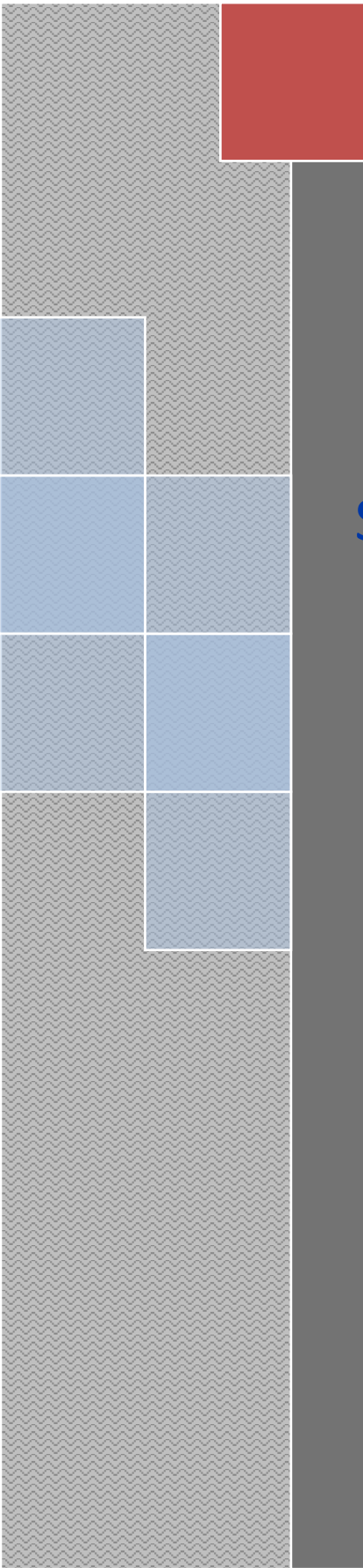




Monthly Report on Short-term Transactions of Electricity in India

March 2023



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Abbreviations

Abbreviation

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

Expanded Version

Acme Bhiwadi Solar Power Private Limited, Anantpur
ACB (India) Limited
Area Clearing Price
Area Clearing Volume
ACME Solar Power Project
Acme Rewa Ultra Mega Solar Project
Adani Green Energy Limited
Adani Hybrid Energy Jaisalmer One Limited (Solar)
Adani Solar Energy Four Private Limited
Adani Hybrid Energy Jaisalmer One Limited (Wind)
Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 3 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 6 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 10 Pavagada Solar Park
Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park
Adani Green Energy (MP) Ltd., Bhuj
Adani Hybrid Energy Jaisalmer One Limited (SOLAR)
Adani Hybrid Energy Jaisalmer One Limited (WIND)
Adani Hybrid Energy Jaisalmer Two Limited (Solar)
Adani Hybrid Energy Jaisalmer Three Limited (Solar)
Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Solar
Adani Hybrid Energy Jaisalmer Four Limited-Hybrid Wind
Acme Hisar Solar Power Private Limited, Anantpur
ACME Kurukshetra Solar Energy Pvt. Ltd
Acme Karnal Solar Power Private Limited, Anantpur
Alfanar Group Wind Project, Bhuj, Gujarat
Arcelor Mittal Nippon Steel, Hazira
Appellate Tribunal for Electricity
Adani Renewable Energy Park Rajasthan Ltd.
Solenergi Rewa Ultra Mega Solar Project
ACME REWARI Solar Power Pvt Ltd.
Adani Solar Energy Jodhpur Two Ltd.
Avaada Solar Energy Private Ltd., Pavagada Project 1
Avaada Solar Energy Private Ltd., Pavagada Project 2
Avaada Rjhn Private Limited_Solar
Ayana Power, NP Kunta
Azure Power, Anantpur
Azure Power, Pavagada
Azure Power Solar Power Project
Azure Power 34 Pvt. Ltd. Solar Power Project
Azure Power Forty Three Private Limited
Bharat Aluminum Company Limited
Bhabha Atomic Research Centre
Bhakra Beas Management Board
Betam Wind Energy Private Limited, Tuticorin
Bhadravathi High Voltage Direct Current Link
Bhartiya Rail Bijlee Company Limited
Central Electricity Authority
Central Electricity Regulatory Commission
Coastal Gujarat Power Limited
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
HP-DAM	High Price Day Ahead Market
HVDC ALPD	Alipurduar High 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
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
MAHOBASLR	Mahoba Solar Power Project
MALANA	Malana Hydroelectric Plant
MANGDECHU HEP	Mangdechhu Hydroelectric Project, Mangdechhu River, Bhutan
Maruti Coal	Maruti Clean Coal and Power Limited
MB POWER	MB Power Ltd
MEENAKSHI	Meenakshi Energy Private Limited
MP	Madhya Pradesh
MRPL	Mahindra Renewables Private Limited
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_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_BHUI	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 **March 2023** is presented in the following sections.

2. Volume of Short-term Transactions of Electricity

2.1. During March 2023, total electricity generation, excluding generation from renewable and captive power plants in India was 120082.42 MU (Table-1). Of the total electricity generation, 15.90% was transacted through short-term, comprising of 8.21% through bilateral (through traders and term-ahead contracts on power exchanges, and directly between distribution companies), followed by 5.92% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)} and 1.77% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions (19091.88 MU), 51.63% was transacted through bilateral (34.97% through traders and term-ahead contracts on power exchanges, and 16.66% directly between distribution companies), followed by 37.26% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM} and 11.11% through DSM (Table-1 & Figure-2). Daily volume of short-term transactions is shown in Table-28 & Figure-4.

2.3. Of the total volume of electricity transacted through power exchanges, 52.70% of the volume was transacted in DAM (including G-DAM & HP-DAM), followed by 25.26% in Term Ahead Market (TAM) (including G-TAM) and 22.04% in RTM (Figure-3).

2.4. The share of electricity traded by each trading licensee is given in Table-2 & Figure-5. The volume of electricity transacted by the trading licensees includes bilateral transactions and the transactions undertaken through power exchanges. There were 48 trading licensees as of March 2023. Of which, 32 trading licensees were engaged in short-term trading. The top 5 trading licensees, namely PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Manikaran Power Ltd., Adani Enterprises Ltd. and Tata Power Trading Company (P) Ltd. had a share of 80.71% 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 0.1955 for the month of March 2023, which indicates moderate concentration of market power (Table-2).

2.6. The volume of electricity transacted in the DAM of IEX was 4718.38 MU. No electricity was transacted through DAM of PXIL and HPX. The volume of total buy bids and sell bids was 8735.53 MU and 7977.60 MU respectively in IEX, while the same was 5.01 MU and 73.22 MU respectively in PXIL. No bids were received in HPX.

2.7. Of the total volume of electricity transacted in the DAM of IEX, the volume purchased by the neighboring countries of India was 370.59 MU, while no volume was sold, under the Cross Border Trade of electricity through power exchange (Table-32). 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 297.75 MU, while no electricity was transacted in the G-DAM of PXIL and HPX. The volume of total buy bids and

sell bids was 1558.63 MU and 494.10 MU respectively in IEX, while no bids were received in PXIL and HPX.

2.9. HP-DAM was introduced on IEX in March 2023, however no volume was transacted. The volume of total buy bids and sell bids was 1.20 MU and 168.67 MU respectively in IEX.

2.10. The volume of electricity transacted in the RTM of IEX was 2097.72 MU, while no electricity was transacted in the RTM of PXIL and HPX. The volume of total buy bids and sell bids was 3394.01 and 3363.08 MU respectively in IEX. No bids were received in PXIL and 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 1086.95 MU, 514.79 MU and 665.88 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 96.92 MU, 30.79 MU and 8.57 MU respectively (Table-12, Table-13 & Table-14).

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, ₹9.00/kWh and ₹7.47/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 ₹7.63/kWh and ₹4.74/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 ₹2.22/kWh, ₹12.00/kWh and ₹5.44/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹3.34/kWh, ₹12.00/kWh and ₹5.67/kWh respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹1.25/kWh, ₹12.00/kWh and ₹4.82/kWh respectively (Table-8). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹6.90/kWh, ₹5.71/kWh and ₹6.61/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 ₹5.69/kWh, ₹6.14/kWh and ₹7.39/kWh respectively (Table-12, Table-13 and Table-14). No electricity was transacted in HP-DAM of IEX. No electricity was transacted in G-DAM & RTM of PXIL and in DAM, G-DAM, RTM of HPX.

3.3. **Price of electricity transacted through DSM:** The minimum, maximum and average price of DSM was ₹2.36/kWh, ₹12.00/kWh and ₹5.93/kWh respectively (Table-15).

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-29(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 ₹0.03/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 36.24% of the volume. These were Punjab, Uttar Pradesh, Jindal Power Ltd Stage II, Raipur Energen Limited and Delhi (Table-16). Top 5 regional entities/states purchased 61.82% of the volume, and these were Tamil Nadu, Maharashtra, Telangana, Andhra Pradesh and Haryana (Table-17).

5.2. Of the total DAM transactions at power exchanges, top 5 regional entities/states sold 55.33% of the volume, and these were Uttar Pradesh, Bihar, DB Power, Odisha and Raipur Energen Limited (Table-18). Top 5 regional entities/states purchased 66.32% of the volume, and these were Gujarat, Telangana, Jammu & Kashmir, Punjab and Nepal (NVVN) (Table-19).

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

5.3. Of the total G-DAM transactions at power exchanges, top 5 regional entities/states sold 92.04% of the volume, and these were Andhra Pradesh, Karnataka, NTPC Stations (Southern Region), Madhya Pradesh and Sikkim (Table-20). Top 5 regional entities/states purchased 67.56% of the volume, and these were Maharashtra, Gujarat, Karnataka, Arcelor Mittal Nippon Steel Hazira and Damodar Valley Corporation (Table-21).

5.4. Of the total RTM transactions at power exchanges, top 5 regional entities/states sold 55.89% of the volume, and these were Madhya Pradesh, Bihar, Odisha, Uttar Pradesh and West Bengal (Table-22). Top 5 regional entities/states purchased 58.89% of the volume, and these were Telangana, Gujarat, Punjab, Jammu & Kashmir and Maharashtra (Table-23).

5.5. Of the total under drawal in March 2023, top 5 regional entities/states under drew 30.25% of the volume, and these were Uttar Pradesh, Tamil Nadu, Gujarat, Madhya Pradesh and Rajasthan (Table-24). Top 5 regional entities/states overdrew 24.59% of the total over drawal volume, and these were NTPC Stations (Northern Region), NTPC Stations (Western Region), West Bengal, Maharashtra and NTPC Stations (Eastern Region) (Table-25).

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-26 & 30. Top 5 electricity selling regional entities/states were Uttar Pradesh, Bihar, Madhya Pradesh, Jindal Power Ltd Stage II and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Telangana, Gujarat, Tamil Nadu, Maharashtra and Andhra Pradesh.

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

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

6.2. The volume of electricity that could not be cleared due to congestion & other reasons and could not be transacted through power exchanges is the difference between unconstrained cleared volume and actual cleared volume. During the month of March 2023, congestion was experienced in RTM on IEX only (Table-27).

6.3. The volume of electricity that could not be cleared, due to congestion, in RTM on IEX, was 0.03% of the unconstrained cleared volume. In terms of time, congestion occurred was 2.28% 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 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.

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

³ “Market Splitting” is a mechanism adopted by Power Exchanges, where the market is split in the event of transmission congestion, into predetermined (by NLDC) bid areas or zones, which are cleared individually at their respective area prices such that the energy balance in every bid area is reached based upon the demand and supply in individual bid areas and using the available transmission corridor capacity between various bid areas simultaneously. As a result of this market splitting the price of electricity in the importing region, where demand for electricity is more than supply, becomes relatively higher than the price of electricity in the exporting region.

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 categorization 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 March 2023 are shown in Table-31. The market clearing volume of RECs transacted on IEX, PXIL and HPX were 868807, 106309 and 1521 respectively. The weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in 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 0.28, 0.11 and 0.40 in IEX, PXIL and HPX respectively.

7.6. The volume of RECs transacted through Trading Licensees in March 2023 was 90049. The weighted average trade prices for the RECs transacted through traders was ₹925/MWh.

8. Inferences:

- a) The percentage of short-term transactions of electricity to total electricity generation was 15.90%.
- b) Of the total short-term transactions (19091.88 MU), 51.63% was transacted through bilateral (34.97% through traders and term-ahead contracts on power exchanges, and 16.66% directly between distribution companies), followed by 37.26% through power exchanges {DAM (including G-DAM & HP-DAM) and RTM} and 11.11% through DSM.

