

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

September 2023



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 and DSM	1
3	Price of Short-term Transactions of Electricity and DSM Charges	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>DSM Charges</i>	4
4	Trading Margin	4
5	Volume of Short-term Transactions of Electricity (Regional Entity-wise)	5
6	Congestion on Inter-State Transmission Corridor for Day-Ahead Market and Real-Time Market on Power Exchanges	6
7	Volume and Price of Renewable Energy Certificates (RECs)	7
8	Inferences	8

<b>S.No.</b>	<b>List of Tables</b>	<b>Page No.</b>
Table-1	Volume of Short-term Transactions of Electricity and DSM 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 High Price Day Ahead Market through Power Exchanges	13
Table-8	Price of Electricity Transacted in Real Time Market through Power Exchanges	13
Table-9	Volume and Price of Electricity in Term Ahead Market of IEX	13
Table-10	Volume and Price of Electricity in Term Ahead Market of PXIL	14
Table-11	Volume and Price of Electricity in Term Ahead Market of HPX	14
Table-12	Volume and Price of Electricity in Green Term Ahead Market of IEX	14
Table-13	Volume and Price of Electricity in Green Term Ahead Market of PXIL	14
Table-14	Volume and Price of Electricity in Green Term Ahead Market of HPX	14
Table-15	Volume and Price of Electricity in High Price Term Ahead Market of HPX	14
Table-16	Volume of Electricity Sold through Bilateral	16
Table-17	Volume of Electricity Purchased through Bilateral	18
Table-18	Volume of Electricity Sold in Day Ahead Market through Power Exchanges	19
Table-19	Volume of Electricity Purchased in Day Ahead Market through Power Exchanges	21
Table-20	Volume of Electricity Sold in Green Day Ahead Market through Power Exchanges	22
Table-21	Volume of Electricity Purchased in Green Day Ahead Market through Power Exchanges	22
Table-22	Volume of Electricity Sold in High Price Day Ahead Market through Power Exchanges	23
Table-23	Volume of Electricity Purchased in High Price Day Ahead Market through Power Exchanges	23
Table-24	Volume of Electricity Sold in Real Time Market through Power Exchanges	24
Table-25	Volume of Electricity Purchased in Real Time Market through Power Exchanges	26
Table-26	Total Volume of Net Short-term Transactions of Electricity (Regional Entity-wise)	27
Table-27	Details of Congestion in Power Exchanges	29
Table-28	Volume of Short-term Transactions of Electricity in India (Day-wise)	30
Table-29(a)	Price of Day Ahead Transactions of Electricity (Day-Wise)	31
Table-29(b)	Price of Green Day Ahead Transactions of Electricity (Day-Wise)	32
Table-29(c)	Price of Real Time Transactions of Electricity (Day-Wise)	33
Table-30	Volume of Short-term Transactions of Electricity (Regional Entity-wise)	34
Table-31	Volume and Charges under DSM (Day wise)	36
Table-32	Volume of Electricity Under drawal/ Over Injection (Exported) under DSM	37
Table-33	Volume of Electricity Over drawal/ Under Injection (Imported) under DSM	41
Table-34	Volume and Price of Renewable Energy Certificates (RECs) Transacted through Power Exchanges	45
Table-35	Volume and Price of Cross Border Trade through Day Ahead Market at IEX	45

<b>S. No.</b>	<b>List of Figures</b>	<b>Page No.</b>
Figure-1	Volume of various kinds of Electricity Transactions in Total Electricity Generation	10
Figure-2	Volume of Short-term Transactions of Electricity and DSM Volume	10
Figure-3	Volume transacted in different markets segments on Power Exchanges	11
Figure-4	Volume of Short-term Transactions of Electricity and DSM (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

<b>Abbreviation</b>	<b>Expanded Version</b>
ABSP_ANTP	Acme Bhiwadi Solar Power Private Limited, Anantpur
ACBIL	ACB (India) Limited
ACP	Area Clearing Price
ACV	Area Clearing Volume
ACME_SLR	ACME Solar Power Project
ACME_RUMS	Acme Rewa Ultra Mega Solar Project
ADANI 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 RewaUltraMega Solar Project
ARS_PVGD	ACME REWARI Solar Power Pvt Ltd.
ARTPP	Adani Power Limited - Raipur TPP
ASEJTL_SLR	Adani Solar Energy Jodhpur Two Ltd.
AVAADA1_PVGD	Avaada Solar Energy Private Ltd., Pavagada Project 1
AVAADA2_PVGD	Avaada Solar Energy Private Ltd., Pavagada Project 2
AVADARJHN_SLR	Avaada Rjhn Private Limited_Solar
AYANA_NPKUNTA	Ayana Power, NP Kunta
AZURE_ANTP	Azure Power,Anantpur
AZURE_PVGD	Azure Power,Pavagada
AZURE_SLR	Azure Power Solar Power Project
AZURE34_SLR	Azure Power 34 Pvt. Ltd. Solar Power Project
AZURE43_SLR	Azure Power Forty Three Private Limited
BALCO	Bharat Aluminum Company Limited
BARC	Bhabha Atomic Research Centre
BBMB	Bhakra Beas Management Board
BETAM_TCN	Betam Wind Energy Private Limited, Tuticorin
BHADRAVATHI HVDC	Bhadravathi High Voltage Direct Current Link
BRBCL	Bhartiya Rail Bijlee Company Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGPL	Coastal Gujarat Power Limited

CHUKHA HEP	Chhukha Hydroelectric Project, Bhutan
CHUZACHEN HEP	Chuzachen Hydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
CLEANSPL_SLR	Clean Solar Jodhpur Pvt Ltd
COASTGEN	Coastal Energen Private Limited
DAGACHU	Dagachhu Hydro Power Corporation
DAM	Day Ahead Market
DB POWER	Diligent Power Pvt. Ltd.
DCPP	Donga Mahua Captive Power Plant
DD&DNH	Daman and Diu & Dadar Nagar Haveli
DGEN MEGA POWER	DGEN Mega Power Project
DGPCL Bhutan	Druk Green Power Corporation Ltd., Bhutan
DHARIWAL POWER	Dhariwal Power Station
DIKCHU HEP	Dikchu Hydro-electric Project, Sikkim
DOYANG HEP	Doyang Hydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EDEN_SLR	Eden RE Cite Private limited
EMCO	EMCO Energy Limited
ESPL_RADHANESDA	Electro Solaire Private Limited, Radhanesda
ESSAR POWER	Essar Power Limited
ESSAR STEEL	Essar Steel Ltd
FORTUM1_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada Project 1
FORTUM2_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada Project 2
FRV_ANTP	Fotowatio Renewable Ventures, Anantapur
FRV_NPK	Fotowatio Renewable Ventures, NP Kunta
GIPCL_RADHANESDA	Gujarat Industries Power Company Ltd, Radhanesda
GIWEL_BHUI	Green infra wind energy Limited, Bhuj
GIWEL_TCN	Green Infra Wind Energy Limited, Tuticorin
GMR CHHATTISGARH	GMR Chhattisgarh Energy Limited
GMR KAMALANGA	GMR Kamalanga Energy Ltd.
G-DAM	Green Day Ahead Market
GSECL P-II	GSECL Radhanesda Solar Park (Phase-II)
G-TAM	Green Term Ahead Market
HPX	Hindustan Power Exchange Limited
HP-DAM	High Price Day Ahead Market
HP-TAM	High Price Term Ahead Market
HVDC ALPD	Alipurduar High Voltage Direct Current Link
HVDC CHAMPA	Champa-Kurukshetra High Voltage Direct Current Link
HVDC PUS	Pasauli High Voltage Direct Current Link
HVDC RAIGARH	Raigarh-Pugalur High Voltage Direct Current Link
IEX	Indian Energy Exchange Limited
IGSTPS	Indira Gandhi Super Thermal Power Station Jhajjar
IL&FS	Infrastructure Leasing & Financial Services Limited
INOX_BHUI	INOX Wind Limited, Bhuj, Gujarat
J&K	Jammu & Kashmir
JAYPEE NIGRIE	Jaypee Nigrie Super Thermal Power Project
JHABUA POWER MP	Jhabua Thermal Power Project
JINDAL POWER	Jindal Power Limited
JINDAL STAGE-II	Jindal Power Ltd Stage II
JITPL	Jindal India Thermal Power Ltd.
JORETHANG	Jorethang Loop Hydroelectric Power Project
JSW_RENEW_2	JSW Renew Energy Two Limited
KAPP 3&4	Kakrapar Atomic Power Station Unit 3 & 4

KARCHAM WANGTOO	Karcham Wangtoo H.E. Project
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
MSEPL	Masaya Solar Energy Private Limited
MTPS	TATA Power Mundra Thermal Power Station
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_TCN	Mytrah Energy (India) Private Limited,Tuticorin
MU	Million Units
NAPP	Narora Atomic Power Plant
NCR ALLAHABAD	North Central Railway, Allahabad
NEEPCO	North Eastern Electric Power Corporation Limited
NEP	Nepal
NFL	National Fertilisers Limited
NHPC STATIONS	National Hydro Electric Power Corporation Ltd. Stations
NJPC	Nathpa Jhakri Hydroelectric Power Station
NLC	Neyveli Lignite Corporation Limited
NLDC	National Load Dispatch Centre
NPGC	Nabinagar Power Generating Company (Pvt.) Limited
NSPCL	NTPC - SAIL Power Company Private Limited
NTECLVallur	NTPC Tamil Nadu Energy Company Limited Vallur
NTPC_ANTP	NTPC Anantapur
NTPC STATIONS	National Thermal Power Corporation Ltd. Stations
NTPL	NLC Tamil Nadu Power Limited
NVVN	NTPC Vidyut Vyapar Nigam Limited
OCF	Order Carry Forward
ONGC Platana	ONGC Tripura Power Company
OPGC	Odisha Power Generation Corporation
ORANGE_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
RENEW_SR_SLR	Renew Surya Ravi Private Limited (Solar)
RENEWJH_SLR	Renew Solar Energy (Jharkhand Three) Private Limited
RENEWURJA_SLR	ReNew Solar Urja Private Limited
RGPPL_IR	Ratnagiri Gas and Power Private Ltd., supply to Indian Railways
RGPPL_OTHER	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Dispatch Centre
RONGNICHU HEP	Rongnichu Hydro Electric Power Project
RPREL	Raipur Energen Limited
RSTPS_FSPP	NTPC Ramagundam STPS- Floating Solar PV Project
RTC	Round The Clock
RTM	Real Time Market
SasanUMPP	Sasan Ultra Mega Power Project
SB_SLR	Soft Bank Solar
SB6_POKARAN	SB Energy Six Private Limited, Pokaran
SBG_CLEANTECH_SLR	SBG Cleantech Ltd
SBG_NPK	SB Energy Solar Private Limited, NP Kunta
SBG_PVGD	SB Energy Solar Private Limited, Pavagada
SBSR_SLR	SBSR Power Cleantech Eleven Private Limited
SEMBCORP	Sembcorp Gayatri Power Ltd
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SESPL	Srijan Energy Systems Pvt. Ltd.
SINGOLI BHATWARI HEP	Singoli-Bhatwari Hydroelectric Project, Uttarakhand
SKRPL	Sitac Kabini Renewables Pvt. Ltd.
SPRNG_NPKUNTA	Sprng Energy, NP Kunta
SPRING_PUGALUR	Spring Solar Power Private Limited, Pugalur
TALA HEP	Tala Hydroelectric Project, Bhutan
TASHIDENG HEP	Tashiding Hydro Electric Project, Sikkim
TATA_ANTP	TATA Power Anantapur
TATA_PVGD	Tata Power Renewable Energy Ltd
TATA_SLR	Tata Solar
TEESTA STG3	Teesta Stage 3 Hydro Power Project
TEHRI	Tehri Hydro Electric Power Project
TAM	Term Ahead Market
THAR1_SLR	Thar Surya Ravi One Pvt Ltd
THERMAL POWERTECH	Thermal Powertech Corporation India Limited
TPREL_RADHANESDA	Tata Power Renewable Energy Limited, Radhanesda
TPSL	TP Saurya Limited
VINDHYACHAL HVDC	Vindhyachal High Voltage Direct Current Link
WA	Weighted Average
YARROW_PVGD	Yarrow Infra Structure Private Ltd



## 1. Introduction

1.1. A well-functioning electricity market requires an effective market monitoring process. The monthly report on short-term transactions of electricity, published by CERC since 2008 as part of its market monitoring process, provides a snapshot of key aspects of short-term transactions of electricity in India. Here, “short-term transactions of electricity” refers to the contracts of less than one year period for electricity transacted (inter-State) - through Trading Licensees, directly by the Distribution Licensees and on Power Exchanges (Indian Energy Exchange Ltd (IEX), Power Exchange India Ltd (PXIL) and Hindustan Power Exchange Ltd (HPX)). “DSM Volume” includes the volume recorded under Deviation Settlement Mechanism. The main objectives of the report are: (i) to analyse the volume and price of the short-term transactions of electricity; (ii) to assess the competition among the market players; (iii) to analyse the effect of congestion on the volume of electricity transacted through power exchanges; (iv) to provide information on volume and price of Renewable Energy Certificates (RECs) transacted through power exchanges; and (v) to disseminate all other relevant market information. The analysis of short-term transactions of electricity and DSM volume during the month of **September 2023** is presented in the following sections.

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

2.1. During September 2023, total electricity generation, excluding generation from renewable and captive power plants in India, was 130505.24 MU (Table-1). Of the total electricity generation, 16.09% was transacted through short-term and DSM, comprising of 9.37% through bilateral (through Traders and Term-Ahead contracts on power exchanges, and directly between distribution companies), followed by 4.99% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)} and 1.74% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions and DSM volume (21001.08 MU), 58.21% was transacted through bilateral (41.00% through Traders and Term-Ahead contracts on power exchanges, and 17.21% directly between distribution companies), followed by 30.98% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM} and 10.81% through DSM (Table-1 & Figure-2). The daily volume of short-term transactions is shown in Table-28. Figure-4 shows the daily volume trend for short-term transactions and DSM volume.

2.3. Of the total volume of electricity transacted through power exchanges, 42.86% of the volume was transacted in Term Ahead Market (TAM) (including G-TAM & HP-TAM), followed by 31.46% in DAM (including G-DAM & HP-DAM) and 25.68% in RTM (Figure-3).

2.4. The share of electricity traded by each trading licensee is given in Table-2 & Figure-5. The volume of electricity transacted by the trading licensees includes bilateral transactions and transactions undertaken through power exchanges. There were 53 trading licensees as of September 2023. Of which, 32 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., Tata Power Trading Company (P) Ltd., NTPC Vidyut Vyapar Nigam Ltd., Arunachal Pradesh Power Corporation (P) Ltd. and Adani Enterprises Ltd., had a share of 76.59% in the total volume of electricity traded by all the licensees.

