	11.36	0.00	0.00	62.65	0.00	0.00	85.50	4100.64
5-Sep-22	183.48	115.05	132.72	0.24	0.00	10.47	0.00	0.00	73.16	0.00	0.00	81.33	4277.87
6-Sep-22	196.34	110.36	131.26	1.15	0.00	8.71	0.00	0.00	68.75	0.20	0.00	80.88	4352.83
7-Sep-22	190.70	106.51	150.09	1.27	0.00	7.08	0.00	0.00	86.09	0.00	0.00	79.34	4396.34
8-Sep-22	180.40	109.81	169.92	1.30	0.00	15.03	0.00	0.00	75.42	0.25	0.00	80.44	4338.96
9-Sep-22	174.07	108.34	192.24	0.75	0.00	16.86	0.00	0.00	71.16	0.00	0.00	82.87	4266.66
10-Sep-22	178.65	104.47	190.60	0.91	0.00	23.93	0.00	0.00	63.36	0.00	0.00	86.25	4189.35
11-Sep-22	167.05	103.66	171.40	0.46	0.00	30.40	0.00	0.00	69.10	0.00	0.00	87.88	3892.74
12-Sep-22	143.19	106.06	145.16	0.30	0.00	29.41	0.25	0.00	73.92	0.00	0.00	88.20	3929.04
13-Sep-22	161.41	107.76	134.94	0.03	0.00	20.01	0.00	0.00	67.67	0.00	0.00	86.04	3918.94
14-Sep-22	157.14	112.01	141.67	0.06	0.00	13.24	0.00	0.00	69.66	0.00	0.00	88.07	3924.64
15-Sep-22	162.91	110.67	126.03	0.01	0.00	6.65	0.00	0.00	69.87	0.00	0.00	82.39	3768.40
16-Sep-22	138.24	106.54	129.15	0.00	0.00	7.39	0.00	0.00	72.23	0.00	0.00	88.27	3643.86
17-Sep-22	143.46	106.75	119.58	0.00	0.00	8.96	0.00	0.00	74.94	0.00	0.00	82.65	3692.45
18-Sep-22	150.62	97.65	126.85	0.09	0.00	5.01	0.00	0.00	70.27	0.00	0.00	73.33	3752.81
19-Sep-22	146.77	104.23	115.49	0.02	0.00	6.07	0.00	0.00	72.51	0.00	0.00	78.11	3937.33
20-Sep-22	144.79	104.40	116.36	0.17	0.00	6.29	0.00	0.00	74.32	0.00	0.00	75.77	3954.74
21-Sep-22	153.44	105.21	123.46	0.15	0.00	10.26	0.00	0.00	80.23	0.00	0.00	75.91	3925.01
22-Sep-22	149.16	104.00	121.83	0.10	0.00	8.97	0.00	0.00	91.37	0.00	0.00	81.04	3782.88
23-Sep-22	136.85	103.54	107.43	0.01	0.00	5.81	0.00	0.00	97.16	0.00	0.00	84.52	3698.41
24-Sep-22	141.04	104.42	125.29	0.00	0.00	5.32	0.00	0.00	100.15	0.00	0.00	84.63	3622.04
25-Sep-22	142.99	103.21	114.97	0.11	0.00	5.38	0.00	0.00	103.71	0.00	0.00	87.60	3616.36
26-Sep-22	141.43	97.76	121.54	0.00	0.00	6.04	0.00	0.00	76.17	0.00	0.00	82.96	3937.85
27-Sep-22	137.49	100.81	120.08	0.05	0.00	4.71	0.00	0.00	64.14	0.00	0.00	79.78	3970.35
28-Sep-22	133.28	92.01	119.93	0.00	0.00	5.40	0.00	0.00	54.99	0.00	0.00	77.42	4013.36
29-Sep-22	133.88	100.81	126.16	0.20	0.00	5.35	0.00	0.00	51.83	0.00	0.00	78.08	4014.20
30-Sep-22	140.55	96.73	117.58	0.02	0.00	6.87	0.00	0.00	49.45	0.00	0.00	75.22	3975.23
Total	4856.35	3155.38	4049.64	12.89	0.00	324.39	0.25	0.00	2192.70	0.55	0.00	2461.64	119931.02

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-27(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh),
SEPTEMBER 2022**

Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Day ahead market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Sep-22	5.00	12.00	7.93	5.12	12.00	8.13	-	-	-
2-Sep-22	5.41	12.00	8.89	6.50	12.00	8.88	-	-	-
3-Sep-22	3.50	12.00	8.09	5.12	12.00	10.13	-	-	-
4-Sep-22	1.50	12.00	5.64	3.50	10.00	6.57	-	-	-
5-Sep-22	2.91	12.00	7.12	5.12	6.02	6.02	-	-	-
6-Sep-22	3.76	12.00	7.90	5.00	9.99	6.44	-	-	-
7-Sep-22	5.30	12.00	8.87	5.50	12.00	7.35	-	-	-
8-Sep-22	4.00	12.00	7.85	6.02	12.00	7.41	-	-	-
9-Sep-22	3.65	12.00	7.70	4.90	12.00	7.12	-	-	-
10-Sep-22	3.46	12.00	7.64	4.00	12.00	6.88	-	-	-
11-Sep-22	1.50	8.68	5.26	3.63	8.89	6.01	-	-	-
12-Sep-22	2.00	11.20	5.03	3.50	6.05	4.79	-	-	-
13-Sep-22	2.68	12.00	5.39	3.00	6.02	6.02	-	-	-
14-Sep-22	1.99	12.00	4.46	3.75	6.02	6.00	-	-	-
15-Sep-22	1.20	12.00	3.72	3.50	6.05	6.05	-	-	-
16-Sep-22	1.50	12.00	3.78	-	-	-	-	-	-
17-Sep-22	1.99	12.00	3.80	5.00	5.00	0.00	-	-	-
18-Sep-22	2.00	8.50	3.65	2.99	4.52	4.29	-	-	-
19-Sep-22	2.87	12.00	4.79	2.99	3.35	3.16	-	-	-
20-Sep-22	3.74	12.00	5.84	2.99	7.78	5.47	-	-	-
21-Sep-22	3.11	12.00	4.69	3.23	6.05	3.89	-	-	-
22-Sep-22	3.16	12.00	4.56	3.23	6.05	3.82	-	-	-
23-Sep-22	2.67	12.00	4.17	3.23	6.05	5.00	-	-	-
24-Sep-22	2.22	12.00	4.05	-	-	-	-	-	-
25-Sep-22	1.70	8.83	3.41	3.23	7.00	6.89	-	-	-
26-Sep-22	2.91	12.00	5.09	-	-	-	-	-	-
27-Sep-22	3.74	12.00	6.62	3.24	6.00	5.90	-	-	-
28-Sep-22	2.94	12.00	5.01	-	-	-	-	-	-
29-Sep-22	3.08	12.00	5.48	4.99	6.01	5.99	-	-	-
30-Sep-22	3.45	12.00	5.32	4.99	6.01	6.00	-	-	-
	1.20#	12.00#	5.87	2.99#	12.00#	7.44	-	-	-

Source: IEX, PXIL and HPX

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

Maximum/Minimum in the month

**Table-27(b): PRICE OF GREEN DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh),
SEPTEMBER 2022**

Market Segment	Green Day ahead market of IEX			Green Day ahead market of PXIL			Green Day ahead market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Sep-22	4.10	12.00	6.74	-	-	-	-	-	-
2-Sep-22	5.77	12.00	8.43	-	-	-	-	-	-
3-Sep-22	6.00	12.00	7.62	-	-	-	-	-	-
4-Sep-22	3.95	12.00	6.28	-	-	-	-	-	-
5-Sep-22	5.00	12.00	8.65	-	-	-	-	-	-
6-Sep-22	5.00	12.00	6.76	-	-	-	-	-	-
7-Sep-22	5.00	12.00	7.86	-	-	-	-	-	-
8-Sep-22	4.20	12.00	5.43	-	-	-	-	-	-
9-Sep-22	3.97	12.00	4.96	-	-	-	-	-	-
10-Sep-22	3.65	12.00	4.94	-	-	-	-	-	-
11-Sep-22	3.39	12.00	4.33	-	-	-	-	-	-
12-Sep-22	3.80	12.00	4.70	5.84	5.88	5.87	-	-	-
13-Sep-22	3.44	12.00	4.23	-	-	-	-	-	-
14-Sep-22	3.80	12.00	4.65	-	-	-	-	-	-
15-Sep-22	3.50	12.00	4.83	-	-	-	-	-	-
16-Sep-22	3.75	12.00	4.68	-	-	-	-	-	-
17-Sep-22	3.49	12.00	4.19	-	-	-	-	-	-
18-Sep-22	2.88	12.00	4.63	-	-	-	-	-	-
19-Sep-22	3.50	12.00	5.97	-	-	-	-	-	-
20-Sep-22	3.75	12.00	5.10	-	-	-	-	-	-
21-Sep-22	3.97	12.00	4.92	-	-	-	-	-	-
22-Sep-22	3.79	12.00	4.54	-	-	-	-	-	-
23-Sep-22	3.30	12.00	4.68	-	-	-	-	-	-
24-Sep-22	3.00	12.00	4.45	-	-	-	-	-	-
25-Sep-22	2.95	12.00	4.02	-	-	-	-	-	-
26-Sep-22	3.00	12.00	5.96	-	-	-	-	-	-
27-Sep-22	3.40	12.00	5.59	-	-	-	-	-	-
28-Sep-22	5.00	12.00	7.12	-	-	-	-	-	-
29-Sep-22	4.12	12.00	6.34	-	-	-	-	-	-
30-Sep-22	4.00	12.00	5.33	-	-	-	-	-	-
	2.88#	12.00#	5.42	5.84#	5.88#	5.87	-	-	-