- c) Of the total volume of electricity transacted through power exchanges, 52.70% of the volume was transacted in DAM (including G-DAM & HP-DAM), followed by 25.26% in Term Ahead Market (TAM) (including G-TAM) and 22.04% in RTM
- d) Top 5 trading licensees had a share of 80.71% 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 0.1955, indicating moderate concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹7.47/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX was ₹5.44/kWh, while no electricity was transacted in DAM of PXIL and HPX. The weighted average price of electricity transacted in G-DAM of IEX was ₹5.67/kWh, while no electricity was transacted in G-DAM of PXIL and HPX. The weighted average price of electricity transacted in RTM of IEX was ₹4.82/kWh. No electricity was transacted in the RTM of PXIL and HPX. No electricity was transacted in HP-DAM of IEX.
- h) The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹6.90/kWh, ₹5.71/kWh and ₹6.61/kWh respectively. The weighted average price of electricity transacted in the G-TAM of IEX, PXIL and HPX was ₹5.69/kWh, ₹6.14/kWh and ₹7.39/kWh respectively.
- i) The average price of electricity transacted through DSM was ₹5.93/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.03/kWh, which was in line with the Trading Licence Regulations 2020.
- k) Top 5 electricity selling regional entities/states were Uttar Pradesh, Bihar, Madhya Pradesh, Jindal Power Ltd Stage II and Raipur Energen Limited. Top 5 electricity purchasing regional entities/states were Telangana, Gujarat, Tamil Nadu, Maharashtra and Andhra Pradesh.

- l) During the month of March 2023, congestion was experienced in RTM of IEX. The volume of electricity that could not be cleared, due to congestion was 0.03% of the unconstrained cleared volume. In terms of time, congestion occurred was 2.28% during the month
- m) The market clearing volume of RECs transacted on IEX, PXIL and HPX were 868807, 106309 and 1521 respectively. The weighted average market clearing price of these RECs was ₹1000/MWh in IEX, ₹1000/MWh in PXIL and ₹1000/MWh in HPX. The volume of RECs transacted through Trading Licensees in March 2023 was 90049. The weighted average trade prices for the RECs transacted through traders was ₹925/MWh.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), MARCH 2023				
Sr. No	Short-term transactions	Volume (MU)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	9856.49	51.63	8.21
	(i) Through Traders and PXs	6675.85	34.97	5.56
	(ii) Direct	3180.64	16.66	2.65
2	Through Power Exchanges	7113.85	37.26	5.92
	(i) IEX			
	(a) DAM	4718.38	24.71	3.93
	(b) RTM	2097.72	10.99	1.75
	(c) GDAM	297.75	1.56	0.25
	(d)HP-DAM	0.00	0.00	0.00
	(ii) PXIL			
	(a) DAM	0.00	0.00	0.00
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
	(ii) HPX			
	(a) DAM	0.00	0.00	0.00
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
3	Through DSM	2121.54	11.11	1.77
	Total Short-term transactions	19091.88	-	15.90
	Total Generation	120082.42	-	-

Source: NLDC

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

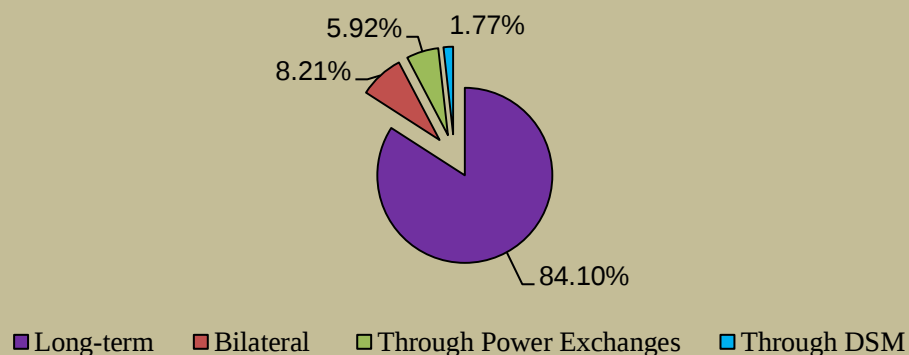


Figure-2: Volume of Short-term Transactions of Electricity, March 2023

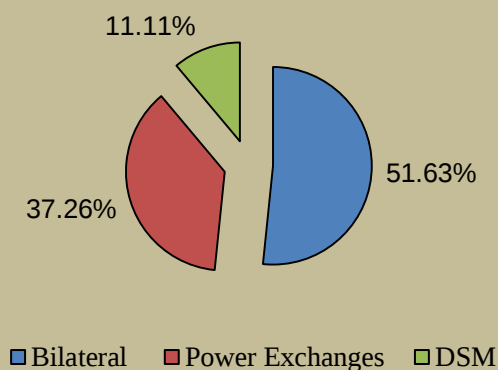


Figure-3: Volume transacted in different markets segments on Power Exchanges, March 2023

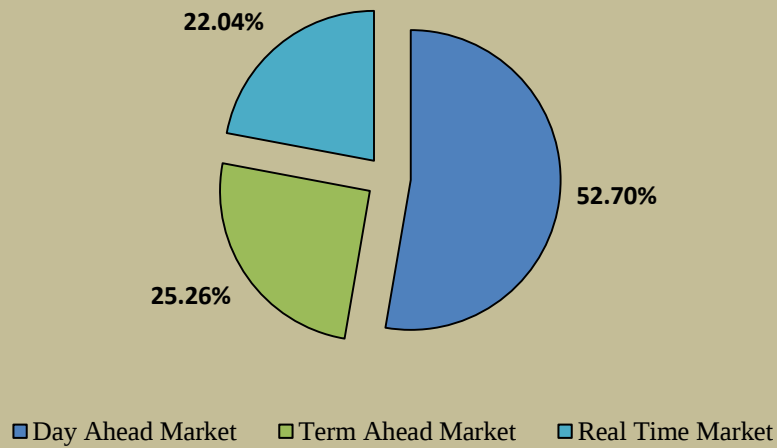


Figure-4: Volume of Short-term Transactions of Electricity, March 2023 (Day-wise)

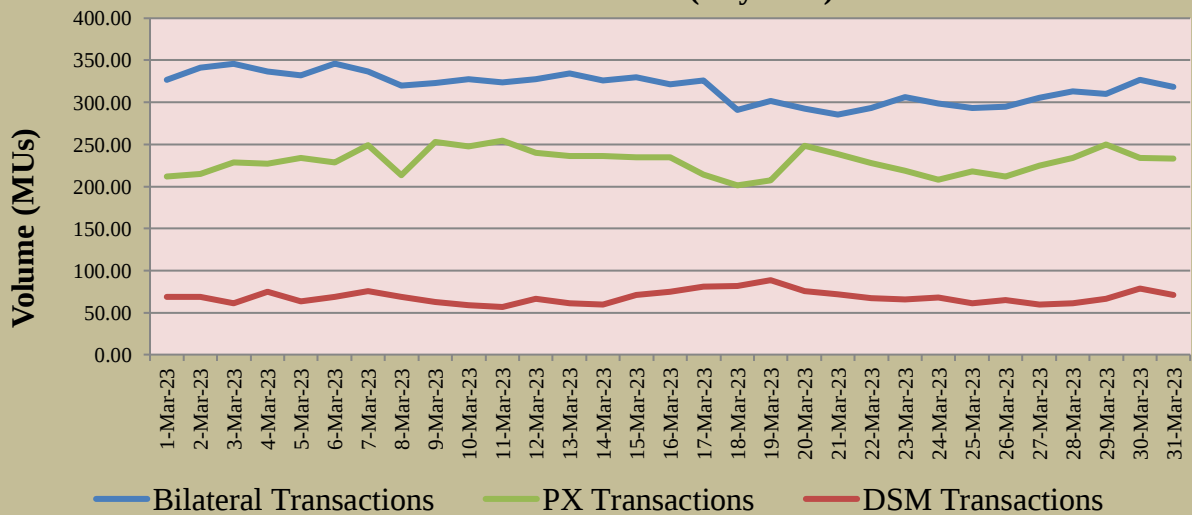


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, MARCH 2023			
Sr. No	Name of the Trading Licensee	% Share in total Volume traded by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	35.88	0.1288
2	NTPC Vidyut Vyapar Nigam Ltd.	20.85	0.0435
3	Manikaran Power Ltd.	8.64	0.0075
4	Adani Enterprises Ltd.	7.93	0.0063
5	Tata Power Trading Company (P) Ltd.	7.40	0.0055
6	JSW Power Trading Company Ltd	3.57	0.0013
7	Arunachal Pradesh Power Corporation (P) Ltd	3.40	0.0012
8	GMR Energy Trading Ltd.	1.88	0.0004
9	Refex Industries Ltd.	1.82	0.0003
10	Shree Cement Ltd.	1.62	0.0003
11	Kreate Energy (I) Pvt. Ltd.	1.57	0.0002
12	Instinct Infra & Power Ltd.	1.23	0.0002
13	Statkraft Markets Pvt. Ltd.	1.08	0.0001
14	Abja Power Private Limited	0.64	0.0000
15	NTPC Ltd.	0.63	0.0000
16	RPG Power Trading Company Ltd.	0.56	0.0000
17	Greenko Energies Pvt Ltd	0.27	0.0000
18	Saranyu Power Trading Private Limited	0.25	0.0000
19	NLC India Ltd.	0.19	0.0000
20	Ambitious Power Trading Company Ltd.	0.17	0.0000
21	Kundan International Pvt. Ltd.	0.08	0.0000
22	Instant Venture Pvt. Ltd.	0.06	0.0000
23	Customized Energy Solutions India (P) Ltd.	0.06	0.0000
24	Gita Power & Infrastructure Private Limited	0.05	0.0000
25	Ideal Energy Solution Pvt. Ltd.	0.05	0.0000
26	Shubheksha Advisors Pvt. Ltd.	0.03	0.0000
27	Amp Energy Markets India Private Limited	0.03	0.0000
28	Powerfull Energy Trading Pvt. Ltd.	0.01	0.0000
29	Phillip Commodities India (P) Ltd.	0.009	0.0000
30	Saini Power Transactor	0.008	0.0000
31	Shell Energy Marketing and Trading India Pvt. Ltd.	0.003	0.0000
32	SJVN Ltd.	0.003	0.0000
TOTAL		100.00%	0.1955
Top 5 trading licensees		80.71%	
Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges.			
Note 2: Volume of electricity transacted by Global Energy Ltd. is not included.			
Source: Information submitted by trading licensees			

Figure 5: Percentage Share of Electricity Transacted by Trading Licensees, March 2023

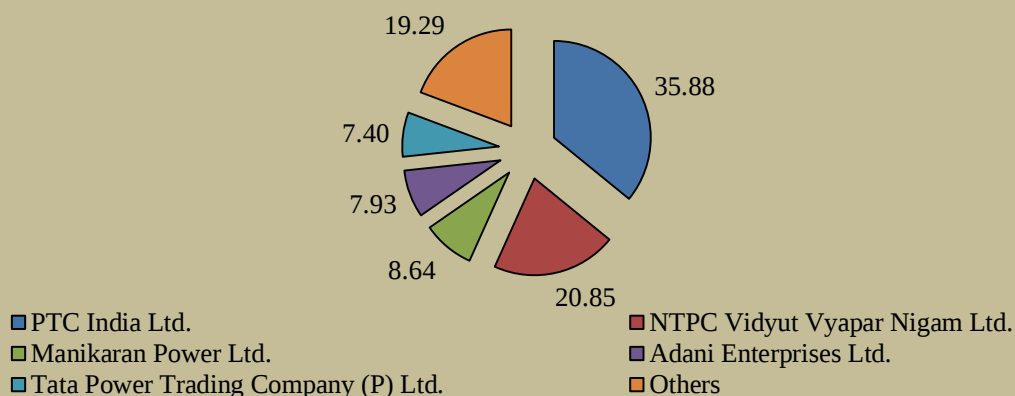


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, MARCH 2023		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	2.70
2	Maximum	9.00
3	Weighted Average	7.47

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), MARCH 2023		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	7.63
2	PEAK	-
3	OFF PEAK	4.74

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, MARCH 2023				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	2.22	-	-
2	Maximum	12.00	-	-
3	Weighted Average	5.44	-	-

Source: IEX, PXIL and HPX

Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, MARCH 2023				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	3.34	-	-
2	Maximum	12.00	-	-
3	Weighted Average	5.67	-	-

Source: IEX, PXIL and HPX

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

Source: IEX, PXIL and HPX

Table-8: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, MARCH 2023				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	1.25	-	-
2	Maximum	12.00	-	-
3	Weighted Average	4.82	-	-

Source: IEX, PXIL and HPX

Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, MARCH 2023			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.11	11.28
2	Day Ahead Contingency Contracts	689.29	5.70
3	Daily Contracts	15.50	12.00
4	Weekly Contracts	36.74	12.00
5	Monthly Contracts	297.60	7.98
6	Any Day Single Sided Contracts	47.70	11.87
	Total	1086.95	6.90