2.5. Herfindahl-Hirschman Index (HHI), a commonly accepted index to calculate market concentration, has been used to measure competition among trading licensees. An increase in the HHI generally indicates a decrease in competition and an increase in market concentration, and vice versa. The HHI below 0.15 indicates non-concentration, HHI between 0.15 and 0.25 indicates moderate concentration, and HHI above 0.25 indicates high concentration. The HHI has been computed based on the volume of electricity traded (inter-State & intra-State) by inter-State trading licensees, and it was 0.1567 for the month of September 2023, which indicates moderate concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX, PXIL and HPX was 3405.42 MU, 11.67 MU and 18.51 MU, respectively. The volume of total buy bids and sell bids was 7867.20 MU and 5570.15 MU, respectively in IEX, 84.79 MU and 28.20 MU, respectively in PXIL, while the same was 41.75 MU and 18.51 MU, respectively in HPX.

2.7. Of the total volume of electricity transacted in the DAM of IEX, the volume sold by the neighbouring countries of India was 262.40 MU, while no volume was purchased, under the Cross Border Trade of electricity through power exchange (Table-35). No Cross Border transaction of electricity was undertaken through PXIL and HPX.

2.8. The volume of electricity transacted in the G-DAM of IEX was 134.92 MU, while no electricity was transacted in the G-DAM of PXIL and HPX. The volume of total buy bids and

sell bids was 1419.84 MU and 194.89 MU, respectively, in IEX. The volume of total buy bids was 7.56 MU in PXIL, while no sell bids were received at PXIL. No bids were received in HPX.

2.9. The volume of electricity transacted in the HP-DAM of IEX and PXIL was 10.79 MU and 0.91 MU, respectively. The volume of total buy bids and sell bids was 25.89 MU and 1894.97 MU, respectively in IEX, while the same was 0.91 MU and 0.91 MU, respectively in PXIL.

2.10. The volume of electricity transacted in the RTM of IEX, PXIL and HPX was 2922.95 MU, 0.25 MU and 1.00 MU, respectively. The volume of total buy bids and sell bids was 6276.65 MU and 4236.42 MU, respectively in IEX, 0.25 MU and 0.25 MU, respectively in PXIL, while the same was 1.29 MU and 1.00 MU, respectively in HPX. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

2.11. The volume of electricity transacted in the TAM of IEX, PXIL and HPX was 1895.42 MU, 1554.77 MU and 1093.73 MU, respectively (Table-9, Table-10 & Table-11). The volume of electricity transacted in the Green Term Ahead Market (G-TAM) of IEX, PXIL and HPX was 89.76 MU, 33.80 MU and 60.07 MU, respectively (Table-12, Table-13 & Table-14).

2.12. The volume of electricity transacted in the HP-TAM) of HPX was 152.26 MU (Table-15).

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

3.1. **Price of electricity transacted through Traders:** The minimum, maximum and weighted average sale prices for the electricity transacted through traders were ₹2.70/kWh, ₹10.00/kWh and ₹7.21/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 ₹7.32/kWh and ₹5.70/kWh, respectively. No electricity was transacted through traders during Peak periods (Table-4).

3.2. **Price of electricity transacted through Power Exchanges:** The minimum, maximum and weighted average prices for the electricity transacted in the DAM of IEX were ₹1.08/kWh, ₹10.00/kWh and ₹5.87/kWh, respectively. These prices in the DAM of PXIL were

₹10.00/kWh, ₹10.00/kWh and ₹10.00/kWh respectively. The minimum, maximum and weighted average prices for the electricity transacted in the DAM of HPX were ₹10.00/kWh, ₹10.00/kWh and ₹10.00/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹3.00/kWh, ₹10.00/kWh and ₹6.47/kWh, respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the HP-DAM of IEX were ₹13.00/kWh, ₹18.50/kWh and ₹18.26/kWh, respectively. These prices in the HP-DAM of PXIL were ₹15.00/kWh, ₹15.00/kWh and ₹15.00/kWh respectively (Table-7). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.50/kWh, ₹10.00/kWh and ₹5.36/kWh, respectively. These prices in the RTM of PXIL were ₹10.00/kWh, ₹10.00/kWh and ₹10.00/kWh respectively. The minimum, maximum and weighted average prices for the electricity transacted in the RTM of HPX were ₹10.00/kWh, ₹10.00/kWh and ₹10.00/kWh respectively (Table-8). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹7.87/kWh, ₹8.57/kWh and ₹7.61/kWh, respectively (Table-9, Table-10 and Table-11). The weighted average price of electricity transacted in the G-TAM of IEX, PXIL and HPX was ₹6.53/kWh, ₹6.58/kWh and ₹6.22/kWh, respectively (Table-12, Table-13 and Table-14). The weighted average price of electricity transacted in the HP-TAM of HPX was ₹14.76/kWh (Table-15). No electricity was transacted in G-DAM of PXIL and HPX.

3.3. **DSM Charges:** The minimum, maximum and average charge under DSM was ₹1.08/kWh, ₹15.94/kWh and ₹6.63/kWh, respectively (Table-31).

3.4. The comparison of weighted average prices of electricity transacted through trading licensees and power exchanges is shown in Figure-6. The daily prices of electricity transacted through various segments at power exchanges and their comparison are shown in Table-29(a), (b) & (c) and Figure-7. The daily volume and charges under DSM are shown in Table-31.

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

4.1. As per the CERC (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations 2020, the trading licensees are allowed to charge a trading margin of not less than 0 paise/kWh and upto 7 paise/kWh. The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.031/kWh.

## 5. Volume of Short-term Transactions of Electricity (Regional Entity<sup>1</sup>-Wise)

5.1. Of the total bilateral transactions, the top 5 regional entities/states sold 29.23% of the volume. These were Karnataka, Simhapuri Energy Private Limited, Madhya Pradesh, Adani Power Limited - Raipur TPP and Himachal Pradesh (Table-16). The top 5 regional entities/states purchased 55.44% of the volume, and these were Punjab, Andhra Pradesh, Haryana, Rajasthan and Uttar Pradesh (Table-17).

5.2. Of the total DAM transactions at power exchanges, the top 5 regional entities/states sold 33.68% of the volume, and these were Chhattisgarh, Nepal (NVVN), Delhi, D B Power and Uttar Pradesh (Table-18). The top 5 regional entities/states purchased 59.69% of the volume, and these were Telangana, Gujarat, Maharashtra, West Bengal and Uttar Pradesh (Table-19).

5.3. Of the total G-DAM transactions at power exchanges, the top 5 regional entities/states sold 72.97% of the volume, and these were Karnataka, Jammu & Kashmir, Andhra Pradesh, Maharashtra and Renew Surya Ravi Private Limited (Solar) (Table-20). The top 5 regional entities/states purchased 51.25% of the volume, and these were Kerala, Damodar Valley Corporation, Maharashtra, Bihar and Punjab (Table-21).

5.4. Of the total HP-DAM transactions at power exchanges, the top 5 regional entities/states sold 99.71% of the volume, and these were NTPC Stations (Northern Region), NTPC Stations (Western Region), DGEN Mega Power Project, Gujarat and Karnataka (Table-22). Only 3 regional entities/states purchased 100.00% of the volume, and these were Tamil Nadu, West Bengal and Maharashtra (Table-23).

5.5. Of the total RTM transactions at power exchanges, the top 5 regional entities/states sold 44.57% of the volume, and these were Madhya Pradesh, Bihar, Andhra Pradesh, Chhattisgarh and Rajasthan (Table-24). The top 5 regional entities/states purchased 51.20% of the volume, and these were Telangana, Punjab, Maharashtra, Uttar Pradesh and Kerala (Table-25).

5.6. The total volume of net short-term transactions of electricity (Regional entity-wise), i.e., the volume of net transactions through bilateral and power exchanges are shown in Table-

---

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

26 & 30. The top 5 electricity selling regional entities/states of short-term transactions were Madhya Pradesh, Simhapuri Energy Private Limited, Himachal Pradesh, Adani Power Limited - Raipur TPP and Karnataka. The top 5 electricity purchasing regional entities/states of short-term transactions were Punjab, Haryana, Andhra Pradesh, Telangana and Uttar Pradesh.

5.7. Of the total under-drawal/ over-injection volume under DSM in September 2023, the top 5 regional entities/states accounted for 25.58% of the volume, and these were Gujarat, Madhya Pradesh, Rajasthan, Tamil Nadu and Maharashtra (Table-32). The top 5 regional entities/states under DSM accounted for 21.69% of the total over-drawal/ under-injection volume, and these were NTPC Stations (Western Region), NTPC Stations (Eastern Region), West Bengal, NTPC Stations (Northern Region) and NTPC Stations (Southern Region) (Table-33).

## **6. Congestion<sup>2</sup> on Inter-State Transmission Corridor for Day-Ahead Market and Real Time Market on Power Exchanges**

6.1. Power exchanges use a price discovery mechanism in which the aggregate demand and supply are matched to arrive at an unconstrained market price and volume. This process assumes that there is no congestion in the inter-State transmission system between different regions. However, in reality, the system operator (NLDC), in coordination with RLDCs, limits the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”<sup>3</sup>.

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 2023, congestion was experienced in RTM on IEX only.

---

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

<sup>3</sup> “Market Splitting” is a mechanism adopted by Power Exchanges, where the market is split in the event of transmission congestion, into predetermined (by NLDC) bid areas or zones, which are cleared individually at their respective area prices such that the energy balance in every bid area is reached based upon the demand and supply in individual bid areas and using the available transmission corridor 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.

6.3. The volume of electricity that could not be cleared due to congestion in RTM of IEX was 0.08% of the unconstrained cleared volume. In terms of time, congestion occurred was 2.95% in RTM of IEX during the month. (Table-27).

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

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

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

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

7.4. The details of REC transactions for the month of September 2023 are shown in Table-34. The market clearing volume of RECs transacted on IEX and PXIL was 514838 and 557000, respectively. The weighted average market clearing price of these RECs was ₹500/MWh in IEX and ₹500/MWh in PXIL. No RECs were traded on HPX.

7.5. The gap between the volume of buy and sell bids of RECs placed through power exchanges shows the variation in demand for the RECs. The ratio of buy bids to sell bids was 0.06 and 0.17 in IEX and PXIL, respectively. No buy bids were received on HPX.

7.6. The volume of RECs transacted through Trading Licensees in September 2023 was 29999. The weighted average trade price for the RECs transacted through traders was ₹794/MWh.

#### **8. Inferences:**

- a) The percentage of short-term transactions of electricity and DSM volume to total electricity generation was 16.09%.
- b) Of the total short-term transactions and DSM volume (21001.08 MU), 58.21% was transacted through bilateral (41.00% through Traders and Term-Ahead contracts on power exchanges, and 17.21% directly between distribution companies), followed by 30.98% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM} and 10.81% through DSM.
- c) Of the total volume of electricity transacted through power exchanges, 42.86% of the volume was transacted in Term Ahead Market (TAM) (including G-TAM & HP-TAM), followed by 31.46% in DAM (including G-DAM & HP-DAM) and 25.68% in RTM.
- d) The top 5 trading licensees had a share of 76.59% 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 0.1567, indicating a moderate concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹7.21/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX, PXIL and HPX was ₹5.87/kWh, ₹10.00/kWh and ₹10.00/kWh. The weighted average price of electricity transacted in G-DAM of IEX was ₹6.47/kWh, while no electricity was transacted in G-DAM of PXIL and HPX. The weighted average price of electricity transacted in HP-DAM of IEX and PXIL was ₹18.26/kWh and ₹15.00/kWh, respectively. The weighted average price of electricity transacted in RTM of IEX, PXIL and HPX was ₹5.36/kWh, ₹10.00/kWh and ₹10.00/kWh.



- h) The weighted average price of electricity transacted in TAM of IEX, PXIL and HPX was ₹7.87/kWh, ₹8.57/kWh and ₹7.61/kWh, respectively. The weighted average price of electricity transacted in G-TAM of IEX, PXIL and HPX was ₹6.53/kWh, ₹6.58/kWh and ₹6.22/kWh, respectively. The weighted average price of electricity transacted in HP-TAM of HPX was ₹14.76/kWh.
- i) The average charge under DSM was ₹6.63/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.031/kWh.
- k) The top 5 electricity selling regional entities/states of short-term transactions were Madhya Pradesh, Simhapuri Energy Private Limited, Himachal Pradesh, Adani Power Limited - Raipur TPP and Karnataka. The top 5 electricity purchasing regional entities/states of short-term transactions were Punjab, Haryana, Andhra Pradesh, Telangana and Uttar Pradesh.
- l) The top 5 regional entities/states under DSM were Gujarat, Madhya Pradesh, Rajasthan, Tamil Nadu and Maharashtra. The top 5 regional entities/states under DSM were NTPC Stations (Western Region), NTPC Stations (Eastern Region), West Bengal, NTPC Stations (Northern Region) and NTPC Stations (Southern Region).
- m) During the month of September 2023, congestion was experienced in RTM of IEX only. The volume of electricity that could not be cleared due to congestion in RTM of IEX was 0.08% of the unconstrained cleared volume.
- n) The market clearing volume of RECs transacted on IEX and PXIL was 514838 and 557000, respectively. The weighted average market clearing price of these RECs was ₹500/MWh in IEX and ₹500/MWh in PXIL. No RECs were traded on HPX. The volume of RECs transacted through Trading Licensees in September 2023 was 29999. The weighted average trade price for the RECs transacted through traders was ₹794/MWh.