Source: IEX, PXIL and HPX

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

Maximum/Minimum in the month

Table-27(c): PRICE OF REAL TIME TRANSACTIONS AND DSM (DAY-WISE) (₹/kWh), SEPTEMBER 2022												
Market Segment	Real Time market of IEX			Real Time market of PXIL			Real Time market of HPX			Under Drawl/Over Drawl from the Grid (DSM)		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	All India Grid		
										Minimum Price	Maximum Price	Average Price**
1-Sep-22	3.45	12.00	8.21	-	-	-	-	-	-	0.00	8.00	6.88
2-Sep-22	3.50	12.00	7.33	12.00	12.00	12.00	-	-	-	0.00	8.00	7.20
3-Sep-22	2.38	12.00	6.56	-	-	-	-	-	-	0.00	7.91	6.33
4-Sep-22	1.52	6.50	3.87	-	-	-	-	-	-	0.00	8.00	4.49
5-Sep-22	2.45	12.00	6.39	-	-	-	-	-	-	0.00	7.92	6.10
6-Sep-22	2.79	12.00	7.48	12.00	12.00	12.00	-	-	-	0.00	7.98	7.01
7-Sep-22	3.82	12.00	7.34	-	-	-	-	-	-	0.00	8.00	7.40
8-Sep-22	2.97	12.00	6.43	12.00	12.00	12.00	-	-	-	3.10	8.00	7.35
9-Sep-22	2.87	12.00	5.99	-	-	-	-	-	-	0.00	8.00	7.14
10-Sep-22	1.50	12.00	5.12	-	-	-	-	-	-	0.00	7.91	6.59
11-Sep-22	0.12	7.22	2.81	-	-	-	-	-	-	0.00	8.00	3.90
12-Sep-22	0.17	6.00	3.03	-	-	-	-	-	-	0.99	7.24	4.55
13-Sep-22	1.59	7.50	3.67	-	-	-	-	-	-	0.00	6.30	4.43
14-Sep-22	1.78	6.50	3.60	-	-	-	-	-	-	0.00	6.71	4.05
15-Sep-22	2.00	8.50	3.65	-	-	-	-	-	-	0.00	8.00	3.53
16-Sep-22	1.80	6.00	3.01	-	-	-	-	-	-	0.00	6.23	2.89
17-Sep-22	1.82	11.00	3.52	-	-	-	-	-	-	0.00	6.95	3.61
18-Sep-22	2.00	12.00	4.51	-	-	-	-	-	-	1.44	6.90	3.56
19-Sep-22	2.98	12.00	5.11	-	-	-	-	-	-	0.00	6.52	4.50
20-Sep-22	2.00	12.00	4.22	-	-	-	-	-	-	1.16	6.37	5.00
21-Sep-22	2.25	10.00	3.65	-	-	-	-	-	-	0.00	6.76	4.06
22-Sep-22	1.59	12.00	3.32	-	-	-	-	-	-	0.00	6.30	4.16
23-Sep-22	0.90	5.83	2.67	-	-	-	-	-	-	0.00	6.77	3.55
24-Sep-22	1.00	12.00	3.10	-	-	-	-	-	-	0.00	5.75	3.46
25-Sep-22	0.50	8.83	2.57	-	-	-	-	-	-	0.00	5.94	2.94
26-Sep-22	2.08	12.00	5.07	-	-	-	-	-	-	0.97	7.80	4.46
27-Sep-22	2.02	12.00	5.46	-	-	-	-	-	-	0.00	7.82	5.74
28-Sep-22	2.87	12.00	5.25	-	-	-	-	-	-	1.94	6.03	4.28
29-Sep-22	1.89	12.00	5.43	-	-	-	-	-	-	2.14	6.67	5.03
30-Sep-22	2.90	12.00	4.88	-	-	-	-	-	-	2.04	5.46	4.38
	0.12#	12.00#	4.68	12.00#	12.00#	12.00	-	-	-	0.00#	8.00#	4.95