Source: IEX

Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, MARCH 2023			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.42	6.89
2	Day Ahead Contingency Contracts	514.37	5.71
	Total	514.79	5.71

Source: PXIL

Table-11: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, MARCH 2023			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.83	7.49
2	Day Ahead Contingency Contracts	466.63	5.68
3	Daily Contracts	4.88	12.00
4	Monthly Contracts	148.80	7.98
5	Any Day Single Sided Contracts	44.75	11.08
	Total	665.88	6.61

Source: HPX

Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, MARCH 2023			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	95.43	5.67
2	Daily Contracts	1.49	6.80
	Total	96.92	5.69

Source: IEX

Table-13: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, MARCH 2023			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	0.35	4.83
2	Day Ahead Contingency Contracts	30.45	6.15
	Total	30.79	6.14

Source: PXIL

Table-14: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF HPX, MARCH 2023			
Sr. No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	1.13	7.34
2	Any Day Single Sided Contracts	7.44	7.40
	Total	8.57	7.39

Source: HPX

Table-15: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, MARCH 2023		
Sr. No	Item	Price in All India Grid (₹/kWh)
1	Minimum	2.36
2	Maximum	12.00
3	Average	5.93

Source: NLDC

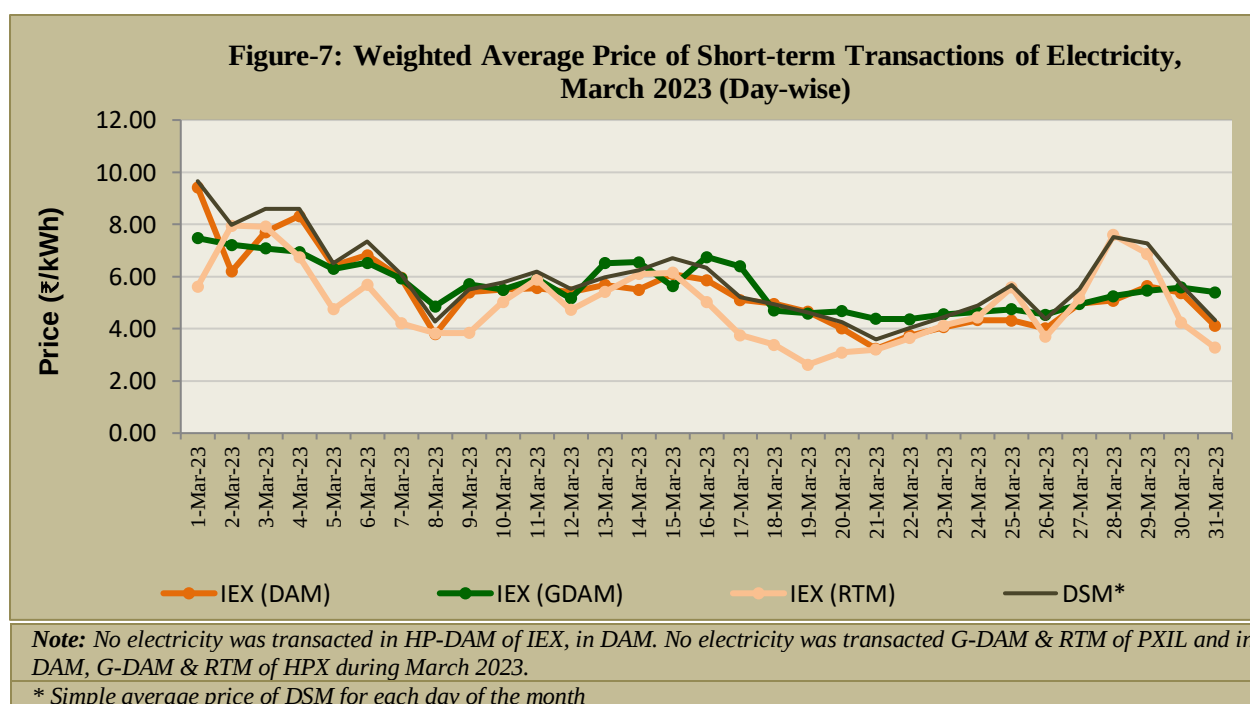
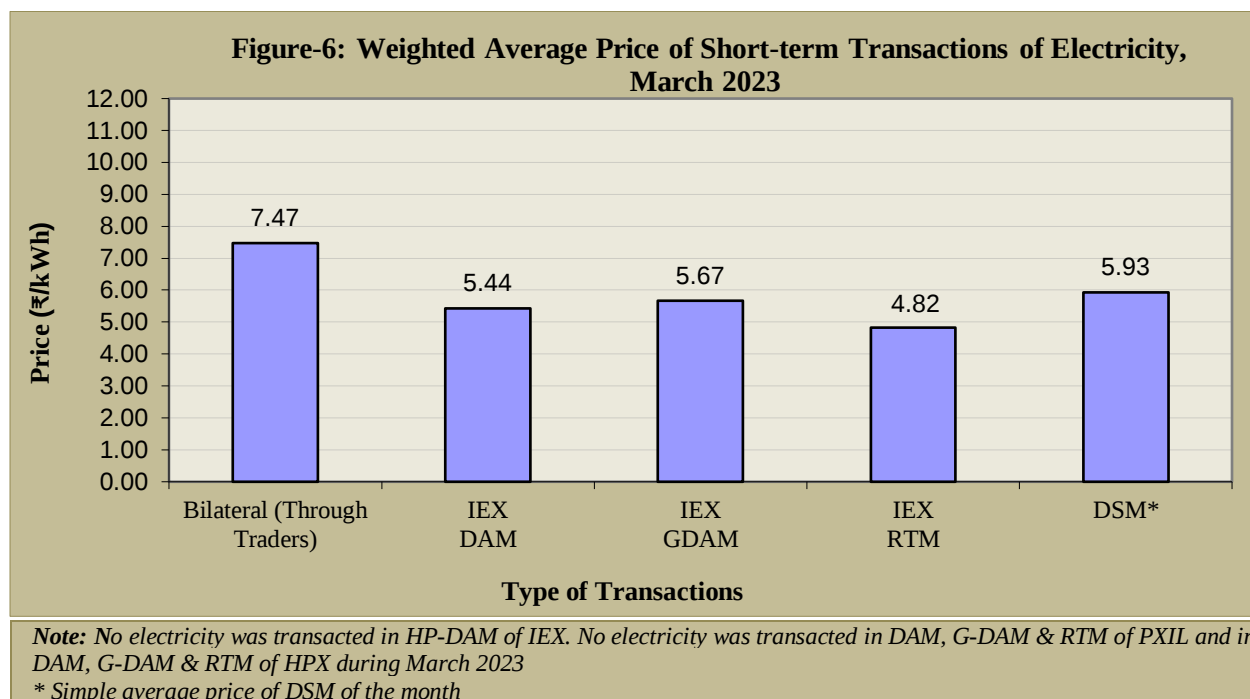


Table-16: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, MARCH 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
PUNJAB	1232.94	12.51
UTTAR PRADESH	692.67	7.03
JINDAL STAGE-II	644.46	6.54
RPREL	534.31	5.42
DELHI	467.50	4.74
SEMBCORP	407.36	4.13
RKM POWER	401.45	4.07
MP	397.02	4.03
ESSAR POWER	374.68	3.80
KARNATAKA	331.01	3.36
COASTGEN	299.00	3.03
JINDAL POWER	297.66	3.02
JITPL	295.69	3.00
IL&FS	265.39	2.69
GUJARAT	224.97	2.28
MAHARASHTRA	219.87	2.23
SHREE CEMENT	173.33	1.76
AHEJ4L_SOLAR	159.07	1.61
RAJASTHAN	158.08	1.60
JAYPEE NIGRIE	156.28	1.59
BIHAR	148.98	1.51
ADHUNIK POWER LTD	131.21	1.33
DVC	130.44	1.32
TEESTA STG3	112.38	1.14
TAMIL NADU	92.57	0.94
ODISHA	91.48	0.93
J & K	87.08	0.88
AHEJ4L_WIND	86.98	0.88
NTPC STATIONS-NR	86.87	0.88
MB POWER	82.26	0.83
KOLYAT_SLR	80.81	0.82
SKS POWER	77.00	0.78
AVAADASN_SLR	73.85	0.75
ACBIL	69.77	0.71
ABC_BHDL2	67.00	0.68
WEST BENGAL	65.74	0.67
SIMHAPURI	62.68	0.64
GMR KAMALANGA	60.73	0.62
THAR1_SLR	56.17	0.57
TATA_GREEN	48.41	0.49
ACME_HEERGARH	47.83	0.49
DB POWER	44.78	0.45
HIMACHAL PRADESH	36.51	0.37
TATA_SLR	34.97	0.35
HARYANA	32.83	0.33
NEEPCO STATIONS	26.85	0.27
RENEW_SR_SLR	25.86	0.26
TRN ENERGY	22.32	0.23
AD HYDRO	12.41	0.13

DAGACHU	12.19	0.12
SINGOLI BHATWARI HEP	10.55	0.11
ANDHRA PRADESH	10.37	0.11
DIKCHU HEP	10.09	0.10
NTPC STATIONS-SR	8.59	0.09
REGL	8.56	0.09
LANKO_AMK	7.86	0.08
JSW_RENEW_2	7.75	0.08
ONGC PALATANA	7.59	0.08
SB_SLR	7.12	0.07
KARCHAM WANGTOO	6.67	0.07
UTTARAKHAND	6.45	0.07
SORANG HEP	4.77	0.05
ARUNACHAL PRADESH	4.71	0.05
TELANGANA	3.68	0.04
MANIPUR	2.23	0.02
JORETHANG	1.63	0.02
OSTRO Hiriyur	1.60	0.02
NTPC STATIONS-WR	1.50	0.02
SAINJ HEP	1.26	0.01
BALCO	1.20	0.01
TASHIDENG HEP	0.37	0.004
SIKKIM	0.26	0.003
Total	9856.49	100.00
Volume Sold by top 5 Regional Entities	3571.88	36.24

Table-17: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, MARCH 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
TAMIL NADU	1684.12	17.09
MAHARASHTRA	1425.80	14.47
TELANGANA	1302.98	13.22
ANDHRA PRADESH	1076.03	10.92
HARYANA	604.50	6.13
KARNATAKA	568.80	5.77
KERALA	482.28	4.89
GUJARAT	430.58	4.37
HIMACHAL PRADESH	374.38	3.80
RAJASTHAN	274.06	2.78
AMPS Hazira	204.11	2.07
UTTAR PRADESH	172.93	1.75
MP	170.17	1.73
UTTARAKHAND	169.85	1.72
DELHI	162.63	1.65
ODISHA	148.42	1.51
CHHATTISGARH	132.20	1.34
JHARKHAND	92.87	0.94
DD&DNH	71.42	0.72
PUNJAB	69.15	0.70
MEGHALAYA	61.51	0.62
GOA	53.66	0.54
J & K	49.90	0.51
WEST BENGAL	24.10	0.24
PONDICHERRY	22.33	0.23
ARUNACHAL PRADESH	7.68	0.08
NAGALAND	6.94	0.07
BALCO	5.98	0.06
MANIPUR	3.60	0.04
SIKKIM	3.39	0.03
BIHAR	0.10	0.001
TOTAL	9856.49	100.00
Volume Purchased by top 5 Regional Entities	6093.44	61.82

Table-18: VOLUME OF ELECTRICITY SOLD IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, MARCH 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
UTTAR PRADESH	1438.16	30.48
BIHAR	684.00	14.50
DB POWER	172.35	3.65
ODISHA	168.72	3.58
RPREL	147.23	3.12
CHHATTISGARH	147.00	3.12
MAHARASHTRA	141.06	2.99
MP	111.28	2.36
DELHI	103.66	2.20
KARNATAKA	93.45	1.98
MB POWER	84.95	1.80
JAYPEE NIGRIE	77.88	1.65
HARYANA	77.79	1.65
JINDAL STAGE-II	76.49	1.62
JINDAL POWER	64.59	1.37
KERALA	62.93	1.33
ESSAR POWER	61.89	1.31
HIMACHAL PRADESH	57.97	1.23
DCPP	57.37	1.22
WEST BENGAL	56.59	1.20
RKM POWER	56.34	1.19
TAMIL NADU	55.91	1.18
ANDHRA PRADESH	55.75	1.18
RAJASTHAN	53.28	1.13
SKS POWER	51.76	1.10
JITPL	47.13	1.00
SEMBCORP	42.54	0.90
COASTGEN	32.28	0.68
ASSAM	30.72	0.65
JHARKHAND	27.10	0.57
MARUTI COAL	26.25	0.56
ACBIL	25.79	0.55
GUJARAT	23.12	0.49
TRIPURA	22.45	0.48
GOA	21.27	0.45
KAPP 3&4	21.00	0.45
NTPC STATIONS-SR	20.11	0.43
CHANDIGARH	19.86	0.42
JHABUA POWER_MP	18.71	0.40
NEEPCO STATIONS	18.09	0.38
TEESTA HEP	14.54	0.31
DVC	13.88	0.29
REGL	12.29	0.26
ASEJTL_SLR	11.75	0.25
J & K	11.12	0.24
EMCO	9.03	0.19
TELANGANA	8.14	0.17
IL&FS	7.87	0.17
SAINJ HEP	7.56	0.16
KARCHAM WANGTOO	6.98	0.15
ADHUNIK POWER LTD	6.36	0.13
PUNJAB	6.10	0.13
SHREE CEMENT	5.30	0.11
MIZORAM	5.11	0.11