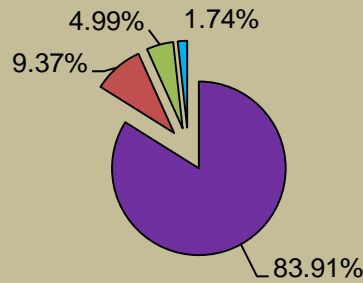
\*\*\*

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

Sr. No	Transaction	Volume (MU)	% to short-term transactions and DSM Volume	% to Total Generation
<b>A</b>	<b>Short-term transactions</b>			
1	Bilateral	<b>12224.66</b>	<b>58.21</b>	<b>9.37</b>
	(i) Through Traders and PXs	8610.18	41.00	6.60
	(ii) Direct	3614.48	17.21	2.77
2	Through Power Exchanges	<b>6506.42</b>	<b>30.98</b>	<b>4.99</b>
	(i) IEX			
	(a) DAM	3405.42	16.22	2.61
	(b) RTM	2922.95	13.92	2.24
	(c) GDAM	134.92	0.64	0.10
	(d) HP-DAM	10.79	0.05	0.01
	(ii) PXIL			
	(a) DAM	11.67	0.06	0.01
	(b) RTM	0.25	0.001	0.0002
	(c) GDAM	0.00	0.00	0.00
	(d) HP-DAM	0.91	0.004	0.001
	(ii) HPX			
	(a) DAM	18.51	0.09	0.01
	(b) RTM	1.00	0.005	0.001
	(c) GDAM	0.00	0.00	0.00
<b>B</b>	<b>Through DSM</b>	<b>2270.00</b>	<b>10.81</b>	<b>1.74</b>
<b>Total Short-term transactions and DSM</b>		<b>21001.08</b>	<b>-</b>	<b>16.09</b>
<b>Total Generation</b>		<b>130505.24</b>	<b>-</b>	<b>-</b>

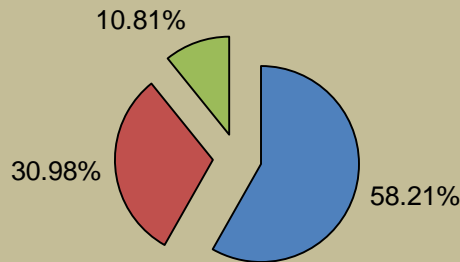
Source: NLDC

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



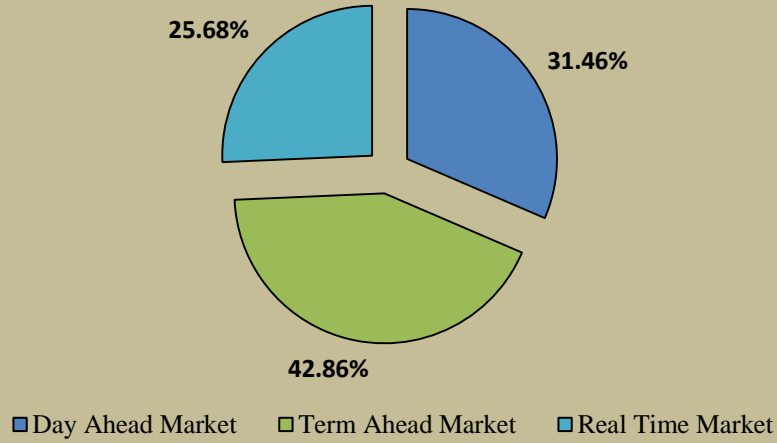
Legend: Long-term (Purple), Bilateral (Red), Through Power Exchanges (Green), Through DSM (Blue)

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

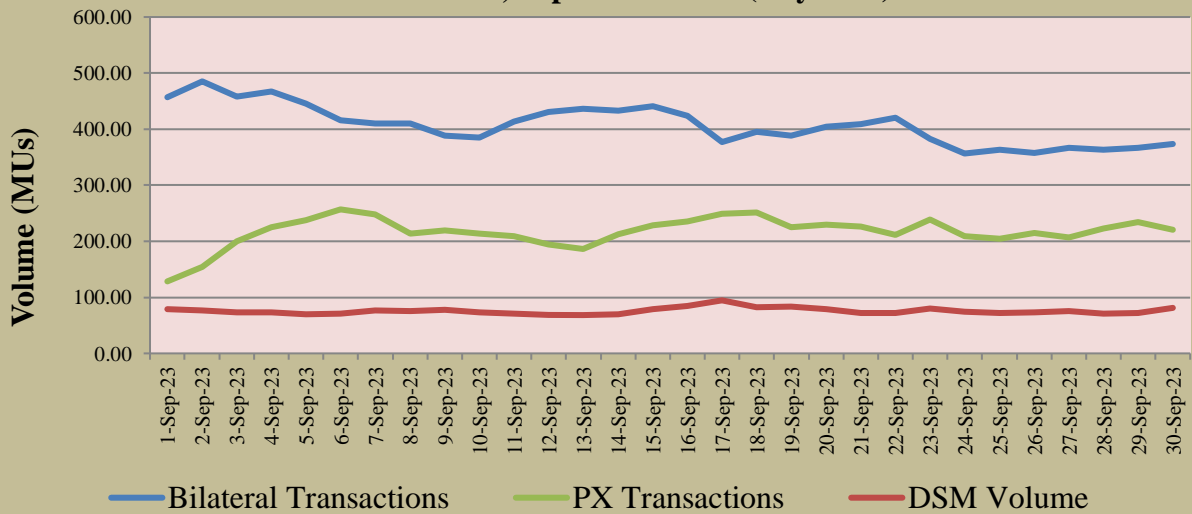


Legend: Bilateral (Blue), Power Exchanges (Red), DSM (Green)

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

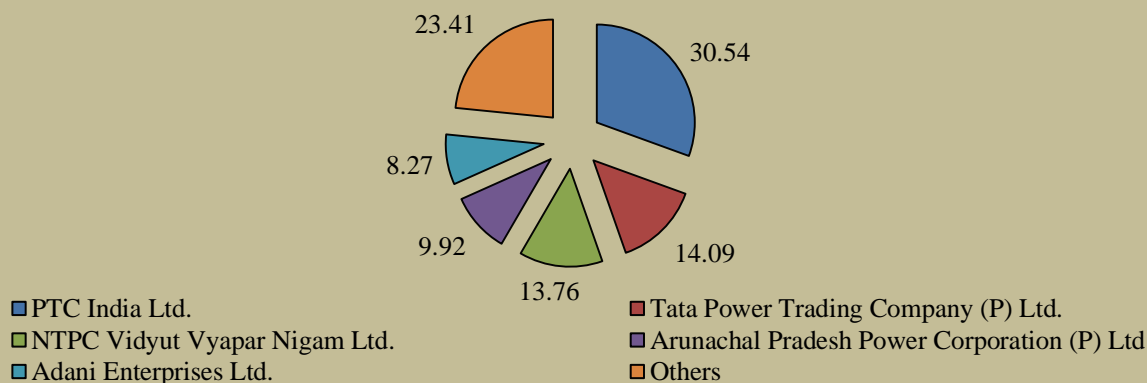


**Figure-4: Volume of Short-term Transactions of Electricity and DSM Volume, September 2023 (Day-wise)**



<b>Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, SEPTEMBER 2023</b>			
<b>Sr. No</b>	<b>Name of the Trading Licensee</b>	<b>% Share in total Volume traded by Trading Licensees</b>	<b>Herfindahl-Hirschman Index</b>
1	PTC India Ltd.	30.54	0.0933
2	Tata Power Trading Company (P) Ltd.	14.09	0.0199
3	NTPC Vidyut Vyapar Nigam Ltd.	13.76	0.0189
4	Arunachal Pradesh Power Corporation (P) Ltd	9.92	0.0098
5	Adani Enterprises Ltd.	8.27	0.0068
6	Manikaran Power Ltd.	5.96	0.0036
7	GMR Energy Trading Ltd.	4.66	0.0022
8	JSW Power Trading Company Ltd	3.61	0.0013
9	Gita Power & Infrastructure Private Limited	1.88	0.0004
10	Ambitious Power Trading Company Ltd.	1.30	0.0002
11	Greenko Energies Pvt Ltd	1.03	0.0001
12	Instinct Infra & Power Ltd.	1.02	0.0001
13	Kreate Energy (I) Pvt. Ltd.	0.81	0.0001
14	Statkraft Markets Pvt. Ltd.	0.71	0.0001
15	NTPC Ltd.	0.58	0.0000
16	RPG Power Trading Company Ltd.	0.49	0.0000
17	Kundan International Pvt. Ltd.	0.37	0.0000
18	Shubheksha Advisors Pvt. Ltd.	0.32	0.0000
19	Abja Power Private Limited	0.18	0.0000
20	Shree Cement Ltd.	0.10	0.0000
21	NLC India Ltd.	0.10	0.0000
22	SJVN Ltd.	0.07	0.0000
23	Instant Venture Pvt. Ltd.	0.06	0.0000
24	Ideal Energy Solution Pvt. Ltd.	0.05	0.0000
25	Saranyu Power Trading Private Limited	0.04	0.0000
26	Powerfull Energy Trading Pvt. Ltd.	0.02	0.0000
27	Refex Industries Ltd.	0.02	0.0000
28	Customized Energy Solutions India (P) Ltd.	0.01	0.0000
29	Phillip Commodities India (P) Ltd.	0.01	0.0000
30	Shell Energy Marketing and Trading India Pvt. Ltd.	0.001	0.0000
31	Altilium Energie Private Limited	0.001	0.0000
32	Energedge Power Trading Pvt. Ltd.	0.0002	0.0000
<b>TOTAL</b>		<b>100.00%</b>	<b>0.1567</b>
<b>Top 5 trading licensees</b>		<b>76.59%</b>	
<i>Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state &amp; 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 2023**



<b>Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, SEPTEMBER 2023</b>		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	2.70
2	Maximum	10.00
3	Weighted Average	7.21

Source: Information submitted by trading licensees

<b>Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), SEPTEMBER 2023</b>		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	7.32
2	PEAK	-
3	OFF PEAK	5.70

Source: Information submitted by trading licensees

<b>Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	1.08	10.00	10.00
2	Maximum	10.00	10.00	10.00
3	Weighted Average	5.87	10.00	10.00

Source: IEX, PXIL and HPX

<b>Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	3.00	-	-
2	Maximum	10.00	-	-
3	Weighted Average	6.47	-	-

Source: IEX, PXIL and HPX

<b>Table-7: PRICE OF ELECTRICITY TRANSACTED IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	13.00	15.00	-
2	Maximum	18.50	15.00	-
3	Weighted Average	18.26	15.00	-

Source: IEX, PXIL and HPX

<b>Table-8: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	0.50	10.00	10.00
2	Maximum	10.00	10.00	10.00
3	Weighted Average	5.36	10.00	10.00

Source: IEX, PXIL and HPX

<b>Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, SEPTEMBER 2023</b>			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	4.92	9.29
2	Day Ahead Contingency Contracts	758.79	6.94
3	Daily Contracts	534.89	8.12
4	Any Day Single Sided Contracts	596.82	8.81
	<b>Total</b>	<b>1895.42</b>	<b>7.87</b>

Source: IEX

**Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, SEPTEMBER 2023**

Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	10.99	9.59
2	Day Ahead Contingency Contracts	524.93	7.89
3	Daily Contracts	434.27	8.69
4	Weekly Contracts	135.95	8.85
5	Any Day Single Sided Contracts	448.63	9.13
	<b>Total</b>	<b>1554.77</b>	<b>8.57</b>

Source: PXIL

**Table-11: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, SEPTEMBER 2023**

Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	4.70	9.57
2	Day Ahead Contingency Contracts	571.04	6.81
3	Daily Contracts	94.00	9.14
4	Any Day Single Sided Contracts	423.99	8.32
	<b>Total</b>	<b>1093.73</b>	<b>7.61</b>

Source: HPX

**Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, SEPTEMBER 2023**

Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.26	9.53
2	Day Ahead Contingency Contracts	84.42	6.53
3	Daily Contracts	0.77	6.10
4	Monthly Contracts	4.32	6.50
	<b>Total</b>	<b>89.76</b>	<b>6.53</b>

Source: IEX

**Table-13: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, SEPTEMBER 2023**

Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	26.31	6.03
2	Any Day Single Sided Contracts	7.49	8.50
	<b>Total</b>	<b>33.80</b>	<b>6.58</b>

Source: PXIL

**Table-14: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF HPX, SEPTEMBER 2023**

Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.10	10.00
2	Day Ahead Contingency Contracts	59.97	6.22
	<b>Total</b>	<b>60.07</b>	<b>6.22</b>

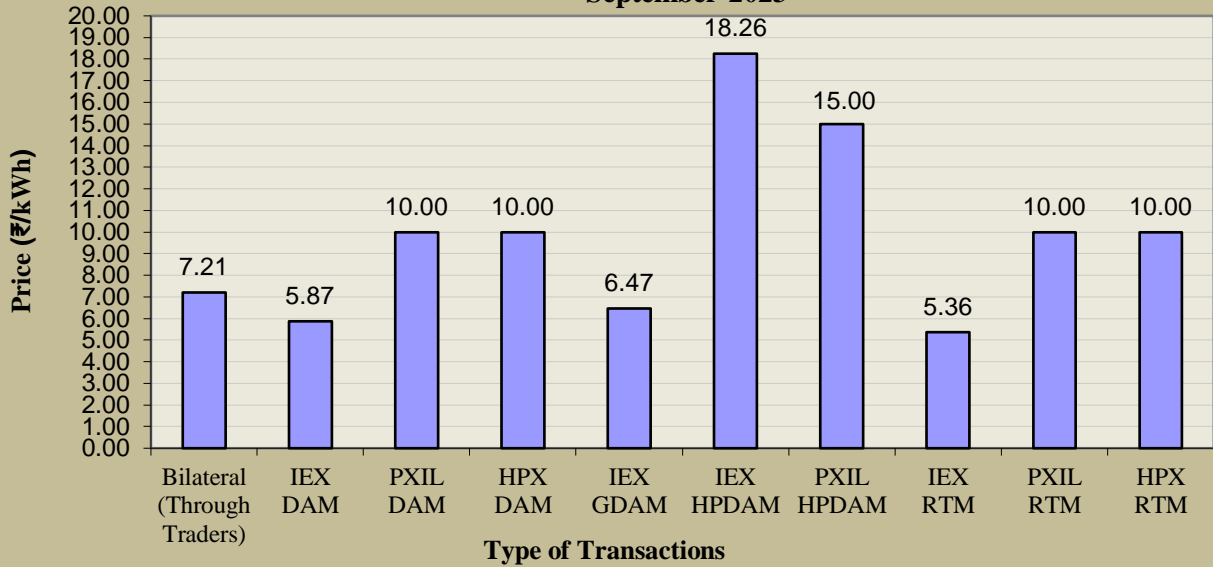
Source: HPX

**Table-15: VOLUME AND PRICE OF ELECTRICITY IN HIGH PRICE TERM AHEAD MARKET OF HPX, SEPTEMBER 2023**

Sr. No	High Price Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	10.25	17.93
2	Day Ahead Contingency Contracts	48.47	16.19
3	Daily Contracts	93.54	13.68
	<b>Total</b>	<b>152.26</b>	<b>14.76</b>