Source: Data on price of PX transactions from IEX, PXIL and HPX 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-28: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), SEPTEMBER 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	0.78	1787.70	1786.92	56.86	589.26	532.40	38.84	50.65	-11.81	2307.51
HARYANA	1.90	1152.21	1150.31	115.25	417.66	302.41	105.51	18.51	87.00	1539.72
RAJASTHAN	48.54	64.15	15.61	22.18	902.84	880.67	104.01	52.75	51.25	947.53
DELHI	7.61	767.41	759.80	131.58	140.85	9.27	21.46	29.02	-7.55	761.52
UTTAR PRADESH	52.23	481.24	429.00	454.18	673.86	219.68	101.55	61.95	39.61	688.29
UTTARAKHAND	66.71	15.94	-50.77	68.63	12.77	-55.86	16.38	23.80	-7.41	-114.04
HIMACHAL PRADESH	723.06	0.46	-722.60	245.04	12.99	-232.05	18.82	11.68	7.14	-947.50
J & K	291.72	0.00	-291.72	109.94	22.40	-87.54	52.09	30.91	21.18	-358.08
CHANDIGARH	0.00	0.00	0.00	36.09	2.17	-33.92	4.69	8.42	-3.73	-37.65
MP	1295.85	81.82	-1214.03	612.04	116.77	-495.27	44.42	115.75	-71.33	-1780.63
MAHARASHTRA	226.05	866.71	640.66	108.67	346.48	237.81	65.51	80.83	-15.33	863.14
GUJARAT	52.00	511.45	459.45	20.69	831.42	810.74	52.31	135.82	-83.51	1186.68
CHHATTISGARH	7.69	31.58	23.89	73.25	50.89	-22.36	26.21	24.90	1.31	2.84
GOA	20.83	53.62	32.79	34.73	4.42	-30.31	6.59	5.68	0.92	3.40
DD&DNH	0.29	56.18	55.89	5.01	195.69	190.68	5.36	6.65	-1.29	245.28
ANDHRA P	51.89	331.18	279.28	226.63	246.76	20.13	57.07	59.28	-2.21	297.20
KARNATAKA	292.35	10.02	-282.32	428.54	75.66	-352.89	51.78	59.04	-7.26	-642.46
KERALA	25.47	0.00	-25.47	363.62	16.81	-346.82	15.16	33.45	-18.29	-390.58
TAMIL NADU	15.24	4.71	-10.53	127.51	200.87	73.36	63.94	82.49	-18.55	44.29
PONDICHERRY	0.00	21.57	21.57	0.00	0.00	0.00	3.00	10.33	-7.32	14.24
TELANGANA	139.34	352.51	213.17	572.66	479.59	-93.07	68.28	52.45	15.84	135.94
WEST BENGAL	65.30	249.65	184.35	203.46	312.27	108.80	23.37	42.21	-18.84	274.32
ODISHA	32.82	472.94	440.11	245.02	259.22	14.21	25.79	37.10	-11.32	443.00
BIHAR	28.17	85.18	57.01	412.37	6.49	-405.89	31.47	36.39	-4.92	-353.80
JHARKHAND	12.74	191.75	179.01	55.04	55.97	0.92	23.93	21.26	2.67	182.60
SIKKIM	37.37	27.66	-9.70	13.11	0.37	-12.74	2.81	2.62	0.18	-22.26
DVC	71.56	5.61	-65.95	0.07	241.35	241.27	11.37	49.75	-38.37	136.94
ARUNACHAL P	25.64	0.00	-25.64	39.94	0.00	-39.94	6.37	4.49	1.88	-63.70
ASSAM	0.00	55.07	55.07	52.08	161.29	109.21	14.41	13.68	0.73	165.01
MANIPUR	31.43	0.31	-31.13	3.07	1.83	-1.25	3.63	2.35	1.29	-31.09
MEGHALAYA	108.26	47.18	-61.08	3.21	6.49	3.28	4.93	3.74	1.19	-56.60
MIZORAM	0.00	0.00	0.00	35.59	0.00	-35.59	0.65	6.07	-5.41	-41.00
NAGALAND	1.62	0.00	-1.62	9.35	0.00	-9.35	0.81	2.53	-1.72	-12.69
TRIPURA	0.00	0.40	0.40	9.82	12.10	2.28	7.18	6.74	0.44	3.12
NTPC STATIONS-NR	0.00	0.00	0.00	0.00	0.00	0.00	125.48	62.41	63.07	63.07
NHPC STATIONS	0.00	0.00	0.00	1.42	0.00	-1.42	13.80	121.36	-107.56	-108.98
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.15	-0.01	-0.01
RAIL	0.00	0.00	0.00	0.00	40.55	40.55	4.67	2.48	2.19	42.74
NEP	0.00	0.00	0.00	0.00	0.00	0.00	6.89	0.61	6.29	6.29
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	3.20	1.52	1.68	1.68
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	0.27	3.60	-3.33	-3.33
NJPC	0.00	0.00	0.00	9.26	0.00	-9.26	2.30	15.93	-13.63	-22.90
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	3.25	10.48	-7.23	-7.23
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	6.27	13.09	-6.82	-6.82
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	6.80	0.62	6.18	6.18
AD HYDRO	47.90	0.00	-47.90	22.82	0.00	-22.82	1.01	4.63	-3.62	-74.34
IGSTPS	0.00	0.00	0.00	6.25	0.00	-6.25	13.23	10.93	2.30	-3.95
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	1.46	2.98	-1.52	-1.52
KARCHAM WANGTOO	66.10	0.00	-66.10	15.51	0.00	-15.51	4.21	12.84	-8.63	-90.24
SHREE CEMENT	34.53	0.00	-34.53	9.20	0.00	-9.20	3.10	1.06	2.04	-41.69
LANCO BUDHIL	0.00	0.00	0.00	4.21	0.00	-4.21	0.77	0.37	0.39	-3.82
RAMPUR HEP	0.00	0.00	0.00	2.43	0.00	-2.43	0.25	11.63	-11.39	-13.82
SORANG HEP	52.18	0.00	-52.18	4.83	0.00	-4.83	1.41	1.53	-0.12	-57.13
SAINJ HEP	29.05	0.00	-29.05	36.66	0.00	-36.66	0.34	1.34	-1.01	-66.71
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.81	-0.13	-0.13
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.67	2.50	-0.83	-0.83