RENEW_SR_SLR	4.63	0.10
NTPC STATIONS-NER	4.25	0.09
SIMHAPURI	3.91	0.08
AD HYDRO	3.68	0.08
SORANG HEP	3.12	0.07
NAGALAND	2.88	0.06
DIKCHU HEP	2.20	0.05
OSTRO Hiriyur	2.00	0.04
ARUNACHAL PRADESH	1.95	0.04
UTTARAKHAND	1.68	0.04
CHUZACHEN HEP	1.35	0.03
SB_SLR	1.08	0.02
SINGOLI BHATWARI HEP	1.01	0.02
LANCO BUDHIL	0.82	0.02
DHARIWAL POWER	0.70	0.01
SIKKIM	0.49	0.01
NLC	0.38	0.01
MEGHALAYA	0.37	0.01
ADANI_WIND	0.32	0.01
BALCO	0.30	0.01
GMR KAMALANGA	0.26	0.01
NHPC STATIONS	0.15	0.003
Total	4718.38	100.00
Volume sold by top 5 Regional Entities	2610.46	55.33

Table-19: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, MARCH 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
GUJARAT	1519.95	32.21
TELANGANA	710.71	15.06
J & K	340.40	7.21
PUNJAB	336.48	7.13
NEPAL(NVVN)	221.88	4.70
UTTARAKHAND	202.99	4.30
ANDHRA PRADESH	155.61	3.30
MAHARASHTRA	147.35	3.12
UTTAR PRADESH	143.26	3.04
RAJASTHAN	142.67	3.02
DGPCL Bhutan	110.43	2.34
DD&DNH	101.45	2.15
MP	78.23	1.66
ASSAM	68.33	1.45
AMPS Hazira	65.77	1.39
WEST BENGAL	59.58	1.26
TAMIL NADU	46.57	0.99
HARYANA	45.99	0.97
KARNATAKA	39.47	0.84
NEP	38.27	0.81
ODISHA	32.93	0.70
HIMACHAL PRADESH	27.36	0.58
JHARKHAND	21.16	0.45
DELHI	19.40	0.41
GOA	15.18	0.32
SIKKIM	9.78	0.21
CHHATTISGARH	3.79	0.08
NAGALAND	3.65	0.08
NCR ALLAHABAD	3.02	0.06
KERALA	2.99	0.06
ARUNACHAL PRADESH	1.24	0.03
BALCO	1.12	0.02
RGPL_IR	0.64	0.01
BIHAR	0.47	0.01
MEGHALAYA	0.25	0.01
CHANDIGARH	0.01	0.0002
TOTAL	4718.38	100.00
Volume purchased by top 5 Regional Entities	3129.42	66.32

Table-20: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, MARCH 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
ANDHRA PRADESH	125.60	42.18
KARNATAKA	117.49	39.46
NTPC STATIONS-SR	13.94	4.68
MP	11.93	4.01
SIKKIM	5.08	1.71
J & K	4.37	1.47
SB_SLR	3.84	1.29
HIMACHAL PRADESH	3.76	1.26
OSTRO Hiriyur	3.39	1.14
RAJASTHAN	1.76	0.59
TELANGANA	1.71	0.57
UTTAR PRADESH	1.39	0.47
SINGOLI BHATWARI HEP	1.23	0.41
HARYANA	0.84	0.28
MAHARASHTRA	0.80	0.27
DELHI	0.25	0.08
WEST BENGAL	0.23	0.08
ADANI_WIND	0.11	0.04
ODISHA	0.001	0.0004
Total	297.75	100.00
Volume sold by top 5 Regional Entities	274.05	92.04

Table-21: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, MARCH 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
MAHARASHTRA	73.78	24.78
GUJARAT	48.10	16.15
KARNATAKA	29.68	9.97
AMPS Hazira	25.90	8.70
DVC	23.70	7.96
ODISHA	16.47	5.53
DELHI	15.24	5.12
PUNJAB	14.32	4.81
MP	13.15	4.42
DD&DNH	11.11	3.73
BALCO	9.04	3.04
TAMIL NADU	5.93	1.99
UTTAR PRADESH	3.89	1.31
HARYANA	2.34	0.79
NCR ALLAHABAD	1.38	0.46
JHARKHAND	1.26	0.42
TELANGANA	1.26	0.42
WEST BENGAL	0.37	0.12
ANDHRA PRADESH	0.33	0.11
KERALA	0.30	0.10
BIHAR	0.14	0.05
MEGHALAYA	0.07	0.02
TOTAL	297.75	100.00
Volume purchased by top 5 Regional Entities	201.15	67.56

Table-22: VOLUME OF ELECTRICITY SOLD IN REAL TIME MARKET THROUGH POWER EXCHANGES, MARCH 2023		
Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	391.41	18.66
BIHAR	371.88	17.73
ODISHA	153.39	7.31
UTTAR PRADESH	134.33	6.40
WEST BENGAL	121.47	5.79
KAPP 3&4	119.24	5.68
RAJASTHAN	87.32	4.16
CHHATTISGARH	86.80	4.14
ANDHRA PRADESH	57.78	2.75
TELANGANA	40.51	1.93
DELHI	39.73	1.89
MAHARASHTRA	39.21	1.87
KARNATAKA	36.16	1.72
HARYANA	35.64	1.70
RKM POWER	28.46	1.36
NEEPCO STATIONS	27.42	1.31
HIMACHAL PRADESH	25.30	1.21
ESSAR POWER	23.58	1.12
SKS POWER	20.55	0.98
KERALA	20.00	0.95
TRN ENERGY	18.93	0.90
ONGC PALATANA	17.89	0.85
JHARKHAND	14.89	0.71
NLC	13.10	0.62
ASSAM	12.15	0.58
RPREL	12.06	0.58
JHABUA POWER_MP	9.94	0.47
SASAN UMPP	9.62	0.46
SEMBCORP	9.56	0.46
MB POWER	9.49	0.45
GUJARAT	9.01	0.43
TRIPURA	8.59	0.41
DVC	7.37	0.35
TAMIL NADU	6.86	0.33
MARUTI COAL	6.31	0.30
BALCO	5.78	0.28
J & K	5.06	0.24
TEESTA HEP	4.95	0.24
ACBIL	4.71	0.22
PUNJAB	4.56	0.22
EMCO	4.51	0.22
DIKCHU HEP	3.13	0.15
JINDAL STAGE-II	2.95	0.14
MANIPUR	2.68	0.13
JINDAL POWER	2.47	0.12
SIKKIM	2.44	0.12
ARUNACHAL PRADESH	2.31	0.11
UTTARAKHAND	2.22	0.11
IL&FS	2.13	0.10

SIMHAPURI	1.72	0.08
NTPC STATIONS-WR	1.64	0.08
ADHUNIK POWER LTD	1.62	0.08
SINGOLI BHATWARI HEP	1.58	0.08
DCPP	1.49	0.07
GOA	1.41	0.07
SHREE CEMENT	1.40	0.07
NTPC STATIONS-SR	1.39	0.07
SAINJ HEP	1.32	0.06
DB POWER	1.26	0.06
REGL	1.25	0.06
DD&DNH	1.12	0.05
NTPC STATIONS-ER	0.83	0.04
JAYPEE NIGRIE	0.71	0.03
RENEW_SR_SLR	0.57	0.03
MEGHALAYA	0.56	0.03
CHANDIGARH	0.48	0.02
OSTRO Hiriyur	0.31	0.01
OSTRO	0.31	0.01
SORANG HEP	0.24	0.01
COASTGEN	0.14	0.01
CHUZACHEN HEP	0.14	0.01
GMR KAMALANGA	0.08	0.004
JITPL	0.08	0.004
RGPPPL_IR	0.06	0.003
KARCHAM WANGTOO	0.06	0.003
AD HYDRO	0.04	0.002
LANCO BUDHIL	0.02	0.001
MAITHON POWER LTD	0.02	0.001
Total	2097.72	100.00
Volume sold by top 5 Regional Entities	1172.47	55.89

Table-23: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, MARCH 2023		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
TELANGANA	425.38	20.28
GUJARAT	246.36	11.74
PUNJAB	219.62	10.47
J & K	174.33	8.31
MAHARASHTRA	169.61	8.09
RAJASTHAN	166.46	7.94
UTTAR PRADESH	121.08	5.77
ANDHRA PRADESH	89.53	4.27
WEST BENGAL	53.84	2.57
DELHI	50.90	2.43
HARYANA	46.20	2.20
ODISHA	40.77	1.94
TAMIL NADU	35.75	1.70
KARNATAKA	34.42	1.64
ASSAM	30.35	1.45
AMPS Hazira	27.60	1.32
UTTARAKHAND	26.77	1.28
DD&DNH	23.32	1.11
MP	20.09	0.96
DVC	19.31	0.92
MANIPUR	13.09	0.62
HIMACHAL PRADESH	7.96	0.38
BALCO	6.50	0.31
JHARKHAND	6.25	0.30
JINDAL STAGE-II	6.07	0.29
CHHATTISGARH	5.23	0.25
NAGALAND	4.81	0.23
KERALA	4.52	0.22
TRIPURA	4.11	0.20
JINDAL POWER	3.84	0.18
CGPL	3.76	0.18
GOA	2.66	0.13
NCR ALLAHABAD	2.20	0.10
SIKKIM	1.34	0.06
MEGHALAYA	1.32	0.06
RPREL	0.86	0.04
ESSAR POWER	0.56	0.03
BIHAR	0.40	0.02
ARUNACHAL PRADESH	0.33	0.02
RGPPL_IR	0.13	0.01
REGL	0.08	0.004
ACBIL	0.05	0.002
TOTAL	2097.72	100.00
Volume purchased by top 5 Regional Entities	1235.29	58.89

Table-24: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, MARCH 2023		
Name of the Entity	Volume of Under drawal (MUs)	% of Volume
UTTAR PRADESH	158.85	7.06
TAMIL NADU	149.59	6.64
GUJARAT	131.24	5.83
MP	127.23	5.65
RAJASTHAN	114.01	5.06
KARNATAKA	79.49	3.53
NTPC STATIONS-WR	76.67	3.41
MAHARASHTRA	72.36	3.21
HARYANA	58.78	2.61
NTPC STATIONS-NR	55.26	2.45
TELANGANA	54.19	2.41
NHPC STATIONS	53.64	2.38
CHHATTISGARH	46.50	2.07
DELHI	45.97	2.04
ANDHRA PRADESH	45.58	2.02
PUNJAB	44.83	1.99
SASAN UMPP	40.73	1.81
J & K	36.72	1.63
DVC	35.90	1.59
NTPC STATIONS-SR	31.37	1.39
NTPC STATIONS-ER	25.88	1.15
UTTARAKHAND	21.60	0.96
NEEPCO STATIONS	20.92	0.93
BIHAR	20.49	0.91
AMPS Hazira	19.94	0.89
JINDAL STAGE-II	18.85	0.84
PONDICHERRY	16.50	0.73
BBMB	16.40	0.73
ODISHA	16.25	0.72
KAPP 3&4	15.58	0.69
NLC	15.25	0.68
SIKKIM	15.15	0.67
NEPAL(NVVN)	14.40	0.64
KERALA	14.21	0.63
DD&DNH	13.87	0.62
RKM POWER	13.67	0.61
IGSTPS	13.38	0.59
HIMACHAL PRADESH	12.65	0.56
ASEJTL SLR	11.94	0.53
CHUKHA HEP	11.71	0.52
JHARKHAND	11.07	0.49
GIWEL_BHUJ	9.49	0.42
LANKO_AMK	9.37	0.42
TRIPURA	9.36	0.42
AGEMPL BHUJ	8.75	0.39
JITPL	8.46	0.38
MAITHON POWER LTD	8.34	0.37
SBESS	8.03	0.36
TALA HEP	7.62	0.34
AZURE43_SLR	7.41	0.33
ASSAM	6.97	0.31
JINDAL POWER	6.74	0.30
MB POWER	6.57	0.29
AVADARJHN SLR	6.36	0.28
AVAADASN_SLR	6.22	0.28
CLEAN_SLR	6.00	0.27
RENEW_BHUJ	5.58	0.25
ESSAR POWER	5.56	0.25
MIZORAM	5.53	0.25
NJPC	5.37	0.24