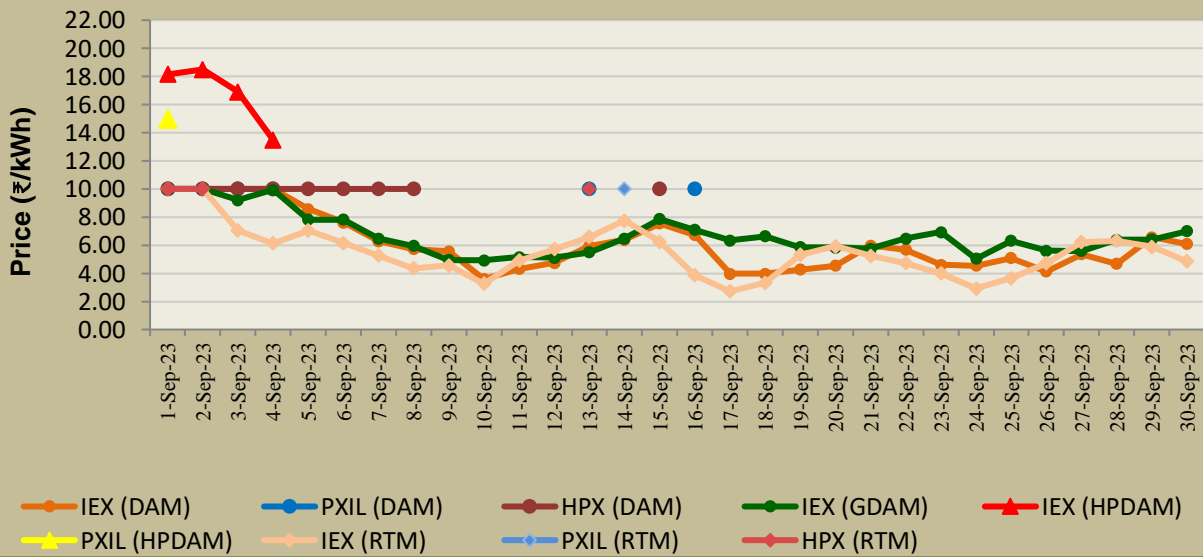
Source: HPX

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



Note: No electricity was transacted in G-DAM of PXIL and HPX during September 2023

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



Note: No electricity was transacted in G-DAM of PXIL and HPX during September 2023

<b>Table-16: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, SEPTEMBER 2023</b>		
<b>Name of the Entity</b>	<b>Volume of Sale (MUs)</b>	<b>% of Volume</b>
KARNATAKA	870.06	7.12
SIMHAPURI	781.50	6.39
MP	651.94	5.33
ARTPP	639.26	5.23
HIMACHAL PRADESH	629.90	5.15
TEESTA HEP	566.49	4.63
JINDAL STAGE-II	512.94	4.20
RKM POWER	464.99	3.80
JITPL	441.78	3.61
JINDAL POWER	407.60	3.33
COASTGEN	378.82	3.10
MAHARASHTRA	376.09	3.08
RAJASTHAN	354.55	2.90
ESSAR POWER	292.08	2.39
TAMIL NADU	291.55	2.38
GUJARAT	267.82	2.19
IL&FS	237.74	1.94
JAYPEE NIGRIE	230.48	1.89
ADHUNIK POWER LTD	210.16	1.72
NEEPCO STATIONS	174.86	1.43
JHABUA POWER_MP	162.41	1.33
AHEJ4L_SOLAR	154.94	1.27
DB POWER	148.21	1.21
J & K	147.43	1.21
MEGHALAYA	139.56	1.14
UTTARAKHAND	134.12	1.10
SHREE CEMENT	124.21	1.02
KERALA	123.63	1.01
DVC	115.48	0.94
NTPC STATIONS-NR	114.78	0.94
ANDHRA PRADESH	112.13	0.92
SKS POWER	108.84	0.89
SEMBCORP	108.83	0.89
ODISHA	100.49	0.82
ACBIL	100.27	0.82
TELANGANA	93.74	0.77
REGL	82.63	0.68
KOLYAT_SLR	81.64	0.67
DGEN MEGA POWER	78.06	0.64
AHEJ4L_WIND	74.22	0.61
NLC	71.62	0.59
DAGACHU	65.00	0.53
SINGOLI BHATWARI HEP	64.03	0.52
UTTAR PRADESH	62.35	0.51
GMR KAMALANGA	60.53	0.50
CHHATTISGARH	57.19	0.47
DIKCHU HEP	55.17	0.45
NEPAL(NVVN)	55.00	0.45
WEST BENGAL	54.61	0.45



KARCHAM WANGTOO	45.33	0.37
RENEW_SR_SLR	43.61	0.36
SORANG HEP	43.12	0.35
GOA	40.94	0.33
DHARIWAL POWER	39.41	0.32
AD HYDRO	37.95	0.31
ARUNACHAL PRADESH	33.38	0.27
OSTRO Hiriyur	25.39	0.21
SIKKIM	24.69	0.20
SAINJ HEP	24.62	0.20
CONTINNUM PT	24.60	0.20
MARUTI COAL	23.23	0.19
SB_SLR	22.86	0.19
TEHRI	22.72	0.19
ONGC PALATANA	21.60	0.18
MANIPUR	20.86	0.17
RGPPL	16.65	0.14
DELHI	14.32	0.12
TRN ENERGY	13.92	0.11
REENERGY5_WIND	13.08	0.11
BALCO	8.34	0.07
NTPC STATIONS-SR	6.93	0.06
TASHIDENG HEP	5.42	0.04
NTPC STATIONS-WR	4.83	0.04
JHARKHAND	4.21	0.03
MB POWER	3.10	0.03
PUNJAB	2.22	0.02
INOX_BHUJ	1.64	0.01
JORETHANG	1.59	0.01
BIHAR	1.20	0.01
NAGALAND	0.59	0.005
MSEPL	0.40	0.003
DD&DNH	0.19	0.002
<b>Total</b>	<b>12224.66</b>	<b>100.00</b>
<b>Volume Sold by top 5 Regional Entities</b>	<b>3572.66</b>	<b>29.23</b>

**Table-17: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, SEPTEMBER 2023**

<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
PUNJAB	1671.78	13.68
ANDHRA PRADESH	1420.39	11.62
HARYANA	1409.95	11.53
RAJASTHAN	1366.67	11.18
UTTAR PRADESH	908.35	7.43
DELHI	815.61	6.67
MAHARASHTRA	692.51	5.66
GUJARAT	670.65	5.49
WEST BENGAL	654.16	5.35
TELANGANA	538.72	4.41
TAMIL NADU	500.96	4.10
KERALA	419.89	3.43
AMPS Hazira	182.83	1.50
JHARKHAND	157.97	1.29
ODISHA	128.10	1.05
KARNATAKA	90.39	0.74
ASSAM	79.29	0.65
MP	77.49	0.63
UTTARAKHAND	76.87	0.63
CHHATTISGARH	68.12	0.56
GOA	64.58	0.53
DD&DNH	59.12	0.48
BALCO	53.71	0.44
BIHAR	42.33	0.35
DVC	25.40	0.21
HIMACHAL PRADESH	24.64	0.20
SIKKIM	13.61	0.11
MEGHALAYA	7.31	0.06
J & K	3.25	0.03
<b>TOTAL</b>	<b>12224.66</b>	<b>100.00</b>
<b>Volume Purchased by top 5 Regional Entities</b>	<b>6777.14</b>	<b>55.44</b>

**Table-18: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023**

<b>Name of the Entity</b>	<b>Volume of Sale (MUs)</b>	<b>% of Volume</b>
CHHATTISGARH	295.36	8.60
NEPAL(NVVN)	240.22	6.99
DELHI	223.90	6.52
DB POWER	199.83	5.82
UTTAR PRADESH	197.69	5.75
JAYPEE NIGRIE	151.45	4.41
MP	150.43	4.38
MB POWER	139.13	4.05
JITPL	130.95	3.81
TAMIL NADU	129.85	3.78
HARYANA	120.50	3.51
BIHAR	112.47	3.27
RAJASTHAN	89.36	2.60
JINDAL POWER	75.16	2.19
DCPP	71.34	2.08
IL&FS	69.65	2.03
TELANGANA	65.54	1.91
GUJARAT	64.64	1.88
HIMACHAL PRADESH	56.27	1.64
ARTPP	49.45	1.44
ADANI_WIND	46.43	1.35
KARNATAKA	45.25	1.32
ODISHA	42.23	1.23
MAHARASHTRA	41.47	1.21
SEMBCORP	39.71	1.16
SKS POWER	36.35	1.06
ANDHRA PRADESH	33.85	0.99
KARCHAM WANGTOO	32.50	0.95
PONDICHERRY	28.77	0.84
PUNJAB	26.12	0.76
AD HYDRO	23.50	0.68
CHANDIGARH	22.71	0.66
NEP	22.18	0.65
SAINJ HEP	21.53	0.63
REGL	21.32	0.62
JHARKHAND	20.59	0.60
TEESTA HEP	20.56	0.60
SHREE CEMENT	20.28	0.59
WEST BENGAL	20.12	0.59
MIZORAM	17.67	0.51
ARUNACHAL PRADESH	16.96	0.49
EMCO	15.67	0.46
DVC	11.99	0.35
ESSAR POWER	10.77	0.31
NTPC STATIONS-NR	10.60	0.31
ASEJTL_SLR	10.18	0.30
MARUTI COAL	10.15	0.30
JHABUA POWER_MP	10.13	0.29
J & K	10.09	0.29
NTPC STATIONS-SR	10.00	0.29
ACBIL	9.81	0.29
RENEW_SR_SLR	9.40	0.27
SIKKIM	8.60	0.25
MEGHALAYA	7.23	0.21

CHUZACHEN HEP	7.18	0.21
RKM POWER	7.11	0.21
NTPC STATIONS-NER	5.78	0.17
GOA	5.33	0.16
NTPC STATIONS-WR	4.77	0.14
NAGALAND	4.76	0.14
SIMHAPURI	4.17	0.12
LANCO BUDHIL	3.61	0.10
NTPC STATIONS-ER	3.48	0.10
DHARIWAL POWER	3.46	0.10
KERALA	3.35	0.10
BALCO	3.19	0.09
NEEPCO STATIONS	2.46	0.07
OSTRO Hiriyur	1.67	0.05
SINGOLI BHATWARI HEP	1.53	0.04
MANIPUR	1.31	0.04
ASSAM	1.04	0.03
MTPS	1.02	0.03
GMR KAMALANGA	0.94	0.03
COASTGEN	0.86	0.03
UTTARAKHAND	0.31	0.01
ONGC PALATANA	0.20	0.01
DGEN MEGA POWER	0.06	0.002
ADHUNIK POWER LTD	0.05	0.001
JINDAL STAGE-II	0.04	0.001
<b>Total</b>	<b>3435.60</b>	<b>100.00</b>
<b>Volume sold by top 5 Regional Entities</b>	<b>1157.01</b>	<b>33.68</b>

<b>Table-19: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>		
<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
TELANGANA	551.52	16.05
GUJARAT	463.87	13.50
MAHARASHTRA	428.96	12.49
WEST BENGAL	335.94	9.78
UTTAR PRADESH	270.43	7.87
ANDHRA PRADESH	252.91	7.36
PUNJAB	211.21	6.15
HARYANA	175.55	5.11
UTTARAKHAND	128.69	3.75
KARNATAKA	96.57	2.81
TAMIL NADU	95.25	2.77
RAJASTHAN	86.86	2.53
ODISHA	61.01	1.78
KERALA	53.18	1.55
MP	43.11	1.25
BIHAR	29.77	0.87
AMPS Hazira	25.21	0.73
NCR ALLAHABAD	22.16	0.65
ASSAM	20.41	0.59
DVC	18.45	0.54
MEGHALAYA	13.49	0.39
DD&DNH	10.35	0.30
DELHI	8.07	0.23
JHARKHAND	7.75	0.23
CHANDIGARH	5.31	0.15
TRIPURA	4.84	0.14
GOA	4.40	0.13
CHHATTISGARH	3.74	0.11
BALCO	3.08	0.09
J & K	2.46	0.07
HIMACHAL PRADESH	1.02	0.03
<b>TOTAL</b>	<b>3435.60</b>	<b>100.00</b>
<b>Volume purchased by top 5 Regional Entities</b>	<b>2050.73</b>	<b>59.69</b>

<b>Table-20: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>		
<b>Name of the Entity</b>	<b>Volume of Sale (MUs)</b>	<b>% of Volume</b>
KARNATAKA	34.16	25.32
J & K	28.32	20.99
ANDHRA PRADESH	20.30	15.05
MAHARASHTRA	9.65	7.15
RENEW_SR_SLR	6.01	4.46
MSEPL	5.35	3.96
TELANGANA	4.52	3.35
OSTRO Hiriyur	4.27	3.16
SINGOLI BHATWARI HEP	4.15	3.08
NTPC STATIONS-SR	3.83	2.84
SIKKIM	3.38	2.50
SB_SLR	2.79	2.07
INOX_BHUJ	2.01	1.49
MP	1.81	1.34
UTTAR PRADESH	1.18	0.87
RAJASTHAN	1.04	0.77
HIMACHAL PRADESH	0.97	0.72
REENERGY5_WIND	0.88	0.65
DELHI	0.29	0.21
<b>Total</b>	<b>134.92</b>	<b>100.00</b>
<b>Volume sold by top 5 Regional Entities</b>	<b>98.46</b>	<b>72.97</b>

<b>Table-21: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>		
<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
KERALA	19.43	14.40
DVC	14.03	10.40
MAHARASHTRA	13.55	10.04
BIHAR	12.00	8.90
PUNJAB	10.14	7.52
AMPS Hazira	9.05	6.71
TAMIL NADU	8.07	5.98
GUJARAT	6.17	4.57
GOA	5.89	4.37
RAJASTHAN	5.47	4.05
KARNATAKA	5.29	3.92
NCR ALLAHABAD	4.97	3.69
UTTAR PRADESH	4.83	3.58
MP	4.11	3.05
BALCO	2.82	2.09
JHARKHAND	2.72	2.01
DELHI	2.23	1.65
ODISHA	2.15	1.59
DD&DNH	0.62	0.46
TELANGANA	0.62	0.46
ANDHRA PRADESH	0.47	0.35
HIMACHAL PRADESH	0.13	0.10
MEGHALAYA	0.08	0.06
HARYANA	0.08	0.06
<b>TOTAL</b>	<b>134.92</b>	<b>100.00</b>
<b>Volume purchased by top 5 Regional Entities</b>	<b>69.15</b>	<b>51.25</b>

<b>Table-22: VOLUME OF ELECTRICITY SOLD IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>		
<b>Name of the Entity</b>	<b>Volume of Sale (MUs)</b>	<b>% of Volume</b>
NTPC STATIONS-NR	6.62	56.64
NTPC STATIONS-WR	3.52	30.08
DGEN MEGA POWER	0.91	7.74
GUJARAT	0.46	3.92
KARNATAKA	0.16	1.33
RGPPL_IR	0.03	0.29
<b>Total</b>	<b>11.69</b>	<b>100.00</b>
<b>Volume sold by top 5 Regional Entities</b>	<b>11.66</b>	<b>99.71</b>

<b>Table-23: VOLUME OF ELECTRICITY PURCHASED IN HIGH PRICE DAY AHEAD MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023</b>		
<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
TAMIL NADU	10.72	91.67
WEST BENGAL	0.94	8.00
MAHARASHTRA	0.04	0.34
<b>TOTAL</b>	<b>11.69</b>	<b>100.00</b>
<b>Volume purchased by top 5 Regional Entities</b>	<b>11.69</b>	<b>100.00</b>