SB_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.15	3.57	-2.42	-2.42
ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.97	4.46	-0.49	-0.49
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.35	2.25	-0.90	-0.90
TATA_SLR	34.00	0.00	-34.00	0.00	0.00	0.00	5.60	1.59	4.01	-29.99
RENEW_SLR_BKN	0.00	0.00	0.00	0.00	0.00	0.00	3.44	2.92	0.52	0.52
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.58	7.49	-5.92	-5.92
ARERJL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.13	3.16	-2.03	-2.03
KSMPL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.95	-0.66	-0.66
ADANI GREEN	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.64	-0.27	-0.27
ASEJTL_SLR	0.00	0.00	0.00	11.25	0.00	-11.25	3.05	3.22	-0.16	-11.41
SINGOLI BHATWARI HE	70.11	0.00	-70.11	5.66	0.03	-5.64	0.94	0.14	0.80	-74.94
AZURE43_SLR	0.00	0.00	0.00	0.00	0.00	0.00	4.36	10.92	-6.56	-6.56
MRPL	0.00	0.00	0.00	0.00	0.00	0.00	1.93	2.83	-0.90	-0.90
SB6_POKARAN	0.00	0.00	0.00	0.00	0.00	0.00	3.30	3.34	-0.04	-0.04
EDEN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.70	4.24	-1.54	-1.54
SBSR_SLR	1.50	0.00	-1.50	12.05	0.00	-12.05	3.80	2.15	1.66	-11.89
RENEWSW_SLR	18.81	0.00	-18.81	0.00	0.00	0.00	3.56	3.88	-0.32	-19.13
RENEWJH_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.02	3.71	-0.69	-0.69
AHEJ2L_SOLAR	58.87	0.00	-58.87	9.63	0.00	-9.63	8.44	7.67	0.77	-67.73
AHEJ2L_WIND	15.19	0.00	-15.19	0.00	0.00	0.00	0.00	0.00	0.00	-15.19
AHEJ3L_SOLAR	43.88	0.00	-43.88	20.61	0.00	-20.61	7.43	10.84	-3.41	-67.90
AHEJ3L_WIND	18.05	0.00	-18.05	0.00	0.00	0.00	0.00	0.00	0.00	-18.05
AHEJ4L_WIND	90.76	0.00	-90.76	0.00	0.00	0.00	0.00	0.00	0.00	-90.76
AHEJ4L_SOLAR	149.48	0.00	-149.48	0.00	0.00	0.00	27.00	21.04	5.97	-143.52
RENEWSB	0.00	0.00	0.00	0.00	0.00	0.00	4.40	4.33	0.07	0.07
AZURE41_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.86	3.91	-0.05	-0.05
AYANA_RP1	0.00	0.00	0.00	0.00	0.00	0.00	4.58	5.62	-1.04	-1.04
AVAADASN_SLR	11.08	0.00	-11.08	0.00	0.00	0.00	3.35	4.33	-0.98	-12.06
RENEWURJA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.09	3.06	2.03	2.03
AVADARJHN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	8.53	7.09	1.44	1.44