SKRPL	5.37	0.24
ACME_HEERGARH	5.37	0.24
THAR1_SLR	5.25	0.23
GOA	5.25	0.23
MEGHALAYA	4.96	0.22
AYANA_RP1	4.85	0.22
OSTRO	4.83	0.21
ALFANAR_BHUJ	4.82	0.21
DB POWER	4.68	0.21
FORTUM2_PVGD	4.63	0.21
AZURE41_SLR	4.58	0.20
CHANDIGARH	4.54	0.20
ABC_BHDL2	4.50	0.20
ARINSUM_RUMS	4.41	0.20
OSTRO Hiriyur	4.40	0.20
JAYPEE NIGRIE	4.35	0.19
NPGC	4.32	0.19
ORANGE_TCN	4.20	0.19
SPRNG_NPKUNTA	4.20	0.19
NAGALAND	4.19	0.19
RENEW_BHACHAU	4.16	0.18
TATA_PVGD	3.97	0.18
SBG_NPK	3.91	0.17
ACME_RUMS	3.89	0.17
RENEW_SLR_BKN	3.77	0.17
RENEWSB	3.74	0.17
AYANA_NPKUNTA	3.68	0.16
RPREL	3.67	0.16
RENEWURJA_SLR	3.65	0.16
BALCO	3.52	0.16
ACME_SLR	3.51	0.16
GIWEL_TCN	3.46	0.15
MAHINDRA_RUMS	3.42	0.15
SBSR_SLR	3.32	0.15
TEHRI	3.29	0.15
NETCL VALLUR	3.17	0.14
RAMPUR HEP	3.04	0.14
AZURE_SLR	3.04	0.13
RENEWJH_SLR	3.03	0.13
BETAM_TCN	3.03	0.13
ADY1_PVGD	3.01	0.13
SPRING_PUGALUR	2.94	0.13
EDEN_SLR	2.93	0.13
MYTRAH_TCN	2.85	0.13
EMCO	2.85	0.13
RENEWSW_SLR	2.83	0.13
MANIPUR	2.80	0.12
BRBCL,NABINAGAR	2.80	0.12
DGPCL Bhutan	2.77	0.12
KOTESHWAR	2.71	0.12
RAIL	2.69	0.12
SB6_POKARAN	2.60	0.12
NSPCL	2.57	0.11
AVIKIRAN	2.56	0.11
ACBIL	2.47	0.11
SB_SLR	2.45	0.11
MRPL	2.38	0.11
NTPC_ANTP	2.37	0.11
KARCHAM WANGTOO	2.36	0.10
ARUNACHAL PRADESH	2.35	0.10
RENEW_SR_SLR	2.35	0.10
MSUPL_BHDL2	2.34	0.10
TATA_GREEN	2.33	0.10

CLEANSR_SLR	2.31	0.10
TRN ENERGY	2.31	0.10
WEST BENGAL	2.28	0.10
SBG_PVGD	2.22	0.10
MTPS II	2.20	0.10
KSK MAHANADI	2.17	0.10
TATA_SLR	2.17	0.10
NTPL	2.15	0.10
INOX_BHUJ	2.14	0.10
SHREE CEMENT	2.10	0.09
RAP C	2.01	0.09
TEESTA HEP	2.00	0.09
BARC	1.99	0.09
SEMBCORP	1.92	0.09
SKS POWER	1.90	0.08
ESPL_RADHANESDA	1.85	0.08
JHABUA POWER_MP	1.76	0.08
AZURE34_SLR	1.76	0.08
AZURE_MAPLE_SLR	1.72	0.08
AVAADA2_PVGD	1.62	0.07
NEP	1.60	0.07
TEESTA STG3	1.52	0.07
SESP	1.52	0.07
ARERJL_SLR	1.50	0.07
NAPP	1.47	0.07
GRT_JPL	1.44	0.06
BANGLADESH	1.43	0.06
NTPC STATIONS-NER	1.41	0.06
GSECL_Radhanesda	1.40	0.06
AZURE_PVGD	1.38	0.06
IL&FS	1.37	0.06
RSTPS_FSPP	1.34	0.06
JORETHANG	1.32	0.06
AVAADA1_PVGD	1.29	0.06
POWERICA	1.23	0.05
COASTGEN	1.15	0.05
ONGC PALATANA	1.10	0.05
FORTUM1_PVGD	1.06	0.05
RANGANADI HEP	1.05	0.05
TATA_ANTP	1.03	0.05
KREDL_PVGD	0.96	0.04
THERMAL POWERTECH	0.87	0.04
ADHUNIK POWER LTD	0.86	0.04
DAGACHU	0.84	0.04
DHARIWAL POWER	0.81	0.04
TPREL_RADHANESDA	0.80	0.04
JSW_RENEW_2	0.80	0.04
ABSP_ANTP	0.79	0.03
RANGIT HEP	0.77	0.03
MANGDECHU HEP	0.77	0.03
AKSP_ANTP	0.76	0.03
GIPCL_RADHANESDA	0.75	0.03
RONGNICHU HEP	0.72	0.03
RGPPL	0.70	0.03
AHSP_ANTP	0.69	0.03
PARAM_PVGD	0.65	0.03
RENEW_SLR	0.64	0.03
DCPP	0.63	0.03
ARS_PVGD	0.63	0.03
GMR KAMALANGA	0.60	0.03
PARE HEP	0.59	0.03
RAP B	0.58	0.03
AKS_PVGD	0.55	0.02

YARROW_PVGD	0.51	0.02
KSMPL_SLR	0.49	0.02
RENEW_PVGD	0.42	0.02
AD HYDRO	0.42	0.02
TASHIDENG HEP	0.41	0.02
ADANI GREEN	0.40	0.02
FRV_NPK	0.34	0.02
LANCO BUDHIL	0.34	0.01
AZURE_ANTP	0.32	0.01
FRV_ANTP	0.32	0.01
CHUZACHEN HEP	0.27	0.01
SINGOLI BHATWARI HEP	0.23	0.01
KURICHU HEP	0.23	0.01
SIMHAPURI	0.22	0.01
NFF	0.22	0.01
DIKCHU HEP	0.22	0.01
SAINJ HEP	0.20	0.01
DOYANG HEP	0.20	0.01
VINDHYACHAL HVDC	0.19	0.01
SORANG HEP	0.17	0.01
LOKTAK	0.16	0.01
HVDC PUS	0.16	0.01
HVDC CHAMPA	0.15	0.01
CGPL	0.09	0.004
HVDC RAIGARH	0.04	0.002
HVDC ALPD	0.03	0.001
BHADRAVATHI HVDC	0.02	0.001
Total	2251.29	100.00
Volume Exported by top 5 Regional Entities	680.92	30.25

Table-25: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, MARCH 2023		
Name of the Entity	Volume of Over drawal (MUs)	% of Volume
NTPC STATIONS-NR	115.58	5.80
NTPC STATIONS-WR	104.51	5.25
WEST BENGAL	100.55	5.05
MAHARASHTRA	91.64	4.60
NTPC STATIONS-ER	77.47	3.89
GUJARAT	69.31	3.48
MANGDECHU HEP	61.54	3.09
TELANGANA	54.77	2.75
UTTAR PRADESH	50.90	2.56
NTPC STATIONS-SR	49.28	2.47
ODISHA	44.91	2.25
RAJASTHAN	42.77	2.15
BIHAR	40.98	2.06
KARNATAKA	37.65	1.89
ANDHRA PRADESH	33.93	1.70
PUNJAB	31.82	1.60
CHUKHA HEP	31.34	1.57
JHARKHAND	29.71	1.49
HARYANA	27.62	1.39
HIMACHAL PRADESH	24.86	1.25
AGEMPL BHUJ	23.73	1.19
DVC	22.28	1.12
AMPS Hazira	21.71	1.09
GIWEL_BHUJ	21.65	1.09
CHHATTISGARH	20.98	1.05
UTTARAKHAND	20.94	1.05
MP	20.43	1.03
TALA HEP	20.25	1.02
J & K	19.33	0.97
ASSAM	18.30	0.92
AVAADASN_SLR	17.82	0.89
NHPC STATIONS	17.45	0.88
NLC	16.45	0.83
SBESS	15.55	0.78
OSTRO	15.17	0.76
THERMAL POWERTECH	15.16	0.76
RENEW_BHACHAU	13.91	0.70
IGSTPS	13.22	0.66
OSTRO Hiriya	11.83	0.59
ALFANAR_BHUJ	11.68	0.59
RENEW_BHUJ	11.12	0.56
ORANGE_TCN	10.63	0.53
GIWEL_TCN	10.54	0.53
SPRING_PUGALUR	10.47	0.53
AZURE43_SLR	10.33	0.52
SKRPL	10.19	0.51
MYTRAH_TCN	9.59	0.48
AVADARJHN_SLR	9.41	0.47
ASEJTL_SLR	8.72	0.44
KURICHU HEP	8.60	0.43
TAMIL NADU	8.56	0.43
ARUNACHAL PRADESH	8.24	0.41
BETAM_TCN	8.16	0.41
GOA	8.12	0.41
ESSAR POWER	7.94	0.40
DGPCL Bhutan	7.68	0.39
MB POWER	7.24	0.36
TATA_SLR	7.12	0.36
ABC_BHDL2	6.68	0.34
TATA_GREEN	6.37	0.32

THAR1_SLR	6.25	0.31
CLEAN_SLR	6.18	0.31
CGPL	5.92	0.30
SB6_POKARAN	5.85	0.29
NETCL VALLUR	5.85	0.29
AYANA_RP1	5.84	0.29
KAPP 3&4	5.78	0.29
NPGC	5.39	0.27
ARERJL_SLR	5.24	0.26
BRBCL,NABINAGAR	5.21	0.26
DELHI	4.73	0.24
BALCO	4.72	0.24
ACME_HEERGARH	4.72	0.24
SEBMB	4.71	0.24
AVIKIRAN	4.65	0.23
AZURE41_SLR	4.51	0.23
NJPC	4.47	0.22
TATA_PVGD	4.43	0.22
NTPL	4.43	0.22
RAIL	4.38	0.22
BBMB	4.38	0.22
KERALA	4.34	0.22
RPREL	4.29	0.22
MRPL	4.24	0.21
JINDAL STAGE-II	4.24	0.21
MSUPL_BHDL2	4.23	0.21
ADHUNIK POWER LTD	4.19	0.21
BANGLADESH	4.17	0.21
RENEW_SLR_BKN	4.14	0.21
AZURE_MAPLE_SLR	3.98	0.20
JAYPEE NIGRIE	3.90	0.20
ACME_SLR	3.86	0.19
RENEWSB	3.75	0.19
RENEWSW_SLR	3.74	0.19
SESPL	3.71	0.19
SBSR_SLR	3.69	0.19
NTPC STATIONS-NER	3.63	0.18
ACME_RUMS	3.63	0.18
RENEW_SR_SLR	3.63	0.18
ADY1_PVGD	3.60	0.18
CHANDIGARH	3.58	0.18
TRIPURA	3.52	0.18
RENEWJH_SLR	3.46	0.17
SB_SLR	3.44	0.17
RENEWURJA_SLR	3.39	0.17
EDEN_SLR	3.38	0.17
AZURE_SLR	3.37	0.17
MAHINDRA_RUMS	3.33	0.17
COASTGEN	3.24	0.16
CLEANSR_SLR	3.22	0.16
MANIPUR	3.20	0.16
MEGHALAYA	3.10	0.16
NEP	2.94	0.15
ESPL_RADHANESDA	2.92	0.15
AYANA_NPKUNTA	2.87	0.14
JHABUA POWER_MP	2.86	0.14
GRT_JPL	2.78	0.14
NEPAL(NVVN)	2.73	0.14
NTPC_ANTP	2.68	0.13
SBG_PVGD	2.67	0.13
ARINSUM_RUMS	2.67	0.13
MTPS II	2.64	0.13
PARAM_PVGD	2.61	0.13