**Table-24: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023**

<b>Name of the Entity</b>	<b>Volume of Sale (MUs)</b>	<b>% of Volume</b>
MP	404.66	13.84
BIHAR	304.93	10.43
ANDHRA PRADESH	203.84	6.97
CHHATTISGARH	203.43	6.96
RAJASTHAN	186.31	6.37
TAMIL NADU	161.74	5.53
ODISHA	152.43	5.21
DELHI	142.69	4.88
PUNJAB	117.46	4.02
TELANGANA	117.13	4.01
WEST BENGAL	99.80	3.41
HIMACHAL PRADESH	74.85	2.56
JHARKHAND	73.29	2.51
J & K	72.69	2.49
UTTAR PRADESH	56.65	1.94
MAHARASHTRA	41.85	1.43
NTPC STATIONS-WR	36.18	1.24
KARNATAKA	30.35	1.04
HARYANA	26.69	0.91
NTPC STATIONS-NR	26.24	0.90
SASAN UMP	24.86	0.85
TEESTA HEP	24.55	0.84
NTPC STATIONS-ER	21.43	0.73
RKM POWER	21.33	0.73
GUJARAT	18.11	0.62
MANIPUR	18.00	0.62
NTPC STATIONS-SR	15.00	0.51
PONDICHERRY	13.30	0.45
NPGC	13.22	0.45
TRIPURA	12.16	0.42
UTTARAKHAND	11.56	0.40
MB POWER	10.65	0.36
DVC	10.43	0.36
ESSAR POWER	10.06	0.34
JHABUA POWER_MP	10.04	0.34
SIKKIM	9.71	0.33
REGL	9.15	0.31
SEMBCORP	8.05	0.28
TRN ENERGY	7.45	0.25
NLC	7.08	0.24
ASSAM	6.26	0.21
SIMHAPURI	6.04	0.21
BALCO	5.78	0.20
KARCHAM WANGTOO	5.48	0.19
AD HYDRO	5.36	0.18
ACBIL	5.30	0.18
DIKCHU HEP	4.66	0.16
IL&FS	4.37	0.15
ADHUNIK POWER LTD	4.31	0.15
GOA	4.24	0.14
IGSTPS	4.02	0.14
ARTPP	3.85	0.13
DD&DNH	3.80	0.13
KERALA	3.67	0.13



SORANG HEP	3.56	0.12
MTPS	3.33	0.11
ONGC PALATANA	3.17	0.11
DGEN MEGA POWER	3.08	0.11
ARUNACHAL PRADESH	2.63	0.09
SKS POWER	2.62	0.09
SAINJ HEP	2.60	0.09
OSTRO Hiriyur	2.51	0.09
NAGALAND	2.24	0.08
NTPC STATIONS-NER	1.90	0.06
CHANDIGARH	1.87	0.06
JITPL	1.76	0.06
NEEPCO STATIONS	1.69	0.06
SINGOLI BHATWARI HEP	1.60	0.05
MARUTI COAL	1.57	0.05
JORETHANG	1.44	0.05
JINDAL POWER	1.41	0.05
EMCO	1.37	0.05
TASHIDENG HEP	1.11	0.04
JINDAL STAGE-II	0.88	0.03
MEGHALAYA	0.87	0.03
MSEPL	0.87	0.03
DCPP	0.82	0.03
SHREE CEMENT	0.74	0.03
DB POWER	0.64	0.02
RENEW_SR_SLR	0.64	0.02
LANCO BUDHIL	0.62	0.02
CHUZACHEN HEP	0.13	0.004
JAYPEE NIGRIE	0.04	0.001
GMR KAMALANGA	0.03	0.001
<b>Total</b>	<b>2924.20</b>	<b>100.00</b>
<b>Volume sold by top 5 Regional Entities</b>	<b>1303.18</b>	<b>44.57</b>

**Table-25: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, SEPTEMBER 2023**

<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
TELANGANA	468.04	16.01
PUNJAB	302.01	10.33
MAHARASHTRA	278.75	9.53
UTTAR PRADESH	227.81	7.79
KERALA	220.46	7.54
HARYANA	151.09	5.17
WEST BENGAL	138.34	4.73
KARNATAKA	135.46	4.63
ASSAM	131.03	4.48
RAJASTHAN	118.62	4.06
GUJARAT	87.01	2.98
UTTARAKHAND	85.97	2.94
ODISHA	81.36	2.78
DVC	79.17	2.71
ANDHRA PRADESH	59.69	2.04
TAMIL NADU	52.51	1.80
MP	51.65	1.77
DELHI	43.80	1.50
BIHAR	39.02	1.33
J & K	29.41	1.01
HIMACHAL PRADESH	25.95	0.89
BALCO	24.41	0.83
DD&DNH	21.73	0.74
AMPS Hazira	16.71	0.57
MEGHALAYA	10.40	0.36
NCR ALLAHABAD	8.82	0.30
TRIPURA	5.58	0.19
JHARKHAND	5.25	0.18
JAYPEE NIGRIE	3.56	0.12
GOA	3.53	0.12
SIMHAPURI	3.02	0.10
ARUNACHAL PRADESH	2.92	0.10
CHHATTISGARH	2.51	0.09
JINDAL POWER	2.07	0.07
MANIPUR	1.84	0.06
NTPC STATIONS-WR	1.27	0.04
RGPPL_IR	1.04	0.04
SINGOLI BHATWARI HEP	0.69	0.02
CHANDIGARH	0.57	0.02
SAINJ HEP	0.40	0.01
ESSAR POWER	0.28	0.01
PONDICHERRY	0.20	0.01
SIKKIM	0.19	0.01
ACBIL	0.07	0.002
<b>TOTAL</b>	<b>2924.20</b>	<b>100.00</b>
<b>Volume purchased by top 5 Regional Entities</b>	<b>1497.07</b>	<b>51.20</b>

**Table-26: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), SEPTEMBER 2023**

S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	PUNJAB	2049.34
2	HARYANA	1589.48
3	ANDHRA PRADESH	1363.33
4	TELANGANA	1277.97
5	UTTAR PRADESH	1093.55
6	WEST BENGAL	954.86
7	RAJASTHAN	946.36
8	MAHARASHTRA	944.74
9	GUJARAT	876.66
10	KERALA	582.31
11	DELHI	488.52
12	AMPS Hazira	233.80
13	ASSAM	223.44
14	UTTARAKHAND	145.54
15	DD&DNH	87.82
16	TAMIL NADU	84.36
17	JHARKHAND	75.61
18	BALCO	66.72
19	NCR ALLAHABAD	35.96
20	GOA	27.89
21	RGPPL_IR	1.01
22	DVC	-0.85
23	TRIPURA	-1.74
24	JORETHANG	-3.03
25	INOX_BHUJ	-3.65
26	IGSTPS	-4.02
27	LANCO BUDHIL	-4.22
28	MTPS	-4.35
29	TASHIDENG HEP	-6.53
30	MSEPL	-6.61
31	CHUZACHEN HEP	-7.31
32	NAGALAND	-7.59
33	NTPC STATIONS-NER	-7.68
34	ASEJTL_SLR	-10.18
35	NPGC	-13.22
36	RENERGY5_WIND	-13.96
37	RGPPL	-16.65
38	EMCO	-17.04
39	MIZORAM	-17.67
40	CHANDIGARH	-18.70
41	TRN ENERGY	-21.37
42	NEP	-22.18
43	ODISHA	-22.53
44	TEHRI	-22.72
45	CONTINNUM PT	-24.60
46	SASAN UMPP	-24.86
47	NTPC STATIONS-ER	-24.91
48	ONGC PALATANA	-24.97
49	SB_SLR	-25.66
50	SIKKIM	-32.59
51	OSTRO Hiriyur	-33.84
52	MARUTI COAL	-34.95
53	NTPC STATIONS-SR	-35.76
54	MANIPUR	-38.33
55	PONDICHERRY	-41.87
56	DHARIWAL POWER	-42.87
57	ADANI_WIND	-46.43
58	SORANG HEP	-46.68
59	NTPC STATIONS-WR	-48.02
60	SAINJ HEP	-48.35
61	ARUNACHAL PRADESH	-50.05
62	RENEW_SR_SLR	-59.66

63	DIKCHU HEP	-59.83
64	GMR KAMALANGA	-61.50
65	DAGACHU	-65.00
66	AD HYDRO	-66.81
67	SINGOLI BHATWARI HEP	-70.63
68	DCPP	-72.16
69	AHEJ4L_WIND	-74.22
70	NLC	-78.70
71	KOLYAT_SLR	-81.64
72	DGEN MEGA POWER	-82.11
73	KARCHAM WANGTOO	-83.31
74	REGL	-113.10
75	ACBIL	-115.31
76	MEGHALAYA	-116.37
77	SHREE CEMENT	-145.23
78	SKS POWER	-147.81
79	MB POWER	-152.88
80	AHEJ4L_SOLAR	-154.94
81	SEMBCORP	-156.59
82	NTPC STATIONS-NR	-158.24
83	NEEPCO STATIONS	-179.01
84	JHABUA POWER_MP	-182.59
85	ADHUNIK POWER LTD	-214.53
86	J & K	-223.42
87	NEPAL(NVVN)	-295.22
88	BIHAR	-295.48
89	IL&FS	-311.76
90	ESSAR POWER	-312.62
91	DB POWER	-348.68
92	JAYPEE NIGRIE	-378.41
93	COASTGEN	-379.68
94	CHHATTISGARH	-481.61
95	JINDAL POWER	-482.10
96	RKM POWER	-493.43
97	JINDAL STAGE-II	-513.86
98	JITPL	-574.48
99	TEESTA HEP	-611.60
100	KARNATAKA	-652.27
101	ARTPP	-692.56
102	HIMACHAL PRADESH	-710.26
103	SIMHAPURI	-788.69
104	MP	-1032.49
* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral and power exchanges		
(-) indicates sale and (+) indicates purchase		

**Table-27: DETAILS OF CONGESTION IN POWER EXCHANGES, SEPTEMBER 2023**

	Details of Congestion	Day Ahead Market			Green Day Ahead Market			High Price Day Ahead Market		Real Time Market		
		IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	IEX	PXIL	HPX
1	Unconstrained Cleared Volume (MUs)	3405.42	11.67	18.51	134.92	0.00	0.00	10.79	0.91	2925.15	0.25	1.00
2	Actual Cleared Volume and hence scheduled (MUs)	3405.42	11.67	18.51	134.92	0.00	0.00	10.79	0.91	2922.95	0.25	1.00
3	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	0.00	0.00	2.20	0.00	0.00
4	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%	0.00%
6	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/ Total number of hours in the month)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.95%	0.00%	0.00%
7	Congestion occurrence (%) time block wise											
	0.00 - 6.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	55.29%	0.00%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.18%	0.00%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.53%	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	40.00%	0.00%	0.00%

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

Source: IEX, PXIL, HPX & NLDC

**Table-28: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs),  
SEPTEMBER 2023**

Date	Bilateral		Day Ahead Market <sup>#</sup>			Green Day Ahead Market <sup>#</sup>			High Price DAM <sup>#</sup>		Real Time Market <sup>#</sup>			Total Electricity Generation (MU) *
	Through Traders and PXs**	Direct	IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	IEX	PXIL	HPX	
1-Sep-23	340.90	115.58	74.08	0.25	2.69	3.23	0.00	0.00	0.30	0.91	46.59	0.00	0.40	4964.40
2-Sep-23	362.76	122.42	68.08	3.59	3.95	2.57	0.00	0.00	9.00	0.00	67.16	0.00	0.29	4868.12
3-Sep-23	336.17	122.11	75.45	3.06	3.87	2.82	0.00	0.00	1.45	0.00	113.62	0.00	0.00	4669.40
4-Sep-23	351.48	115.17	76.31	4.32	6.40	4.40	0.00	0.00	0.04	0.00	133.79	0.00	0.00	4603.75
5-Sep-23	334.24	111.16	120.60	0.00	0.28	4.24	0.00	0.00	0.00	0.00	112.51	0.00	0.00	4654.05
6-Sep-23	305.26	110.95	126.65	0.00	0.40	5.04	0.00	0.00	0.00	0.00	124.77	0.00	0.00	4542.71
7-Sep-23	295.73	114.26	129.16	0.00	0.33	6.41	0.00	0.00	0.00	0.00	111.72	0.00	0.00	4301.57
8-Sep-23	286.64	123.41	102.07	0.00	0.32	7.07	0.00	0.00	0.00	0.00	103.88	0.00	0.00	4200.04
9-Sep-23	262.85	125.67	116.86	0.00	0.00	8.18	0.00	0.00	0.00	0.00	94.74	0.00	0.00	4111.49
10-Sep-23	258.06	127.00	100.42	0.00	0.00	8.19	0.00	0.00	0.00	0.00	104.50	0.00	0.00	3935.98
11-Sep-23	281.65	131.82	102.94	0.00	0.00	5.78	0.00	0.00	0.00	0.00	99.92	0.00	0.00	4184.26
12-Sep-23	297.37	133.23	93.50	0.00	0.00	6.06	0.00	0.00	0.00	0.00	94.64	0.00	0.00	4382.50
13-Sep-23	300.35	135.45	96.86	0.25	0.00	4.43	0.00	0.00	0.00	0.00	84.29	0.00	0.31	4515.06
14-Sep-23	302.38	130.32	101.26	0.00	0.00	7.05	0.00	0.00	0.00	0.00	103.91	0.25	0.00	4665.20
15-Sep-23	312.56	128.78	115.40	0.00	0.27	5.39	0.00	0.00	0.00	0.00	107.98	0.00	0.00	4538.12
16-Sep-23	299.68	124.14	118.41	0.20	0.00	4.22	0.00	0.00	0.00	0.00	112.94	0.00	0.00	4268.48
17-Sep-23	259.35	118.08	122.26	0.00	0.00	5.15	0.00	0.00	0.00	0.00	121.94	0.00	0.00	3891.85
18-Sep-23	274.62	120.86	139.12	0.00	0.00	3.50	0.00	0.00	0.00	0.00	108.69	0.00	0.00	4038.89
19-Sep-23	265.13	122.93	131.64	0.00	0.00	4.43	0.00	0.00	0.00	0.00	89.24	0.00	0.00	4176.07
20-Sep-23	284.13	120.19	136.45	0.00	0.00	3.50	0.00	0.00	0.00	0.00	89.85	0.00	0.00	4335.55
21-Sep-23	288.39	120.01	130.82	0.00	0.00	3.46	0.00	0.00	0.00	0.00	91.63	0.00	0.00	4438.76
22-Sep-23	299.49	121.04	119.94	0.00	0.00	3.42	0.00	0.00	0.00	0.00	88.24	0.00	0.00	4392.61
23-Sep-23	263.57	118.95	131.12	0.00	0.00	2.93	0.00	0.00	0.00	0.00	104.22	0.00	0.00	4172.87
24-Sep-23	246.45	110.05	111.80	0.00	0.00	3.80	0.00	0.00	0.00	0.00	93.44	0.00	0.00	3910.62
25-Sep-23	251.47	111.59	120.39	0.00	0.00	3.28	0.00	0.00	0.00	0.00	80.60	0.00	0.00	4131.45
26-Sep-23	244.75	113.36	125.68	0.00	0.00	3.69	0.00	0.00	0.00	0.00	85.51	0.00	0.00	4337.22
27-Sep-23	251.98	114.57	123.58	0.00	0.00	3.56	0.00	0.00	0.00	0.00	79.17	0.00	0.00	4383.95
28-Sep-23	247.66	115.90	127.27	0.00	0.00	2.75	0.00	0.00	0.00	0.00	92.47	0.00	0.00	4337.74
29-Sep-23	250.18	116.70	142.02	0.00	0.00	3.03	0.00	0.00	0.00	0.00	89.06	0.00	0.00	4328.52
30-Sep-23	254.92	118.78	125.27	0.00	0.00	3.34	0.00	0.00	0.00	0.00	91.93	0.00	0.00	4224.01
<b>Total</b>	<b>8610.18</b>	<b>3614.48</b>	<b>3405.42</b>	<b>11.67</b>	<b>18.51</b>	<b>134.92</b>	<b>0.00</b>	<b>0.00</b>	<b>10.79</b>	<b>0.91</b>	<b>2922.95</b>	<b>0.25</b>	<b>1.00</b>	<b>130505.24</b>

Source: NLDC

\* As available on CEA Website. 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.