NCR ALLAHABAD	0.00	8.39	8.39	0.00	0.00	0.00	0.00	0.00	0.00	8.39
RENEW_SR_SLR	0.00	0.00	0.00	12.04	0.00	-12.04	1.68	2.60	-0.92	-12.96
AZURE_MAPLE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.81	1.42	0.38	0.38
THAR1_SLR	29.31	0.00	-29.31	0.00	0.00	0.00	1.27	4.44	-3.17	-32.48
CLEANSR_SLR	55.78	0.00	-55.78	0.00	0.00	0.00	4.53	1.97	2.56	-53.21
ACME_HEERGARH	46.68	0.00	-46.68	0.00	0.00	0.00	1.92	5.17	-3.24	-49.92
ABC_BHDL2	64.70	0.00	-64.70	0.00	0.00	0.00	7.11	2.23	4.88	-59.82
MSUPL_BHDL2	0.00	0.00	0.00	0.00	0.00	0.00	2.50	2.37	0.12	0.12
KOLYAT_SLR	52.19	0.00	-52.19	0.00	0.00	0.00	0.00	0.00	0.00	-52.19
TATA_GREEN	46.71	0.00	-46.71	0.00	0.00	0.00	5.68	1.58	4.10	-42.61
NTPC STATIONS-WR	0.00	0.00	0.00	0.00	0.00	0.00	149.91	99.78	50.12	50.12
BHADRAVATHI HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.02	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	88.00	0.00	-88.00	58.83	0.00	-58.83	2.54	2.78	-0.24	-147.06
LANKO_AMK	4.70	0.00	-4.70	0.00	0.00	0.00	1.60	3.68	-2.09	-6.79
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	3.51	2.06	1.44	1.44
ACBIL	0.00	0.00	0.00	14.52	0.00	-14.52	2.29	0.38	1.91	-12.61
BALCO	0.00	5.98	5.98	0.00	17.69	17.69	8.87	1.59	7.28	30.95
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00	2.22	0.96	1.27	1.27
CGPL	0.00	0.00	0.00	4.36	0.00	-4.36	12.85	1.53	11.32	6.97
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	0.00	0.00	0.00	1.30	1.90	-0.600	-0.600
KSK MAHANADI	57.46	0.00	-57.46	0.00	0.00	0.00	0.93	1.10	-0.17	-57.63
ESSAR POWER	242.84	0.00	-242.84	50.20	0.00	-50.20	18.93	0.86	18.07	-274.97
JINDAL STAGE-II	187.13	0.00	-187.13	176.86	0.45	-176.41	4.53	3.08	1.44	-362.10
DB POWER	47.75	0.00	-47.75	46.20	0.00	-46.20	3.20	3.17	0.03	-93.92
DHARIWAL POWER	0.00	0.00	0.00	0.46	0.00	-0.46	1.14	0.24	0.90	0.43
JAYPEE NIGRIE	207.62	0.00	-207.62	29.37	0.00	-29.37	6.11	4.81	1.30	-235.68
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	91.71	0.00	-91.71	30.57	0.00	-30.57	7.89	5.86	2.04	-120.24
JHABUA POWER_MP	32.01	0.00	-32.01	0.38	0.00	-0.38	5.24	2.08	3.16	-29.23
SASAN UMPP	0.00	0.00	0.00	51.39	0.00	-51.39	1.47	26.99	-25.53	-76.91
TRN ENERGY	6.72	0.00	-6.72	1.29	0.00	-1.29	0.71	2.19	-1.48	-9.49