JITPL	2.60	0.13
JINDAL POWER	2.56	0.13
SIKKIM	2.46	0.12
JSW_RENEW_2	2.32	0.12
NAPP	2.23	0.11
POWERICA	2.22	0.11
MAITHON POWER LTD	2.21	0.11
KSK MAHANADI	2.20	0.11
NEEPCO STATIONS	2.19	0.11
RKM POWER	2.18	0.11
AVAADA1_PVGD	2.11	0.11
SBG_NPK	2.07	0.10
SHREE CEMENT	2.01	0.10
AZURE34_SLR	1.94	0.10
SPRNG_NPKUNTA	1.93	0.10
GMR KAMALANGA	1.89	0.09
TPREL_RADHANESDA	1.82	0.09
AVAADA2_PVGD	1.82	0.09
SIMHAPURI	1.80	0.09
GIPCL_RADHANESDA	1.79	0.09
TEHRI	1.72	0.09
NSPCL	1.62	0.08
FORTUM2_PVGD	1.58	0.08
RANGANADI HEP	1.48	0.07
RAP C	1.41	0.07
ADANI GREEN	1.37	0.07
KSMPL_SLR	1.34	0.07
RSTPS_FSPP	1.25	0.06
TATA_ANTP	1.19	0.06
TRN ENERGY	1.15	0.06
FORTUM1_PVGD	1.14	0.06
RENEW_SLR	1.13	0.06
GSECL_Radhanesda	1.06	0.05
DB POWER	1.05	0.05
DGEN MEGA POWER	1.03	0.05
PONDICHERRY	1.00	0.05
AZURE_PVGD	1.00	0.05
ACBIL	0.97	0.05
EMCO	0.95	0.05
DD&DNH	0.92	0.05
ONGC PALATANA	0.90	0.05
DIKCHU HEP	0.89	0.04
RAMPUR HEP	0.86	0.04
KARCHAM WANGTOO	0.85	0.04
RENEW_PVGD	0.70	0.04
RAP B	0.69	0.03
FRV_ANTP	0.66	0.03
FRV_NPK	0.59	0.03
YARROW_PVGD	0.58	0.03
AHSP_ANTP	0.55	0.03
SKS POWER	0.55	0.03
AZURE_ANTP	0.53	0.03
AKSP_ANTP	0.52	0.03
SASAN UMPP	0.51	0.03
AKS_PVGD	0.50	0.03
IL&FS	0.49	0.02
ABSP_ANTP	0.47	0.02
INOX_BHUJ	0.46	0.02
ARS_PVGD	0.46	0.02
NFF	0.44	0.02
KREDL_PVGD	0.41	0.02
MIZORAM	0.39	0.02
MEENAKSHI	0.39	0.02

RGPPL	0.37	0.02
LANKO KONDAPALLI	0.32	0.02
TEESTA STG3	0.32	0.02
DHARIWAL POWER	0.25	0.01
DOYANG HEP	0.24	0.01
KOTESHWAR	0.23	0.01
PARE HEP	0.23	0.01
RANGIT HEP	0.22	0.01
CHUZACHEN HEP	0.17	0.01
LOKTAK	0.14	0.01
NAGALAND	0.14	0.01
RONGNICHU HEP	0.14	0.01
TASHIDENG HEP	0.10	0.01
SINGOLI BHATWARI HEP	0.10	0.005
LANCO BUDHIL	0.09	0.005
HVDC ALPD	0.09	0.004
HVDC RAIGARH	0.09	0.004
AD HYDRO	0.09	0.004
LANKO AMK	0.08	0.004
BHADRAVATHI HVDC	0.07	0.003
SAINJ HEP	0.06	0.003
DCPP	0.06	0.003
DAGACHU	0.05	0.003
JORETHANG	0.05	0.002
BARC	0.04	0.002
TEESTA HEP	0.03	0.001
SORANG HEP	0.02	0.001
HVDC CHAMPA	0.02	0.001
HVDC PUS	0.001	0.0001
TOTAL	1991.79	100.00
Volume Imported by top 5 Regional Entities	489.75	24.59

Table-26: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), MARCH 2023		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	TELANGANA	2386.87
2	GUJARAT	1925.95
3	TAMIL NADU	1476.01
4	MAHARASHTRA	1434.88
5	ANDHRA PRADESH	1060.33
6	HARYANA	520.77
7	J & K	439.61
8	KERALA	397.29
9	UTTARAKHAND	388.59
10	AMPS Hazira	325.15
11	HIMACHAL PRADESH	298.37
12	RAJASTHAN	211.52
13	NEPAL(NVVN)	210.21
14	DD&DNH	193.21
15	DGPCL Bhutan	115.35
16	JHARKHAND	98.20
17	ASSAM	67.14
18	MANGDECHU HEP	60.78
19	MEGHALAYA	60.36
20	KARNATAKA	52.41
21	GOA	51.68
22	NTPC STATIONS-ER	50.76
23	NEP	39.61
24	NTPC STATIONS-WR	24.70
25	CHUKHA HEP	19.63
26	BALCO	16.56
27	AGEMPL BHUJ	14.98
28	THERMAL POWERTECH	14.28
29	TALA HEP	12.64
30	MANIPUR	12.17
31	GIWEL_BHUJ	12.16
32	OSTRO	10.03
33	RENEW_BHACHAU	9.75
34	CGPL	9.59
35	NAGALAND	8.47
36	KURICHU HEP	8.38
37	SPRING_PUGALUR	7.53
38	SBESS	7.53
39	GIWEL_TCN	7.07
40	ALFANAR_BHUJ	6.86
41	PONDICHERRY	6.84
42	MYTRAH_TCN	6.74
43	NCR ALLAHABAD	6.59
44	ORANGE_TCN	6.43
45	ARUNACHAL PRADESH	6.16
46	RENEW_BHUJ	5.54
47	BETAM_TCN	5.14
48	SKRPL	4.82
49	ARERJL_SLR	3.74
50	SB6_POKARAN	3.24
51	AVADARJHN_SLR	3.06
52	AZURE43_SLR	2.92
53	BANGLADESH	2.73
54	NETCL VALLUR	2.67
55	BRBCL,NABINAGAR	2.40
56	NTPL	2.27
57	AZURE_MAPLE_SLR	2.26
58	SESPL	2.19
59	AVIKIRAN	2.08
60	PARAM_PVGD	1.96
61	MSUPL_BHDL2	1.88
62	MRPL	1.86

63	RAIL	1.70
64	GRT_JPL	1.34
65	ESPL_RADHANESDA	1.07
66	NPGC	1.07
67	GIPCL_RADHANESDA	1.05
68	DGEN MEGA POWER	1.03
69	TPREL_RADHANESDA	1.02
70	AYANA_RP1	0.99
71	POWERICA	0.98
72	ADANI GREEN	0.97
73	CLEANSR_SLR	0.91
74	RENEW SW_SLR	0.91
75	KSMPL_SLR	0.86
76	AVAADA1_PVGD	0.83
77	NAPP	0.76
78	RGPPPL_IR	0.70
79	ADY1_PVGD	0.59
80	RENEW_SLR	0.48
81	TATA_PVGD	0.46
82	EDEN_SLR	0.45
83	SBG_PVGD	0.45
84	MTPS II	0.44
85	RANGANADI HEP	0.43
86	RENEWJH_SLR	0.43
87	MEENAKSHI	0.39
88	RENEW_SLR_BKN	0.37
89	SBSR_SLR	0.37
90	ACME_SLR	0.35
91	FRV_ANTP	0.34
92	AZURE_SLR	0.33
93	LANKO KONDAPALLI	0.32
94	NTPC_ANTP	0.31
95	RENEW_PVGD	0.28
96	FRV_NPK	0.25
97	NFF	0.22
98	AZURE_ANTP	0.20
99	AVAADA2_PVGD	0.20
100	AZURE34_SLR	0.18
101	CLEAN_SLR	0.18
102	TATA_ANTP	0.16
103	OSTRO Hiriyur	0.13
104	RAP B	0.11
105	FORTUM1_PVGD	0.08
106	YARROW_PVGD	0.07
107	HVDC ALPD	0.06
108	BHADRAVATHI HVDC	0.05
109	DOYANG HEP	0.05
110	HVDC RAIGARH	0.04
111	KSK MAHANADI	0.02
112	RENEW SB	0.02
113	LOKTAK	-0.02
114	AKS_PVGD	-0.05
115	AZURE41_SLR	-0.07
116	RSTPS_FSPP	-0.09
117	MAHINDRA_RUMS	-0.09
118	HVDC CHAMPA	-0.13
119	AHSP_ANTP	-0.14
120	IGSTPS	-0.15
121	HVDC PUS	-0.15
122	ARS_PVGD	-0.17
123	VINDHYACHAL HVDC	-0.19
124	AKSP_ANTP	-0.24
125	RENEWURJA_SLR	-0.26
126	ACME_RUMS	-0.27
127	ABSP_ANTP	-0.32
128	RGPPPL	-0.34

129	GSECL_Radhanesda	-0.34
130	PARE HEP	-0.35
131	AZURE_PVGD	-0.38
132	ADANI_WIND	-0.43
133	KREDL_PVGD	-0.55
134	RANGIT HEP	-0.55
135	RONGNICHU HEP	-0.58
136	RAP C	-0.59
137	TASHIDENG HEP	-0.67
138	AYANA_NPKUNTA	-0.81
139	NJPC	-0.90
140	NSPCL	-0.95
141	LANCO BUDHIL	-1.08
142	DHARIWAL POWER	-1.26
143	TEHRI	-1.57
144	CHUZACHEN HEP	-1.59
145	INOX_BHUJ	-1.68
146	ARINSUM_RUMS	-1.75
147	SBG_NPK	-1.84
148	BARC	-1.96
149	NTPC STATIONS-NER	-2.02
150	RAMPUR HEP	-2.18
151	SPRNG_NPKUNTA	-2.26
152	KOTESHWAR	-2.48
153	JORETHANG	-2.90
154	FORTUM2_PVGD	-3.05
155	MAITHON POWER LTD	-6.15
156	JSW_RENEW_2	-6.23
157	SIKKIM	-6.47
158	WEST BENGAL	-7.86
159	SORANG HEP	-8.27
160	MIZORAM	-10.25
161	SAINJ HEP	-10.27
162	SB_SLR	-11.05
163	BBMB	-12.01
164	NLC	-12.28
165	DAGACHU	-12.98
166	SINGOLI BHATWARI HEP	-14.51
167	DIKCHU HEP	-14.75
168	ASEJTL_SLR	-14.97
169	KARCHAM WANGTOO	-15.22
170	EMCO	-15.44
171	AD HYDRO	-16.46
172	LANKO_AMK	-17.15
173	CHANDIGARH	-21.29
174	TEESTA HEP	-21.46
175	REGL	-22.03
176	ONGC PALATANA	-25.67
177	NTPC STATIONS-SR	-26.13
178	NTPC STATIONS-NR	-26.55
179	JHABUA POWER_MP	-27.55
180	RENEW_SR_SLR	-29.78
181	TATA_SLR	-30.02
182	MARUTI COAL	-32.56
183	TRIPURA	-32.77
184	NHPC STATIONS	-36.34
185	TRN ENERGY	-42.41
186	TATA_GREEN	-44.37
187	ACME_HEERGARH	-48.48
188	SASAN UMPP	-49.84
189	THAR1_SLR	-55.17
190	DCPP	-59.43
191	GMR KAMALANGA	-59.78
192	AVAADASN_SLR	-62.25
193	ABC_BHDL2	-64.82
194	SIMHAPURI	-66.73

195	KOLYAT_SLR	-80.81
196	AHEJ4L_WIND	-86.98
197	NEEPCO STATIONS	-91.09
198	ACBIL	-101.72
199	TEESTA STG3	-113.59
200	CHHATTISGARH	-118.09
201	DVC	-122.30
202	ADHUNIK POWER LTD	-135.86
203	ODISHA	-146.33
204	KAPP 3&4	-150.04
205	SKS POWER	-150.67
206	AHEJ4L_SOLAR	-159.07
207	MB POWER	-176.04
208	SHREE CEMENT	-180.12
209	DB POWER	-222.01
210	JAYPEE NIGRIE	-235.32
211	IL&FS	-276.27
212	COASTGEN	-329.33
213	JITPL	-348.76
214	JINDAL POWER	-365.06
215	DELHI	-404.20
216	SEMBICORP	-456.67
217	ESSAR POWER	-457.21
218	RKM POWER	-497.74
219	PUNJAB	-617.03
220	RPREL	-692.13
221	JINDAL STAGE-II	-732.45
222	MP	-736.80
223	BIHAR	-1183.26
224	UTTAR PRADESH	-1933.34
* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral, power exchange and DSM		
(-) indicates sale and (+) indicates purchase		