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

Table-29(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), SEPTEMBER 2023															
Market Segment	Day Ahead Market of IEX			Day Ahead Market of PXIL			Day Ahead Market of HPX			High Price Day Ahead Market of IEX			High Price Day Ahead Market of PXIL		
Date	Minimum ACP	Maximum ACP	WA Price*	Minimum ACP	Maximum ACP	WA Price*	Minimum ACP	Maximum ACP	WA Price*	Minimum ACP	Maximum ACP	WA Price*	Minimum ACP	Maximum ACP	WA Price*
1-Sep-23	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	15.00	18.50	18.15	15.00	15.00	15.00
2-Sep-23	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	18.50	18.50	18.50	-	-	-
3-Sep-23	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	16.00	17.00	16.90	-	-	-
4-Sep-23	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	13.00	16.00	13.50	-	-	-
5-Sep-23	5.00	10.00	8.57	-	-	-	10.00	10.00	10.00	-	-	-	-	-	-
6-Sep-23	4.25	10.00	7.60	-	-	-	10.00	10.00	10.00	-	-	-	-	-	-
7-Sep-23	3.28	10.00	6.29	-	-	-	10.00	10.00	10.00	-	-	-	-	-	-
8-Sep-23	2.92	10.00	5.73	-	-	-	10.00	10.00	10.00	-	-	-	-	-	-
9-Sep-23	2.81	10.00	5.56	-	-	-	-	-	-	-	-	-	-	-	-
10-Sep-23	1.70	6.25	3.59	-	-	-	-	-	-	-	-	-	-	-	-
11-Sep-23	1.50	8.50	4.31	-	-	-	-	-	-	-	-	-	-	-	-
12-Sep-23	2.86	10.00	4.74	-	-	-	-	-	-	-	-	-	-	-	-
13-Sep-23	3.36	10.00	5.92	10.00	10.00	10.00	-	-	-	-	-	-	-	-	-
14-Sep-23	3.87	10.00	6.38	-	-	-	-	-	-	-	-	-	-	-	-
15-Sep-23	4.54	10.00	7.53	-	-	-	10.00	10.00	10.00	-	-	-	-	-	-
16-Sep-23	4.09	10.00	6.72	10.00	10.00	10.00	-	-	-	-	-	-	-	-	-
17-Sep-23	2.58	5.48	3.97	-	-	-	-	-	-	-	-	-	-	-	-
18-Sep-23	2.25	9.53	3.97	-	-	-	-	-	-	-	-	-	-	-	-
19-Sep-23	3.00	6.51	4.26	-	-	-	-	-	-	-	-	-	-	-	-
20-Sep-23	3.19	8.00	4.54	-	-	-	-	-	-	-	-	-	-	-	-
21-Sep-23	3.75	10.00	5.98	-	-	-	-	-	-	-	-	-	-	-	-
22-Sep-23	3.32	10.00	5.68	-	-	-	-	-	-	-	-	-	-	-	-
23-Sep-23	2.46	10.00	4.60	-	-	-	-	-	-	-	-	-	-	-	-
24-Sep-23	1.08	10.00	4.53	-	-	-	-	-	-	-	-	-	-	-	-
25-Sep-23	2.06	10.00	5.08	-	-	-	-	-	-	-	-	-	-	-	-
26-Sep-23	2.00	10.00	4.14	-	-	-	-	-	-	-	-	-	-	-	-
27-Sep-23	3.26	10.00	5.36	-	-	-	-	-	-	-	-	-	-	-	-
28-Sep-23	2.00	10.00	4.67	-	-	-	-	-	-	-	-	-	-	-	-
29-Sep-23	3.62	10.00	6.56	-	-	-	-	-	-	-	-	-	-	-	-
30-Sep-23	3.30	10.00	6.08	-	-	-	-	-	-	-	-	-	-	-	-
	<b>1.08#</b>	<b>10.00#</b>	<b>5.87</b>	<b>10.00#</b>	<b>10.00#</b>	<b>10.00</b>	<b>10.00#</b>	<b>10.00#</b>	<b>10.00</b>	<b>13.00#</b>	<b>18.50#</b>	<b>18.26</b>	<b>15.00#</b>	<b>15.00#</b>	<b>15.00</b>

Source: IEX, PXIL and HPX

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

# Maximum/Minimum in the month

**Table-29(b): PRICE OF GREEN DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh),  
SEPTEMBER 2023**

Market Segment	Green Day Ahead Market of IEX			Green Day Ahead Market of PXIL			Green Day Ahead Market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Sep-23	10.00	10.00	10.00	-	-	-	-	-	-
2-Sep-23	10.00	10.00	10.00	-	-	-	-	-	-
3-Sep-23	7.00	10.00	9.20	-	-	-	-	-	-
4-Sep-23	9.00	10.00	9.93	-	-	-	-	-	-
5-Sep-23	6.00	10.00	7.82	-	-	-	-	-	-
6-Sep-23	6.00	10.00	7.81	-	-	-	-	-	-
7-Sep-23	4.70	10.00	6.47	-	-	-	-	-	-
8-Sep-23	3.53	10.00	5.94	-	-	-	-	-	-
9-Sep-23	3.30	10.00	4.96	-	-	-	-	-	-
10-Sep-23	3.00	10.00	4.93	-	-	-	-	-	-
11-Sep-23	3.36	10.00	5.16	-	-	-	-	-	-
12-Sep-23	3.48	10.00	5.11	-	-	-	-	-	-
13-Sep-23	4.10	10.00	5.50	-	-	-	-	-	-
14-Sep-23	4.11	10.00	6.48	-	-	-	-	-	-
15-Sep-23	4.99	10.00	7.86	-	-	-	-	-	-
16-Sep-23	4.65	10.00	7.09	-	-	-	-	-	-
17-Sep-23	4.00	10.00	6.34	-	-	-	-	-	-
18-Sep-23	4.50	10.00	6.63	-	-	-	-	-	-
19-Sep-23	4.00	10.00	5.87	-	-	-	-	-	-
20-Sep-23	4.10	10.00	5.83	-	-	-	-	-	-
21-Sep-23	4.11	10.00	5.75	-	-	-	-	-	-
22-Sep-23	4.30	10.00	6.47	-	-	-	-	-	-
23-Sep-23	5.50	10.00	6.94	-	-	-	-	-	-
24-Sep-23	4.11	6.50	5.05	-	-	-	-	-	-
25-Sep-23	5.00	10.00	6.33	-	-	-	-	-	-
26-Sep-23	4.10	10.00	5.61	-	-	-	-	-	-
27-Sep-23	4.11	10.00	5.59	-	-	-	-	-	-
28-Sep-23	4.50	10.00	6.38	-	-	-	-	-	-
29-Sep-23	4.40	10.00	6.41	-	-	-	-	-	-
30-Sep-23	4.50	10.00	7.00	-	-	-	-	-	-
	<b>3.00#</b>	<b>10.00#</b>	<b>6.47</b>	-	-	-	-	-	-

Source: IEX, PXIL and HPX

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

# Maximum/Minimum in the month



**Table-29(c): PRICE OF REAL TIME TRANSACTIONS (DAY-WISE) (₹/kWh), SEPTEMBER 2023**

Market Segment	Real Time Market of IEX			Real Time Market of PXIL			Real Time Market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Sep-23	10.00	10.00	10.00	-	-	-	10.00	10.00	10.00
2-Sep-23	10.00	10.00	10.00	-	-	-	10.00	10.00	10.00
3-Sep-23	2.00	10.00	7.04	-	-	-	-	-	-
4-Sep-23	2.59	10.00	6.12	-	-	-	-	-	-
5-Sep-23	3.10	10.00	7.03	-	-	-	-	-	-
6-Sep-23	3.06	10.00	6.15	-	-	-	-	-	-
7-Sep-23	1.70	10.00	5.26	-	-	-	-	-	-
8-Sep-23	2.00	10.00	4.36	-	-	-	-	-	-
9-Sep-23	2.36	10.00	4.57	-	-	-	-	-	-
10-Sep-23	0.85	7.50	3.27	-	-	-	-	-	-
11-Sep-23	2.50	10.00	4.91	-	-	-	-	-	-
12-Sep-23	2.36	10.00	5.73	-	-	-	-	-	-
13-Sep-23	3.02	10.00	6.60	-	-	-	10.00	10.00	10.00
14-Sep-23	3.72	10.00	7.74	10.00	10.00	10.00	-	-	-
15-Sep-23	3.05	10.00	6.25	-	-	-	-	-	-
16-Sep-23	1.91	7.00	3.86	-	-	-	-	-	-
17-Sep-23	0.50	6.50	2.71	-	-	-	-	-	-
18-Sep-23	1.20	10.00	3.33	-	-	-	-	-	-
19-Sep-23	2.50	10.00	5.32	-	-	-	-	-	-
20-Sep-23	2.90	10.00	5.94	-	-	-	-	-	-
21-Sep-23	3.02	10.00	5.25	-	-	-	-	-	-
22-Sep-23	2.01	10.00	4.73	-	-	-	-	-	-
23-Sep-23	1.11	10.00	3.99	-	-	-	-	-	-
24-Sep-23	0.50	6.00	2.93	-	-	-	-	-	-
25-Sep-23	1.50	10.00	3.66	-	-	-	-	-	-
26-Sep-23	2.00	10.00	4.71	-	-	-	-	-	-
27-Sep-23	2.80	10.00	6.21	-	-	-	-	-	-
28-Sep-23	3.30	10.00	6.32	-	-	-	-	-	-
29-Sep-23	3.23	10.00	5.89	-	-	-	-	-	-
30-Sep-23	2.78	10.00	4.85	-	-	-	-	-	-
	<b>0.50<sup>#</sup></b>	<b>10.00<sup>#</sup></b>	<b>5.36</b>	<b>10.00<sup>#</sup></b>	<b>10.00<sup>#</sup></b>	<b>10.00</b>	<b>10.00<sup>#</sup></b>	<b>10.00<sup>#</sup></b>	<b>10.00</b>

Source: IEX, PXIL and HPX

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

# Maximum/Minimum in the month

**Table-30: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY\*-WISE)  
(MUs), SEPTEMBER 2023**

Name of the Entity	Through Bilateral (Traders + PXs + Direct)			Through Power Exchanges (DAM + GDAM + HPDAM + RTM)			Total Net***
	Sale	Purchase	Net**	Sale	Purchase	Net**	
PUNJAB	2.22	1671.78	1669.56	143.58	523.37	379.79	2049.34
HARYANA	0.00	1409.95	1409.95	147.18	326.72	179.53	1589.48
RAJASTHAN	354.55	1366.67	1012.12	276.72	210.95	-65.76	946.36
DELHI	14.32	815.61	801.29	366.87	54.10	-312.78	488.52
UTTAR PRADESH	62.35	908.35	846.00	255.52	503.07	247.55	1093.55
UTTARAKHAND	134.12	76.87	-57.25	11.88	214.66	202.79	145.54
HIMACHAL PRADESH	629.90	24.64	-605.26	132.09	27.10	-104.99	-710.26
J & K	147.43	3.25	-144.18	111.11	31.87	-79.24	-223.42
CHANDIGARH	0.00	0.00	0.00	24.58	5.88	-18.70	-18.70
MP	651.94	77.49	-574.45	556.91	98.87	-458.04	-1032.49
MAHARASHTRA	376.09	692.51	316.42	92.97	721.29	628.32	944.74
GUJARAT	267.82	670.65	402.83	83.21	557.05	473.84	876.66
CHHATTISGARH	57.19	68.12	10.93	498.79	6.26	-492.54	-481.61
GOA	40.94	64.58	23.64	9.57	13.82	4.25	27.89
DD&DNH	0.19	59.12	58.93	3.80	32.70	28.90	87.82
ANDHRA PRADESH	112.13	1420.39	1308.26	258.00	313.07	55.07	1363.33
KARNATAKA	870.06	90.39	-779.67	109.92	237.33	127.41	-652.27
KERALA	123.63	419.89	296.27	7.02	293.07	286.04	582.31
TAMIL NADU	291.55	500.96	209.41	291.59	166.55	-125.04	84.36
PONDICHERRY	0.00	0.00	0.00	42.07	0.20	-41.87	-41.87
TELANGANA	93.74	538.72	444.97	187.19	1020.18	833.00	1277.97
WEST BENGAL	54.61	654.16	599.55	119.92	475.22	355.30	954.86
ODISHA	100.49	128.10	27.62	194.67	144.52	-50.14	-22.53
BIHAR	1.20	42.33	41.13	417.40	80.80	-336.60	-295.48
JHARKHAND	4.21	157.97	153.76	93.88	15.72	-78.16	75.61
SIKKIM	24.69	13.61	-11.08	21.69	0.19	-21.50	-32.59
DVC	115.48	25.40	-90.07	22.43	111.65	89.22	-0.85
ARUNACHAL PRADESH	33.38	0.00	-33.38	19.59	2.92	-16.67	-50.05
ASSAM	0.00	79.29	79.29	7.29	151.44	144.15	223.44
MANIPUR	20.86	0.00	-20.86	19.30	1.84	-17.46	-38.33
MEGHALAYA	139.56	7.31	-132.24	8.10	23.97	15.88	-116.37
MIZORAM	0.00	0.00	0.00	17.67	0.00	-17.67	-17.67
NAGALAND	0.59	0.00	-0.59	7.00	0.00	-7.00	-7.59
TRIPURA	0.00	0.00	0.00	12.16	10.42	-1.74	-1.74
NTPC STATIONS-NR	114.78	0.00	-114.78	43.46	0.00	-43.46	-158.24
NEP	0.00	0.00	0.00	22.18	0.00	-22.18	-22.18
TEHRI	22.72	0.00	-22.72	0.00	0.00	0.00	-22.72
AD HYDRO	37.95	0.00	-37.95	28.86	0.00	-28.86	-66.81
IGSTPS	0.00	0.00	0.00	4.02	0.00	-4.02	-4.02
KARCHAM WANGTOO	45.33	0.00	-45.33	37.98	0.00	-37.98	-83.31
SHREE CEMENT	124.21	0.00	-124.21	21.02	0.00	-21.02	-145.23
LANCO BUDHIL	0.00	0.00	0.00	4.22	0.00	-4.22	-4.22
SORANG HEP	43.12	0.00	-43.12	3.56	0.00	-3.56	-46.68
SAINJ HEP	24.62	0.00	-24.62	24.13	0.40	-23.73	-48.35
SB_SLR	22.86	0.00	-22.86	2.79	0.00	-2.79	-25.66
ASEJTL_SLR	0.00	0.00	0.00	10.18	0.00	-10.18	-10.18
SINGOLI BHATWARI HEP	64.03	0.00	-64.03	7.28	0.69	-6.60	-70.63
AHEJ4L_WIND	74.22	0.00	-74.22	0.00	0.00	0.00	-74.22
AHEJ4L_SOLAR	154.94	0.00	-154.94	0.00	0.00	0.00	-154.94
NCR ALLAHABAD	0.00	0.00	0.00	0.00	35.96	35.96	35.96
RENEW_SR_SLR	43.61	0.00	-43.61	16.05	0.00	-16.05	-59.66
KOLYAT_SLR	81.64	0.00	-81.64	0.00	0.00	0.00	-81.64
NTPC STATIONS-WR	4.83	0.00	-4.83	44.46	1.27	-43.19	-48.02
JINDAL POWER	407.60	0.00	-407.60	76.57	2.07	-74.50	-482.10
ACBIL	100.27	0.00	-100.27	15.10	0.07	-15.03	-115.31
BALCO	8.34	53.71	45.37	8.96	30.31	21.35	66.72
RGPPL	16.65	0.00	-16.65	0.00	0.00	0.00	-16.65
DCPP	0.00	0.00	0.00	72.16	0.00	-72.16	-72.16