RKM POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.58	2.53	-0.96	-0.96
SKS POWER	88.44	0.00	-88.44	20.62	0.28	-20.35	1.55	1.52	0.02	-108.77
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	-3.20	-3.20
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	3.80	151.17	-147.38	-147.38
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.19	-0.17	-0.17
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	6.38	4.27	2.11	2.11
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	5.74	5.13	0.61	0.61
OSTRO	4.45	0.00	-4.45	8.87	0.00	-8.87	10.23	6.71	3.52	-9.80
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	5.97	4.19	1.78	1.78
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	9.03	4.40	4.63	4.63
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	13.64	11.50	2.14	2.14
AGEMPL BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	28.57	6.40	22.17	22.17
REGL	6.59	0.00	-6.59	1.61	0.00	-1.61	0.00	0.00	0.00	-8.20
RPREL	349.37	0.00	-349.37	90.46	0.00	-90.46	17.77	0.69	17.08	-422.74
AMPS Hazira	0.43	127.15	126.73	6.39	123.92	117.53	19.52	16.97	2.55	246.81
HVDC RAIGARH	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.08	0.19	0.19
ALFANAR_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	7.37	5.29	2.08	2.08
RENEW_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	8.81	7.48	1.33	1.33
ADANI_WIND	3.39	0.00	-3.39	32.11	0.00	-32.11	0.00	0.00	0.00	-35.50
TPREL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.65	1.80	-0.15	-0.15
ESPL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	2.17	3.20	-1.03	-1.03
GIPCL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.70	1.85	-0.15	-0.15
GSECL_Radhanesda	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.83	-0.64	-0.64
AVIKIRAN	0.00	0.00	0.00	0.00	0.00	0.00	4.35	3.87	0.48	0.48
SESPL	0.00	0.00	0.00	0.00	0.00	0.00	2.21	1.58	0.63	0.63
POWERICA	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.25	0.28	0.28
SKRPL	0.00	0.00	0.00	0.00	0.00	0.00	4.72	4.40	0.33	0.33
SBESS	0.00	0.00	0.00	0.00	0.00	0.00	4.03	11.10	-7.07	-7.07
NTPC STATIONS-SR	8.58	0.00	-8.58	13.18	0.00	-13.18	65.14	23.61	41.53	19.77
LANKO KONDAPALLI	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.46	0.46
SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.47	0.47
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.51	0.51
COASTGEN	19.40	0.00	-19.40	21.83	0.00	-21.83	3.19	0.50	2.69	-38.55
THERMAL POWERTECH	0.10	0.00	-0.10	126.46	0.00	-126.46	21.56	1.87	19.70	-106.87
IL&FS	0.00	0.00	0.00	2.52	0.00	-2.52	9.00	0.07	8.94	6.41
NLC	0.00	0.00	0.00	28.94	0.00	-28.94	33.92	22.28	11.64	-17.30
SEMBCORP	353.22	0.00	-353.22	49.71	0.00	-49.71	27.67	0.49	27.18	-375.74
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	24.31	1.83	22.48	22.48
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	9.87	0.40	9.47	9.47
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.85	1.01	-0.16	-0.16
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.82	1.04	-0.21	-0.21
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.93	1.05	-0.12	-0.12
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.87	-0.08	-0.08
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.99	1.59	0.40	0.40
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.83	-0.02	-0.02
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	4.79	3.61	1.18	1.18
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	7.13	8.52	-1.39	-1.39
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	4.76	6.56	-1.79	-1.79
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.94	-0.11	-0.11
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	7.39	9.39	-2.00	-2.00
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	5.80	7.02	-1.22	-1.22
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.91	3.86	0.05	0.05
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	4.57	5.20	-0.63	-0.63
FORTUM1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.63	2.07	-0.44	-0.44
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.42	0.01	0.01
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.20	0.05	0.05
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.84	1.65	0.18	0.18
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.21	0.17	0.17
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.22	0.00	0.00
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.23	-0.01	-0.01
AVAADA1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.68	0.21	0.21
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.99	0.49	0.49
AZURE_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.47	0.06	0.06