Table-27: DETAILS OF CONGESTION IN POWER EXCHANGES, MARCH 2023										
	Details of Congestion	Day Ahead Market			Green Day Ahead Market			Real Time Market		
		IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX
1	Unconstrained Cleared Volume (MUs)	4718.38	0.00	0.00	297.75	0.00	0.00	2098.25	0.00	0.00
2	Actual Cleared Volume and hence scheduled (MUs)	4718.38	0.00	0.00	297.75	0.00	0.00	2097.72	0.00	0.00
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	0.53	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
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%	0.03%	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%	2.28%	0.00%	0.00%
7	Congestion occurrence (%) time block wise									
	0.00 - 6.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.41%	0.00%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	76.47%	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.12%	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), MARCH 2023														
Date	Bilateral		Day Ahead Market [#]			Green Day Ahead Market [#]			High Price DAM [#]	Real Time Market [#]			DSM	Total Electricity Generation (MU) *
	Through Traders and PXs**	Direct	IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	IEX	PXIL	HPX		
1-Mar-23	220.51	106.49	140.96	0.00	0.00	7.77	0.00	0.00	0.00	63.19	0.00	0.00	68.57	4028.50
2-Mar-23	230.67	110.78	149.41	0.00	0.00	9.04	0.00	0.00	0.00	56.42	0.00	0.00	68.78	4048.83
3-Mar-23	235.04	110.82	149.75	0.00	0.00	11.82	0.00	0.00	0.00	67.03	0.00	0.00	61.22	4089.05
4-Mar-23	226.22	110.38	156.35	0.00	0.00	13.32	0.00	0.00	0.00	57.68	0.00	0.00	74.78	4081.42
5-Mar-23	223.22	108.83	161.97	0.00	0.00	13.60	0.00	0.00	0.00	58.34	0.00	0.00	63.44	3925.84
6-Mar-23	238.54	107.50	154.43	0.00	0.00	12.44	0.00	0.00	0.00	61.73	0.00	0.00	68.72	4017.61
7-Mar-23	228.83	107.52	156.99	0.00	0.00	14.11	0.00	0.00	0.00	78.28	0.00	0.00	75.81	3763.34
8-Mar-23	207.98	111.90	113.25	0.00	0.00	10.45	0.00	0.00	0.00	89.71	0.00	0.00	68.43	3565.06
9-Mar-23	215.87	106.98	159.02	0.00	0.00	11.40	0.00	0.00	0.00	82.23	0.00	0.00	62.68	3722.48
10-Mar-23	223.52	104.09	173.18	0.00	0.00	10.59	0.00	0.00	0.00	63.68	0.00	0.00	58.60	3966.59
11-Mar-23	218.07	105.31	169.99	0.00	0.00	12.65	0.00	0.00	0.00	71.80	0.00	0.00	56.64	4008.71
12-Mar-23	221.42	106.10	164.87	0.00	0.00	8.26	0.00	0.00	0.00	66.76	0.00	0.00	66.61	3930.81
13-Mar-23	229.70	104.74	174.86	0.00	0.00	9.88	0.00	0.00	0.00	51.66	0.00	0.00	60.99	4113.32
14-Mar-23	219.52	106.52	175.95	0.00	0.00	7.94	0.00	0.00	0.00	52.11	0.00	0.00	59.79	4184.59
15-Mar-23	233.03	96.55	156.51	0.00	0.00	10.57	0.00	0.00	0.00	67.45	0.00	0.00	71.14	4208.97
16-Mar-23	233.85	87.71	158.69	0.00	0.00	7.14	0.00	0.00	0.00	68.74	0.00	0.00	74.62	4069.69
17-Mar-23	233.58	92.78	137.58	0.00	0.00	8.70	0.00	0.00	0.00	68.15	0.00	0.00	80.85	3823.39
18-Mar-23	195.49	95.40	122.77	0.00	0.00	10.72	0.00	0.00	0.00	67.78	0.00	0.00	81.78	3617.24
19-Mar-23	204.30	97.02	108.25	0.00	0.00	12.00	0.00	0.00	0.00	87.33	0.00	0.00	88.53	3271.93
20-Mar-23	193.73	99.10	134.50	0.00	0.00	15.66	0.00	0.00	0.00	98.49	0.00	0.00	75.35	3444.25
21-Mar-23	200.72	84.73	129.67	0.00	0.00	12.63	0.00	0.00	0.00	96.02	0.00	0.00	71.42	3594.81
22-Mar-23	201.60	91.89	147.92	0.00	0.00	6.89	0.00	0.00	0.00	72.62	0.00	0.00	66.90	3708.39
23-Mar-23	208.10	98.46	156.11	0.00	0.00	7.41	0.00	0.00	0.00	55.11	0.00	0.00	65.46	3782.49
24-Mar-23	197.13	101.76	136.45	0.00	0.00	7.56	0.00	0.00	0.00	63.77	0.00	0.00	68.10	3772.39
25-Mar-23	192.40	101.00	145.67	0.00	0.00	7.02	0.00	0.00	0.00	64.98	0.00	0.00	60.95	3874.68
26-Mar-23	190.70	104.28	157.41	0.00	0.00	6.38	0.00	0.00	0.00	48.13	0.00	0.00	64.71	3704.91
27-Mar-23	203.53	102.17	159.37	0.00	0.00	4.92	0.00	0.00	0.00	60.81	0.00	0.00	59.33	3877.28
28-Mar-23	209.17	103.63	169.99	0.00	0.00	5.96	0.00	0.00	0.00	58.29	0.00	0.00	61.34	4014.83
29-Mar-23	207.30	102.57	174.08	0.00	0.00	6.83	0.00	0.00	0.00	69.22	0.00	0.00	66.72	4074.71
30-Mar-23	219.85	107.14	167.91	0.00	0.00	6.80	0.00	0.00	0.00	58.88	0.00	0.00	78.50	4016.00
31-Mar-23	212.26	106.50	154.53	0.00	0.00	7.27	0.00	0.00	0.00	71.35	0.00	0.00	70.79	3780.31
Total	6675.85	3180.64	4718.38	0.00	0.00	297.75	0.00	0.00	0.00	2097.72	0.00	0.00	2121.54	120082.42
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.														
[#] Scheduled volume of all the bid areas.														

Table-29(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), MARCH 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		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Mar-23	5.00	12.00	9.41	-	-	-	-	-	-	-	-	-
2-Mar-23	3.62	12.00	6.20	-	-	-	-	-	-	-	-	-
3-Mar-23	3.56	12.00	7.71	-	-	-	-	-	-	-	-	-
4-Mar-23	3.85	12.00	8.32	-	-	-	-	-	-	-	-	-
5-Mar-23	3.50	10.50	6.41	-	-	-	-	-	-	-	-	-
6-Mar-23	3.54	12.00	6.82	-	-	-	-	-	-	-	-	-
7-Mar-23	3.39	12.00	5.95	-	-	-	-	-	-	-	-	-
8-Mar-23	2.99	4.98	3.80	-	-	-	-	-	-	-	-	-
9-Mar-23	3.47	8.89	5.40	-	-	-	-	-	-	-	-	-
10-Mar-23	3.52	11.50	5.50	-	-	-	-	-	-	-	-	-
11-Mar-23	3.46	12.00	5.56	-	-	-	-	-	-	-	-	-
12-Mar-23	2.87	8.00	5.40	-	-	-	-	-	-	-	-	-
13-Mar-23	3.46	11.50	5.68	-	-	-	-	-	-	-	-	-
14-Mar-23	3.46	11.15	5.50	-	-	-	-	-	-	-	-	-
15-Mar-23	3.62	12.00	6.09	-	-	-	-	-	-	-	-	-
16-Mar-23	3.57	12.00	5.87	-	-	-	-	-	-	-	-	-
17-Mar-23	3.48	11.00	5.11	-	-	-	-	-	-	-	-	-
18-Mar-23	3.19	9.53	4.95	-	-	-	-	-	-	-	-	-
19-Mar-23	2.95	7.00	4.65	-	-	-	-	-	-	-	-	-
20-Mar-23	2.80	9.00	4.02	-	-	-	-	-	-	-	-	-
21-Mar-23	2.40	6.32	3.23	-	-	-	-	-	-	-	-	-
22-Mar-23	2.22	9.00	3.74	-	-	-	-	-	-	-	-	-
23-Mar-23	2.50	9.00	4.06	-	-	-	-	-	-	-	-	-
24-Mar-23	2.71	7.80	4.34	-	-	-	-	-	-	-	-	-
25-Mar-23	2.40	9.50	4.33	-	-	-	-	-	-	-	-	-
26-Mar-23	2.36	7.23	4.02	-	-	-	-	-	-	-	-	-
27-Mar-23	2.69	12.00	4.98	-	-	-	-	-	-	-	-	-
28-Mar-23	2.73	12.00	5.08	-	-	-	-	-	-	-	-	-
29-Mar-23	2.71	12.00	5.64	-	-	-	-	-	-	-	-	-
30-Mar-23	2.82	9.00	5.38	-	-	-	-	-	-	-	-	-
31-Mar-23	2.71	6.00	4.11	-	-	-	-	-	-	-	-	-
	2.22 [#]	12.00 [#]	5.44	-	-	-	-	-	-	-	-	-
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-29(b): PRICE OF GREEN DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), MARCH 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-Mar-23	5.15	12.00	7.47	-	-	-	-	-	-
2-Mar-23	5.37	12.00	7.22	-	-	-	-	-	-
3-Mar-23	5.00	12.00	7.08	-	-	-	-	-	-
4-Mar-23	5.00	12.00	6.94	-	-	-	-	-	-
5-Mar-23	4.36	12.00	6.29	-	-	-	-	-	-
6-Mar-23	4.20	12.00	6.53	-	-	-	-	-	-
7-Mar-23	4.00	12.00	5.93	-	-	-	-	-	-
8-Mar-23	3.34	11.00	4.85	-	-	-	-	-	-
9-Mar-23	4.00	12.00	5.71	-	-	-	-	-	-
10-Mar-23	4.00	12.00	5.50	-	-	-	-	-	-
11-Mar-23	4.16	12.00	5.92	-	-	-	-	-	-
12-Mar-23	4.00	8.00	5.17	-	-	-	-	-	-
13-Mar-23	4.44	12.00	6.51	-	-	-	-	-	-
14-Mar-23	4.30	12.00	6.56	-	-	-	-	-	-
15-Mar-23	4.50	10.50	5.63	-	-	-	-	-	-
16-Mar-23	4.50	12.00	6.74	-	-	-	-	-	-
17-Mar-23	4.50	12.00	6.39	-	-	-	-	-	-
18-Mar-23	4.30	8.00	4.70	-	-	-	-	-	-
19-Mar-23	3.80	7.00	4.59	-	-	-	-	-	-
20-Mar-23	3.69	8.00	4.68	-	-	-	-	-	-
21-Mar-23	3.50	10.00	4.39	-	-	-	-	-	-
22-Mar-23	3.37	6.00	4.37	-	-	-	-	-	-
23-Mar-23	3.70	10.00	4.55	-	-	-	-	-	-
24-Mar-23	3.69	9.30	4.64	-	-	-	-	-	-
25-Mar-23	3.80	9.20	4.75	-	-	-	-	-	-
26-Mar-23	3.36	7.70	4.54	-	-	-	-	-	-
27-Mar-23	4.11	12.00	4.95	-	-	-	-	-	-
28-Mar-23	4.03	12.00	5.25	-	-	-	-	-	-
29-Mar-23	4.11	12.00	5.47	-	-	-	-	-	-
30-Mar-23	4.20	10.00	5.58	-	-	-	-	-	-
31-Mar-23	4.15	9.00	5.40	-	-	-	-	-	-
	3.34[#]	12.00[#]	5.67	-	-	-	-	-	-
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 AND DSM (DAY-WISE) (₹/kWh), MARCH 2023