EMCO	0.00	0.00	0.00	17.04	0.00	-17.04	-17.04
ESSAR POWER	292.08	0.00	-292.08	20.82	0.28	-20.55	-312.62
JINDAL STAGE-II	512.94	0.00	-512.94	0.92	0.00	-0.92	-513.86
DB POWER	148.21	0.00	-148.21	200.47	0.00	-200.47	-348.68
DHARIWAL POWER	39.41	0.00	-39.41	3.46	0.00	-3.46	-42.87
JAYPEE NIGRIE	230.48	0.00	-230.48	151.49	3.56	-147.93	-378.41
DGEN MEGA POWER	78.06	0.00	-78.06	4.05	0.00	-4.05	-82.11
MB POWER	3.10	0.00	-3.10	149.78	0.00	-149.78	-152.88
MARUTI COAL	23.23	0.00	-23.23	11.72	0.00	-11.72	-34.95
JHABUA POWER_MP	162.41	0.00	-162.41	20.18	0.00	-20.18	-182.59
SASAN UMPP	0.00	0.00	0.00	24.86	0.00	-24.86	-24.86
TRN ENERGY	13.92	0.00	-13.92	7.45	0.00	-7.45	-21.37
RKM POWER	464.99	0.00	-464.99	28.43	0.00	-28.43	-493.43
SKS POWER	108.84	0.00	-108.84	38.98	0.00	-38.98	-147.81
INOX_BHUJ	1.64	0.00	-1.64	2.01	0.00	-2.01	-3.65
REGL	82.63	0.00	-82.63	30.47	0.00	-30.47	-113.10
AMPS Hazira	0.00	182.83	182.83	0.00	50.97	50.97	233.80
RGPPL_IR	0.00	0.00	0.00	0.03	1.04	1.01	1.01
ADANI WIND	0.00	0.00	0.00	46.43	0.00	-46.43	-46.43
CONTINNUM PT	24.60	0.00	-24.60	0.00	0.00	0.00	-24.60
RENERGY5_WIND	13.08	0.00	-13.08	0.88	0.00	-0.88	-13.96
ARTPP	639.26	0.00	-639.26	53.29	0.00	-53.29	-692.56
MTPS	0.00	0.00	0.00	4.35	0.00	-4.35	-4.35
MSEPL	0.40	0.00	-0.40	6.21	0.00	-6.21	-6.61
NTPC STATIONS-SR	6.93	0.00	-6.93	28.83	0.00	-28.83	-35.76
SIMHAPURI	781.50	0.00	-781.50	10.21	3.02	-7.19	-788.69
COASTGEN	378.82	0.00	-378.82	0.86	0.00	-0.86	-379.68
IL&FS	237.74	0.00	-237.74	74.02	0.00	-74.02	-311.76
NLC	71.62	0.00	-71.62	7.08	0.00	-7.08	-78.70
SEMBCORP	108.83	0.00	-108.83	47.76	0.00	-47.76	-156.59
OSTRO Hiriyur	25.39	0.00	-25.39	8.45	0.00	-8.45	-33.84
NTPC STATIONS-ER	0.00	0.00	0.00	24.91	0.00	-24.91	-24.91
NPGC	0.00	0.00	0.00	13.22	0.00	-13.22	-13.22
ADHUNIK POWER LTD	210.16	0.00	-210.16	4.36	0.00	-4.36	-214.53
CHUZACHEN HEP	0.00	0.00	0.00	7.31	0.00	-7.31	-7.31
GMR KAMALANGA	60.53	0.00	-60.53	0.97	0.00	-0.97	-61.50
JITPL	441.78	0.00	-441.78	132.70	0.00	-132.70	-574.48
TEESTA HEP	566.49	0.00	-566.49	45.11	0.00	-45.11	-611.60
DAGACHU	65.00	0.00	-65.00	0.00	0.00	0.00	-65.00
JORETHANG	1.59	0.00	-1.59	1.44	0.00	-1.44	-3.03
NEPAL(NVVN)	55.00	0.00	-55.00	240.22	0.00	-240.22	-295.22
DIKCHU HEP	55.17	0.00	-55.17	4.66	0.00	-4.66	-59.83
TASHIDENG HEP	5.42	0.00	-5.42	1.11	0.00	-1.11	-6.53
NTPC STATIONS-NER	0.00	0.00	0.00	7.68	0.00	-7.68	-7.68
NEEPCO STATIONS	174.86	0.00	-174.86	4.15	0.00	-4.15	-179.01
ONGC PALATANA	21.60	0.00	-21.60	3.37	0.00	-3.37	-24.97

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 and power exchanges

**Table-31: VOLUME AND CHARGES UNDER DSM (DAY-WISE), SEPTEMBER 2023**

Date	Volume (MU)	All India Grid Charges (₹/kWh)		
		Minimum	Maximum	Average
1-Sep-23	78.49	2.77	11.74	10.00
2-Sep-23	76.60	2.77	15.94	10.29
3-Sep-23	73.63	3.27	13.56	10.00
4-Sep-23	73.41	2.96	10.01	9.91
5-Sep-23	69.85	5.00	10.00	8.93
6-Sep-23	71.10	4.25	10.00	8.05
7-Sep-23	76.29	3.28	10.00	6.85
8-Sep-23	75.51	3.00	10.00	6.08
9-Sep-23	77.75	3.00	10.00	5.90
10-Sep-23	72.90	1.70	8.02	4.01
11-Sep-23	70.54	2.50	10.00	5.14
12-Sep-23	69.13	2.86	10.00	5.97
13-Sep-23	68.33	3.47	10.00	6.65
14-Sep-23	69.67	4.09	10.00	7.86
15-Sep-23	78.98	4.54	10.00	7.86
16-Sep-23	84.89	4.09	10.00	6.90
17-Sep-23	94.59	2.58	10.00	4.26
18-Sep-23	82.38	2.25	10.00	4.24
19-Sep-23	83.03	3.00	10.00	5.30
20-Sep-23	79.01	3.10	10.00	5.89
21-Sep-23	71.57	3.21	10.00	6.46
22-Sep-23	72.47	3.15	10.00	6.12
23-Sep-23	80.59	2.46	10.00	5.12
24-Sep-23	74.80	1.08	10.00	4.74
25-Sep-23	72.25	1.18	10.00	5.23
26-Sep-23	73.73	1.46	10.00	4.96
27-Sep-23	74.89	2.80	10.00	6.21
28-Sep-23	70.68	3.23	10.00	6.49
29-Sep-23	71.98	3.23	10.00	7.03
30-Sep-23	80.96	3.04	10.00	6.41
<b>Total</b>	<b>2270.00</b>	<b>1.08<sup>#</sup></b>	<b>15.94<sup>#</sup></b>	<b>6.63</b>
Source: NLDC				
# Maximum/Minimum in the month				

**Table-32: VOLUME OF ELECTRICITY UNDER DRAWAL/ OVER INJECTION (EXPORTED) THROUGH DSM, SEPTEMBER 2023**

Name of the Entity	Volume of Under drawal/ Over injection (MUs)	% of Volume
GUJARAT	134.32	5.88
MP	120.96	5.29
RAJASTHAN	110.91	4.85
TAMIL NADU	110.10	4.82
MAHARASHTRA	108.46	4.74
PUNJAB	106.38	4.65
UTTAR PRADESH	92.51	4.05
ANDHRA PRADESH	82.46	3.61
CHHATTISGARH	63.80	2.79
DELHI	62.50	2.73
HARYANA	59.72	2.61
NTPC STATIONS-WR	56.40	2.47
BIHAR	56.33	2.46
KARNATAKA	55.63	2.43
TELANGANA	55.37	2.42
NTPC STATIONS-NR	54.83	2.40
NHPC STATIONS	47.82	2.09
NTPC STATIONS-ER	41.31	1.81
NTPC STATIONS-SR	31.88	1.39
JHARKHAND	30.69	1.34
DVC	26.91	1.18
J & K	24.55	1.07
AMPS Hazira	20.41	0.89
UTTARAKHAND	19.61	0.86
BBMB	18.07	0.79
TEESTA HEP	17.44	0.76
NEEPCO STATIONS	17.23	0.75
NJPC	16.10	0.70
SASAN UMPP	14.31	0.63
NLC	13.65	0.60
KREDL_PVGD	13.05	0.57
HIMACHAL PRADESH	12.83	0.56
IGSTPS	12.50	0.55
NEPAL(NVVN)	12.45	0.54
RAMPUR HEP	12.01	0.53
ODISHA	11.32	0.49
WEST BENGAL	11.29	0.49
KARCHAM WANGTOO	10.08	0.44
PONDICHERRY	9.45	0.41
MAITHON POWER LTD	9.18	0.40
RKM POWER	8.68	0.38
GRT_JPL	8.32	0.36
JINDAL STAGE-II	7.73	0.34
DD&DNH	7.72	0.34
JINDAL POWER	7.47	0.33
LANKO_AMK	7.32	0.32
GIWEL_BHUI	7.29	0.32
FORTUM1_PVGD	7.09	0.31
OSTRO Hiriyur	6.84	0.30
MEGHALAYA	6.69	0.29
PARAM_PVGD	6.64	0.29
AZURE43_SLR	6.47	0.28
NEP	6.43	0.28
TATA_PVGD	6.34	0.28
ASEJTL_SLR	6.06	0.26
CHANDIGARH	6.01	0.26
TEHRI	5.92	0.26
SKRPL	5.90	0.26
BALCO	5.80	0.25

NAGALAND	5.77	0.25
MIZORAM	5.72	0.25
ADANI_WIND	5.69	0.25
GOA	5.61	0.25
RPREL	5.48	0.24
ESSAR POWER	5.47	0.24
AGEMPL BHUJ	5.44	0.24
NPGC	5.40	0.24
AVAADASN_SLR	5.34	0.23
SBESS	5.23	0.23
JAYPEE NIGRIE	5.10	0.22
DAGACHU	4.93	0.22
TRIPURA	4.90	0.21
THARI_SLR	4.88	0.21
ARERJL_SLR	4.78	0.21
AYANA_RP1	4.73	0.21
ASSAM	4.70	0.21
SPRNG_NPKUNTA	4.67	0.20
AVADARJHN_SLR	4.52	0.20
ALFANAR_BHUJ	4.38	0.19
MANIPUR	4.36	0.19
JITPL	4.36	0.19
MB POWER	4.34	0.19
RAIL	4.33	0.19
CLEAN_SLR	4.32	0.19
ARS_PVGD	4.20	0.18
TEESTA STG3	4.12	0.18
OSTRO	4.03	0.18
DB POWER	3.87	0.17
ACME_HEERGARH	3.83	0.17
SBSR_SLR	3.82	0.17
NTPC_ANTP	3.79	0.17
ARINSUM_RUMS	3.66	0.16
RENEW_SR_SLR	3.54	0.16
AZURE41_SLR	3.54	0.16
RENEW_BHACHAU	3.48	0.15
AZURE_PVGD	3.44	0.15
MSUPL_BHDL2	3.41	0.15
RENEW_BHUJ	3.38	0.15
SEBMCORP	3.38	0.15
BARC	3.38	0.15
MAHINDRA_RUMS	3.37	0.15
RENEWSB	3.37	0.15
ACME_SLR	3.36	0.15
SBG_PVGD	3.35	0.15
GIWEL_TCN	3.27	0.14
BRBCL,NABINAGAR	3.26	0.14
NTPL	3.23	0.14
SBG_NPK	3.23	0.14
ACME_RUMS	3.14	0.14
ADY1_PVGD	3.13	0.14
RENEW_SLR_BKN	3.08	0.13
KERALA	3.07	0.13
NTPC STATIONS-NER	2.96	0.13
ABC_BHDL2	2.91	0.13
AVIKIRAN	2.89	0.13
NSPCL	2.89	0.13
RENEWURJA_SLR	2.84	0.12
SB6_POKARAN	2.82	0.12
EMCO	2.81	0.12
ADHUNIK POWER LTD	2.77	0.12
NETCL VALLUR	2.73	0.12
ORANGE_TCN	2.64	0.12