FORTUM2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.97	0.01	0.01
AVAADA2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.64	0.42	0.42
KREDL_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.25	0.04	0.04
AYANA_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	1.38	1.29	0.09	0.09
SPRNG_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.16	0.12	0.12
SPRING_PUGALUR	0.00	0.00	0.00	0.00	0.00	0.00	3.02	1.67	1.35	1.35
OSTRO Hiriyur	0.00	0.00	0.00	0.00	0.00	0.00	1.72	1.57	0.16	0.16
RSTPS_FSPP	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.25	0.95	0.95
GRT_JPL	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.60	-0.05	-0.05
NTPC STATIONS-ER	0.00	0.00	0.00	0.00	0.00	0.00	97.91	40.22	57.69	57.69
MAITHON POWER LTD	0.00	0.00	0.00	0.00	0.00	0.00	2.95	8.56	-5.61	-5.61
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	12.24	6.79	5.45	5.45
ADHUNIK POWER LTD	211.05	144.00	-67.05	4.71	0.00	-4.71	7.41	0.18	7.23	-64.53
CHUZACHEN HEP	0.00	0.00	0.00	9.93	0.00	-9.93	0.82	1.25	-0.43	-10.37
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.34	1.46	-1.12	-1.12
GMR KAMALANGA	35.12	0.00	-35.12	2.43	0.00	-2.43	5.04	0.32	4.73	-32.81
JITPL	210.24	0.00	-210.24	92.00	0.00	-92.00	8.18	1.42	6.76	-295.48
TEESTA HEP	0.00	0.00	0.00	193.93	0.00	-193.93	0.01	9.11	-9.10	-203.03
DAGACHU	83.10	0.00	-83.10	0.00	0.00	0.00	20.94	0.33	20.61	-62.49
JORETHANG	75.12	0.00	-75.12	0.00	0.00	0.00	7.73	0.00	7.73	-67.39
NEPAL(NVVN)	0.00	0.00	0.00	254.28	0.00	-254.28	17.94	10.23	7.71	-246.57
BANGLADESH	0.00	0.00	0.00	0.00	0.00	0.00	4.49	0.17	4.31	4.31
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	-0.18	-0.18
TEESTA STG3	495.00	0.00	-495.00	0.00	0.00	0.00	5.63	0.74	4.89	-490.11
DIKCHU HEP	67.01	0.00	-67.01	6.85	0.00	-6.85	0.38	2.47	-2.09	-75.94
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.00	0.00
TASHIDENG HEP	75.90	0.00	-75.90	0.00	0.00	0.00	1.72	2.97	-1.25	-77.16
BRBCL NABINAGAR	0.00	0.00	0.00	0.00	0.00	0.00	7.92	7.30	0.62	0.62
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	4.86	4.16	0.70	0.70
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	139.20	0.36	138.85	138.85
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	143.45	-143.45	-143.45
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.05	30.32	-30.27	-30.27
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	12.71	10.63	2.08	2.08
RONGNICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.67	2.52	-1.84	-1.84
NTPC STATIONS-NER	0.00	0.00	0.00	1.02	0.00	-1.02	9.52	3.17	6.35	5.34
NEEPCO STATIONS	181.63	0.00	-181.63	51.76	0.00	-51.76	0.80	12.39	-11.59	-244.97
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.51	1.40	0.11	0.11
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.47	-0.19	-0.19
ONGC PALATANA	6.57	0.00	-6.57	17.34	0.00	-17.34	0.51	0.91	-0.40	-24.31
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.60	-0.41	-0.41
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.99	-0.67	-0.67
PUNJAB	0.78	1787.70	1786.92	56.86	589.26	532.40	38.84	50.65	-11.81	2307.51
HARYANA	1.90	1152.21	1150.31	115.25	417.66	302.41	105.51	18.51	87.00	1539.72

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 exchanges and DSM

Table-29: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, SEPTEMBER 2022

Sr. No.	Details of REC Transactions	IEX		PXIL		HPX	
		Solar	Non-Solar	Solar	Non-Solar	Solar	Non-Solar
A	Volume of Buy Bid	390477	197709	178029	118960	680	2232
B	Volume of Sell Bid	4822000	5033035	1766688	1553269	947	3106
C	Ratio of Buy Bid to Sell Bid Volume	0.08	0.04	0.10	0.08	0.72	0.72
D	Market Clearing Volume (MWh)	390477	197709	178029	118960	680	2232
E	Weighted average Market Clearing Price (₹/MWh)	1000	1000	1000	1000	1000	1000

Source: IEX, PXIL and HPX

Note 1: 1 REC = 1 MWh

Table-30: VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, SEPTEMBER 2022

Sr. No.	Neighbouring Country	Volume (MU)			Weighted Average Price (₹/kWh)	
		Sale	Purchase	Net*	Sale	Purchase
1	Nepal	254.28	0.00	-254.28	5.53	-
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 and HPX