TATA_SLR	2.48	0.11
MSEPL	2.48	0.11
SB_SLR	2.45	0.11
ESPL_RADHANESDA	2.45	0.11
CLEANSPL_SLR	2.43	0.11
EDEN_SLR	2.41	0.11
KOTESHWAR	2.40	0.10
APRAAVA	2.39	0.10
RENEWSW_SLR	2.37	0.10
AZURE_MAPLE_SLR	2.33	0.10
SIMHAPURI	2.32	0.10
SESPL	2.32	0.10
ARUNACHAL PRADESH	2.19	0.10
AZURE_SLR	2.17	0.09
MRPL	2.11	0.09
SPRING_PUGALUR	2.10	0.09
INOX_BHUI	2.03	0.09
AYANA_NPKUNTA	2.03	0.09
RENEWJH_SLR	2.00	0.09
FRV_ANTP	1.94	0.08
DIKCHU HEP	1.92	0.08
SORANG HEP	1.87	0.08
TASHIDENG HEP	1.83	0.08
RANGANADI HEP	1.81	0.08
NETRA WIND	1.80	0.08
AZURE34_SLR	1.80	0.08
SINGOLI BHATWARI HEP	1.79	0.08
NAPP	1.73	0.08
GIPCL_RADHANESDA	1.69	0.07
TORRENT SOLARGEN	1.65	0.07
MTPS II	1.64	0.07
SAINJ HEP	1.60	0.07
JHABUA POWER_MP	1.60	0.07
AVAADA1_PVGD	1.58	0.07
RENEW_PVGD	1.53	0.07
TATA_GREEN	1.49	0.07
SIKKIM	1.48	0.06
TPREL_RADHANESDA	1.42	0.06
CGPL	1.40	0.06
JORETHANG	1.38	0.06
SKS POWER	1.37	0.06
RAP C	1.36	0.06
AZURE_ANTP	1.36	0.06
KSK MAHANADI	1.36	0.06
ONGC PALATANA	1.34	0.06
Railways_ER ISTS	1.33	0.06
GSECL_Radhanesda	1.33	0.06
RONGNICHU HEP	1.30	0.06
ADANI GREEN	1.29	0.06
ACBIL	1.26	0.06
KSMPL_SLR	1.23	0.05
TATA_ANTP	1.14	0.05
THERMAL POWERTECH	1.09	0.05
TRN ENERGY	1.07	0.05
FORTUM2_PVGD	1.07	0.05
CHUZACHEN HEP	1.05	0.05
MYTRAH_TCN	1.02	0.04
COASTGEN	0.97	0.04
PARE HEP	0.95	0.04
BANGLADESH	0.93	0.04
RANGIT HEP	0.93	0.04
POWERICA	0.85	0.04
DHARIWAL POWER	0.85	0.04

SHREE CEMENT	0.84	0.04
DCPP	0.83	0.04
AD HYDRO	0.78	0.03
SRSSFPL	0.72	0.03
GSECL P-II	0.71	0.03
AHSP_ANTP	0.69	0.03
AVAADA2_PVGD	0.69	0.03
RGPPL	0.68	0.03
BETAM_TCN	0.64	0.03
AKSP_ANTP	0.63	0.03
RENEW_SLR	0.62	0.03
GMR KAMALANGA	0.62	0.03
RSTPS_FSPP	0.58	0.03
TPSL	0.57	0.03
ABSP_ANTP	0.57	0.02
AKS_PVGD	0.56	0.02
LANCO BUDHIL	0.55	0.02
IL&FS	0.54	0.02
DGEN MEGA POWER	0.52	0.02
JSW_RENEW_2	0.51	0.02
RAP B	0.48	0.02
YARROW_PVGD	0.45	0.02
FRV_NPK	0.40	0.02
DOYANG HEP	0.37	0.02
LOKTAK	0.36	0.02
HVDC ALPD	0.11	0.005
NFF	0.11	0.005
VINDHYACHAL HVDC	0.11	0.005
HVDC CHAMPA	0.10	0.005
HVDC RAIGARH	0.09	0.004
HVDC PUS	0.07	0.003
BHADRAVATHI HVDC	0.002	0.0001
<b>Total</b>	<b>2286.30</b>	<b>100.00</b>
<b>Volume Exported by top 5 Regional Entities</b>	<b>584.76</b>	<b>25.58</b>



**Table-33: VOLUME OF ELECTRICITY OVER DRAWAL/ UNDER INJECTION (IMPORTED) THROUGH DSM, SEPTEMBER 2023**

Name of the Entity	Volume of Over drawal/ Under Injection (MUs)	% of Volume
NTPC STATIONS-WR	150.49	6.68
NTPC STATIONS-ER	103.04	4.57
WEST BENGAL	84.89	3.77
NTPC STATIONS-NR	76.28	3.38
NTPC STATIONS-SR	74.09	3.29
J & K	72.31	3.21
GUJARAT	68.85	3.05
ASSAM	65.00	2.88
RAJASTHAN	64.88	2.88
TELANGANA	62.68	2.78
KARNATAKA	60.20	2.67
UTTAR PRADESH	56.83	2.52
ODISHA	55.59	2.47
BIHAR	49.10	2.18
HARYANA	42.54	1.89
KERALA	36.81	1.63
ANDHRA PRADESH	36.65	1.63
MAHARASHTRA	36.44	1.62
TAMIL NADU	35.96	1.60
MP	30.65	1.36
AGEMPL BHUJ	28.06	1.25
UTTARAKHAND	26.11	1.16
PUNJAB	23.36	1.04
HIMACHAL PRADESH	22.20	0.98
NEPAL(NVVN)	21.04	0.93
CGPL	20.87	0.93
AMPS Hazira	20.86	0.93
GIWEL_BHUJ	20.68	0.92
JHARKHAND	20.15	0.89
INOX_BHUJ	19.87	0.88
DVC	19.82	0.88
SPRING_PUGALUR	18.93	0.84
KREDL_PVGD	15.19	0.67
SBESS	14.97	0.66
JINDAL STAGE-II	14.25	0.63
IGSTPS	13.98	0.62
NLC	13.56	0.60
GRT_JPL	13.02	0.58
THERMAL POWERTECH	13.02	0.58
OSTRO	12.20	0.54
CHHATTISGARH	12.13	0.54
OSTRO Hiriyur	11.63	0.52
PARAM_PVGD	11.54	0.51
ALFANAR_BHUJ	11.53	0.51
NPGC	11.45	0.51
RENEW_BHUJ	10.99	0.49
RENEW_BHACHAU	10.90	0.48
NHPC STATIONS	10.44	0.46
SKRPL	10.14	0.45
GOA	9.87	0.44
FORTUMI_PVGD	9.60	0.43
NETCL VALLUR	9.39	0.42
JHABUA POWER_MP	8.91	0.40
AVAADASN_SLR	8.58	0.38
BRBCL,NABINAGAR	8.57	0.38
DELHI	8.56	0.38
ARUNACHAL PRADESH	8.21	0.36
BALCO	8.21	0.36
TRIPURA	8.07	0.36
ADANI_WIND	7.95	0.35
AVADARJHN_SLR	7.07	0.31
AZURE43_SLR	7.06	0.31
JAYPEE NIGRIE	6.95	0.31
RAIL	6.81	0.30
ARS_PVGD	6.73	0.30
TATA_PVGD	6.69	0.30

CHANDIGARH	6.66	0.30
MAHINDRA_RUMS	6.63	0.29
NTPC STATIONS-NER	6.48	0.29
ARINSUM_RUMS	6.43	0.29
ACME_RUMS	6.09	0.27
SHREE CEMENT	6.02	0.27
NTPL	5.89	0.26
NTPC_ANTP	5.77	0.26
MSEPL	5.76	0.26
SESPL	5.76	0.26
NEP	5.71	0.25
GIWEL_TCN	5.57	0.25
SB6_POKARAN	5.35	0.24
AVIKIRAN	5.33	0.24
MB POWER	5.18	0.23
DD&DNH	5.13	0.23
SBG_NPK	5.11	0.23
CLEAN_SLR	4.94	0.22
TORRENT SOLARGEN	4.92	0.22
AZURE_PVGD	4.76	0.21
BANGLADESH	4.75	0.21
TATA_SLR	4.70	0.21
NETRA WIND	4.65	0.21
SPRNG_NPKUNTA	4.55	0.20
ASEJTL_SLR	4.49	0.20
RENEWJH_SLR	4.48	0.20
SIKKIM	4.48	0.20
APRAAVA	4.44	0.20
JINDAL POWER	4.42	0.20
ADY1_PVGD	4.39	0.19
RENEWSW_SLR	4.37	0.19
EDEN_SLR	4.33	0.19
RENEWURJA_SLR	4.28	0.19
RENEWSB	4.24	0.19
NEEPCO STATIONS	4.14	0.18
TEESTA STG3	4.12	0.18
JITPL	4.08	0.18
AZURE41_SLR	4.08	0.18
AVAADA1_PVGD	4.05	0.18
ABC_BHDL2	4.02	0.18
RENEW_SR_SLR	4.00	0.18
ORANGE_TCN	3.74	0.17
RAP C	3.73	0.17
SBG_PVGD	3.69	0.16
RENEW_PVGD	3.65	0.16
AYANA_NPKUNTA	3.65	0.16
KARCHAM WANGTOO	3.64	0.16
CLEANSR_SLR	3.64	0.16
MRPL	3.58	0.16
KAPP 3&4	3.54	0.16
AYANA_RP1	3.49	0.15
FRV_ANTP	3.47	0.15
SBSR_SLR	3.32	0.15
MSUPL_BHDL2	3.23	0.14
ACME_SLR	3.17	0.14
AZURE_MAPLE_SLR	3.15	0.14
ACME_HEERGARH	3.03	0.13
TATA_GREEN	2.96	0.13
PONDICHERRY	2.89	0.13
RAP B	2.89	0.13
ESSAR POWER	2.85	0.13
RENEW_SLR_BKN	2.77	0.12
TEHRI	2.68	0.12
THAR1_SLR	2.67	0.12
NAPP	2.66	0.12
RPREL	2.60	0.12
ESPL_RADHANESDA	2.59	0.11
ARERJL_SLR	2.58	0.11
SEMBCORP	2.58	0.11
TPSL	2.57	0.11

FORTUM2_PVGD	2.48	0.11
BBMB	2.45	0.11
SB_SLR	2.43	0.11
MTPS II	2.42	0.11
DHARIWAL POWER	2.40	0.11
AZURE_ANTP	2.40	0.11
ACBIL	2.30	0.10
MANIPUR	2.23	0.10
NSPCL	2.22	0.10
TATA_ANTP	2.21	0.10
KSK MAHANADI	2.17	0.10
RKM POWER	2.17	0.10
AZURE_SLR	2.04	0.09
IL&FS	2.00	0.09
POWERICA	2.00	0.09
NJPC	1.77	0.08
RSTPS_FSPP	1.73	0.08
MEGHALAYA	1.73	0.08
SIMHAPURI	1.71	0.08
COASTGEN	1.68	0.07
RGPPL	1.64	0.07
DGEN MEGA POWER	1.51	0.07
SRSSFPL	1.46	0.06
AZURE34_SLR	1.44	0.06
YARROW_PVGD	1.37	0.06
GSECL P-II	1.37	0.06
SORANG HEP	1.37	0.06
FRV_NPK	1.37	0.06
AKS_PVGD	1.32	0.06
ABSP_ANTP	1.30	0.06
Railways_ER ISTS	1.23	0.05
JSW_RENEW_2	1.23	0.05
SASAN UMPP	1.22	0.05
AKSP_ANTP	1.20	0.05
TPREL_RADHANESDA	1.16	0.05
AHSP_ANTP	1.11	0.05
DB POWER	1.10	0.05
AVAADA2_PVGD	1.08	0.05
PARE HEP	1.07	0.05
GIPCL_RADHANESDA	1.04	0.05
CHUZACHEN HEP	0.96	0.04
SKS POWER	0.88	0.04
MYTRAH_TCN	0.88	0.04
BETAM_TCN	0.86	0.04
SINGOLI BHATWARI HEP	0.83	0.04
MAITHON POWER LTD	0.81	0.04
RENEW_SLR	0.77	0.03
MEENAKSHI	0.71	0.03
RANGANADI HEP	0.67	0.03
DIKCHU HEP	0.67	0.03
ADANI GREEN	0.67	0.03
EMCO	0.66	0.03
DAGACHU	0.66	0.03
MIZORAM	0.64	0.03
KSMPL_SLR	0.64	0.03
GMR KAMALANGA	0.57	0.03
ADHUNIK POWER LTD	0.50	0.02
RANGIT HEP	0.50	0.02
SAINJ HEP	0.42	0.02
GSECL_Radhnesda	0.40	0.02
LANKO KONDAPALLI	0.34	0.01
ONGC PALATANA	0.32	0.01
NAGALAND	0.29	0.01
LANCO BUDHIL	0.25	0.01
KOTESHWAR	0.22	0.01
TRN ENERGY	0.21	0.01
DCPP	0.21	0.01
DOYANG HEP	0.20	0.01
BHADRAVATHI HVDC	0.15	0.01
AD HYDRO	0.13	0.01

TEESTA HEP	0.12	0.01
NFF	0.09	0.004
RAMPUR HEP	0.08	0.004
LOKTAK	0.08	0.004
HVDC ALPD	0.06	0.003
LANKO_AMK	0.04	0.002
JORETHANG	0.04	0.002
HVDC RAIGARH	0.03	0.001
TASHIDENG HEP	0.02	0.001
HVDC CHAMPA	0.02	0.001
RONGNICHU HEP	0.01	0.0004
HVDC PUS	0.01	0.0003
<b>TOTAL</b>	<b>2253.70</b>	<b>100.00</b>
<b>Volume Imported by top 5 Regional Entities</b>	<b>488.79</b>	<b>21.69</b>

**Table-34: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, SEPTEMBER 2023**

Sr. No	Details of REC Transactions	Through Power Exchange			Bilateral through Traders
		IEX	PXIL	HPX	
1	Volume of Buy Bid	516838	597000	-	-
2	Volume of Sell Bid	9218360	3507301	113466	-
3	Ratio of Buy Bid to Sell Bid Volume	0.06	0.17	-	-
4	Traded Volume (MWh)	514838	557000	-	29999
5	Weighted Average Price (₹/MWh)	500.00	500.00	-	793.84

Source: Power Exchanges & Grid-India REC Report

Note: 1 REC = 1 MWh

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

**Table-35: VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, SEPTEMBER 2023**

Sr. No.	Neighbouring Country	Volume (MU)			Weighted Average Price (₹/kWh)	
		Sale	Purchase	Net*	Sale	Purchase
1	Nepal	262.40	0.00	-262.40	6.19	-
2	Bhutan	0.00	0.00	0.00	-	-
	<b>Total</b>	<b>262.40</b>	<b>0.00</b>	<b>-262.40</b>	<b>-</b>	<b>-</b>

Source: IEX

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

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



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