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-Mar-23	2.70	10.50	5.62	-	-	-	-	-	-	5.00	12.00	9.66
2-Mar-23	4.30	12.00	7.96	-	-	-	-	-	-	4.00	12.00	7.98
3-Mar-23	3.90	12.00	7.91	-	-	-	-	-	-	4.00	12.00	8.60
4-Mar-23	3.32	12.00	6.75	-	-	-	-	-	-	3.85	12.00	8.59
5-Mar-23	3.34	8.29	4.75	-	-	-	-	-	-	3.50	12.00	6.51
6-Mar-23	3.62	10.00	5.68	-	-	-	-	-	-	4.15	12.00	7.34
7-Mar-23	3.00	6.15	4.21	-	-	-	-	-	-	3.39	12.00	6.09
8-Mar-23	2.00	6.42	3.83	-	-	-	-	-	-	2.99	12.00	4.28
9-Mar-23	2.02	7.80	3.84	-	-	-	-	-	-	3.39	9.75	5.51
10-Mar-23	3.14	12.00	5.04	-	-	-	-	-	-	3.52	12.00	5.78
11-Mar-23	3.62	10.00	5.88	-	-	-	-	-	-	3.62	12.00	6.18
12-Mar-23	2.60	8.01	4.72	-	-	-	-	-	-	2.92	12.00	5.52
13-Mar-23	3.30	10.98	5.41	-	-	-	-	-	-	3.46	11.50	5.98
14-Mar-23	2.98	12.00	6.10	-	-	-	-	-	-	3.46	12.00	6.25
15-Mar-23	3.77	9.00	6.15	-	-	-	-	-	-	3.82	12.00	6.72
16-Mar-23	2.92	8.50	5.03	-	-	-	-	-	-	3.62	12.00	6.35
17-Mar-23	2.60	7.50	3.76	-	-	-	-	-	-	3.48	11.25	5.22
18-Mar-23	2.05	6.50	3.39	-	-	-	-	-	-	3.19	11.00	4.94
19-Mar-23	1.25	4.20	2.63	-	-	-	-	-	-	2.95	11.00	4.63
20-Mar-23	2.10	7.05	3.09	-	-	-	-	-	-	2.80	11.00	4.26
21-Mar-23	1.81	6.00	3.21	-	-	-	-	-	-	2.40	11.00	3.59
22-Mar-23	2.36	6.00	3.65	-	-	-	-	-	-	2.36	11.00	4.02
23-Mar-23	2.36	8.00	4.13	-	-	-	-	-	-	2.50	11.00	4.45
24-Mar-23	2.42	12.00	4.45	-	-	-	-	-	-	2.71	12.00	4.90
25-Mar-23	2.40	12.00	5.58	-	-	-	-	-	-	2.40	12.00	5.68
26-Mar-23	1.50	7.05	3.69	-	-	-	-	-	-	2.36	11.76	4.36
27-Mar-23	1.94	12.00	5.17	-	-	-	-	-	-	2.69	12.00	5.53
28-Mar-23	3.00	12.00	7.59	-	-	-	-	-	-	2.80	12.00	7.52
29-Mar-23	2.86	12.00	6.87	-	-	-	-	-	-	2.82	12.00	7.27
30-Mar-23	2.36	7.50	4.24	-	-	-	-	-	-	2.82	12.00	5.67
31-Mar-23	1.53	7.36	3.28	-	-	-	-	-	-	2.71	12.00	4.33
	1.25[#]	12.00[#]	4.82	-	-	-	-	-	-	2.36[#]	12.00[#]	5.93

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.

** CERC DSM Regulations 2022 came into effect from 05.12.2022, wherein normal rate of charges for deviation for a time block is equal to the highest of the [weighted average Area Clearing Price (ACP) of the Day Ahead Market segments of all the Power Exchanges; or the weighted average ACP of the Real Time Market segments of all the Power Exchanges; or the Weighted Average Ancillary Service Charge of all the regions]. Thereafter a ceiling of Rs. 12/kWh was imposed by CERC from 28.12.2022

Maximum/Minimum in the month

Table-30: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), MARCH 2023										
Name of the Entity	Through Bilateral (Traders + PXs + Direct)			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	1232.94	69.15	-1163.78	10.66	570.42	559.76	31.82	44.83	-13.00	-617.03
HARYANA	32.83	604.50	571.67	114.27	94.52	-19.75	27.62	58.78	-31.15	520.77
RAJASTHAN	158.08	274.06	115.98	142.36	309.13	166.77	42.77	114.01	-71.23	211.52
DELHI	467.50	162.63	-304.87	143.63	85.54	-58.09	4.73	45.97	-41.24	-404.20
UTTAR PRADESH	692.67	172.93	-519.74	1573.88	268.23	-1305.64	50.90	158.85	-107.96	-1933.34
UTTARAKHAND	6.45	169.85	163.40	3.91	229.76	225.86	20.94	21.60	-0.66	388.59
HIMACHAL PRADESH	36.51	374.38	337.87	87.03	35.32	-51.71	24.86	12.65	12.21	298.37
J & K	87.08	49.90	-37.18	20.55	514.73	494.17	19.33	36.72	-17.39	439.61
CHANDIGARH	0.00	0.00	0.00	20.34	0.01	-20.33	3.58	4.54	-0.96	-21.29
MP	397.02	170.17	-226.84	514.62	111.47	-403.15	20.43	127.23	-106.81	-736.80
MAHARASHTRA	219.87	1425.80	1205.94	181.07	390.74	209.67	91.64	72.36	19.28	1434.88
GUJARAT	224.97	430.58	205.62	32.14	1814.41	1782.27	69.31	131.24	-61.94	1925.95
CHHATTISGARH	0.00	132.20	132.20	233.80	9.02	-224.78	20.98	46.50	-25.52	-118.09
GOA	0.00	53.66	53.66	22.69	17.84	-4.85	8.12	5.25	2.87	51.68
DD&DNH	0.00	71.42	71.42	1.12	135.88	134.75	0.92	13.87	-12.96	193.21
ANDHRA P	10.37	1076.03	1065.65	239.13	245.46	6.34	33.93	45.58	-11.66	1060.33
KARNATAKA	331.01	568.80	237.79	247.09	103.56	-143.53	37.65	79.49	-41.84	52.41
KERALA	0.00	482.28	482.28	82.93	7.80	-75.12	4.34	14.21	-9.87	397.29
TAMIL NADU	92.57	1684.12	1591.56	62.77	88.25	25.48	8.56	149.59	-141.03	1476.01
PONDICHERRY	0.00	22.33	22.33	0.00	0.00	0.00	1.00	16.50	-15.50	6.84
TELANGANA	3.68	1302.98	1299.30	50.36	1137.35	1086.98	54.77	54.19	0.59	2386.87
WEST BENGAL	65.74	24.10	-41.63	178.29	113.79	-64.50	100.55	2.28	98.27	-7.86
ODISHA	91.48	148.42	56.94	322.10	90.17	-231.93	44.91	16.25	28.66	-146.33
BIHAR	148.98	0.10	-148.88	1055.88	1.01	-1054.87	40.98	20.49	20.49	-1183.26
JHARKHAND	0.00	92.87	92.87	41.99	28.67	-13.32	29.71	11.07	18.64	98.20
SIKKIM	0.26	3.39	3.13	8.02	11.12	3.10	2.46	15.15	-12.70	-6.47
DVC	130.44	0.00	-130.44	21.25	43.01	21.75	22.28	35.90	-13.61	-122.30
ARUNACHAL P	4.71	7.68	2.97	4.26	1.57	-2.69	8.24	2.35	5.88	6.16
ASSAM	0.00	0.00	0.00	42.87	98.68	55.81	18.30	6.97	11.33	67.14
MANIPUR	2.23	3.60	1.36	2.68	13.09	10.41	3.20	2.80	0.39	12.17
MEGHALAYA	0.00	61.51	61.51	0.93	1.64	0.71	3.10	4.96	-1.86	60.36
MIZORAM	0.00	0.00	0.00	5.11	0.00	-5.11	0.39	5.53	-5.14	-10.25
NAGALAND	0.00	6.94	6.94	2.88	8.46	5.58	0.14	4.19	-4.05	8.47
TRIPURA	0.00	0.00	0.00	31.04	4.11	-26.93	3.52	9.36	-5.84	-32.77
NTPC STATIONS-NR	86.87	0.00	-86.87	0.00	0.00	0.00	115.58	55.26	60.32	-26.55
NHPC STATIONS	0.00	0.00	0.00	0.15	0.00	-0.15	17.45	53.64	-36.19	-36.34
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.22	0.22	0.22
RAIL	0.00	0.00	0.00	0.00	0.00	0.00	4.38	2.69	1.70	1.70
NEP	0.00	0.00	0.00	0.00	38.27	38.27	2.94	1.60	1.34	39.61
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	2.23	1.47	0.76	0.76
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.58	0.11	0.11
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	4.47	5.37	-0.90	-0.90
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	1.72	3.29	-1.57	-1.57
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	4.38	16.40	-12.01	-12.01
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	1.41	2.01	-0.59	-0.59
AD HYDRO	12.41	0.00	-12.41	3.72	0.00	-3.72	0.09	0.42	-0.33	-16.46
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	13.22	13.38	-0.15	-0.15
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	0.23	2.71	-2.48	-2.48
KARCHAM WANGTOO	6.67	0.00	-6.67	7.04	0.00	-7.04	0.85	2.36	-1.51	-15.22
SHREE CEMENT	173.33	0.00	-173.33	6.70	0.00	-6.70	2.01	2.10	-0.09	-180.12
LANCO BUDHIL	0.00	0.00	0.00	0.84	0.00	-0.84	0.09	0.34	-0.25	-1.08
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.86	3.04	-2.18	-2.18
SORANG HEP	4.77	0.00	-4.77	3.36	0.00	-3.36	0.02	0.17	-0.15	-8.27
SAINJ HEP	1.26	0.00	-1.26	8.88	0.00	-8.88	0.06	0.20	-0.13	-10.27
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.64	0.48	0.48
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.37	3.04	0.33	0.33

SB_SLR	7.12	0.00	-7.12	4.93	0.00	-4.93	3.44	2.45	0.99	-11.05
ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.86	3.51	0.35	0.35
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.94	1.76	0.18	0.18
TATA_SLR	34.97	0.00	-34.97	0.00	0.00	0.00	7.12	2.17	4.95	-30.02
RENEW_SLR_BKN	0.00	0.00	0.00	0.00	0.00	0.00	4.14	3.77	0.37	0.37
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	6.18	6.00	0.18	0.18
ARERJL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.24	1.50	3.74	3.74
KSMPL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.34	0.49	0.86	0.86
ADANI GREEN	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.40	0.97	0.97
ASEJTL_SLR	0.00	0.00	0.00	11.75	0.00	-11.75	8.72	11.94	-3.22	-14.97
SINGOLI BHATWARI HE	10.55	0.00	-10.55	3.82	0.00	-3.82	0.10	0.23	-0.13	-14.51
AZURE43_SLR	0.00	0.00	0.00	0.00	0.00	0.00	10.33	7.41	2.92	2.92
MRPL	0.00	0.00	0.00	0.00	0.00	0.00	4.24	2.38	1.86	1.86
SB6_POKARAN	0.00	0.00	0.00	0.00	0.00	0.00	5.85	2.60	3.24	3.24
EDEN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.38	2.93	0.45	0.45
SBSR_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.69	3.32	0.37	0.37
RENEWSW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.74	2.83	0.91	0.91
RENEWJH_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.46	3.03	0.43	0.43
AHEJ4L_WIND	86.98	0.00	-86.98	0.00	0.00	0.00	0.00	0.00	0.00	-86.98
AHEJ4L_SOLAR	159.07	0.00	-159.07	0.00	0.00	0.00	0.00	0.00	0.00	-159.07
RENEWSB	0.00	0.00	0.00	0.00	0.00	0.00	3.75	3.74	0.02	0.02
AZURE41_SLR	0.00	0.00	0.00	0.00	0.00	0.00	4.51	4.58	-0.07	-0.07
AYANA_RP1	0.00	0.00	0.00	0.00	0.00	0.00	5.84	4.85	0.99	0.99
AVAADASN_SLR	73.85	0.00	-73.85	0.00	0.00	0.00	17.82	6.22	11.60	-62.25
RENEWURJA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.39	3.65	-0.26	-0.26
AVADARJHN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	9.41	6.36	3.06	3.06
NCR ALLAHABAD	0.00	0.00	0.00	0.00	6.59	6.59	0.00	0.00	0.00	6.59
RENEW_SR_SLR	25.86	0.00	-25.86	5.21	0.00	-5.21	3.63	2.35	1.28	-29.78
AZURE_MAPLE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.98	1.72	2.26	2.26
THAR1_SLR	56.17	0.00	-56.17	0.00	0.00	0.00	6.25	5.25	1.00	-55.17
CLEANSR_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.22	2.31	0.91	0.91
ACME_HEERGARH	47.83	0.00	-47.83	0.00	0.00	0.00	4.72	5.37	-0.65	-48.48
ABC_BHDL2	67.00	0.00	-67.00	0.00	0.00	0.00	6.68	4.50	2.18	-64.82
MSUPL_BHDL2	0.00	0.00	0.00	0.00	0.00	0.00	4.23	2.34	1.88	1.88
KOLYAT_SLR	80.81	0.00	-80.81	0.00	0.00	0.00	0.00	0.00	0.00	-80.81
TATA_GREEN	48.41	0.00	-48.41	0.00	0.00	0.00	6.37	2.33	4.04	-44.37
NTPC STATIONS-WR	1.50	0.00	-1.50	1.64	0.00	-1.64	104.51	76.67	27.84	24.70
BHADRAVATHI HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.02	0.05	0.05
VINDHYACHAL HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	-0.19	-0.19
JINDAL POWER	297.66	0.00	-297.66	67.06	3.84	-63.22	2.56	6.74	-4.18	-365.06
LANKO_AMK	7.86	0.00	-7.86	0.00	0.00	0.00	0.08	9.37	-9.29	-17.15
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	1.62	2.57	-0.95	-0.95
ACBIL	69.77	0.00	-69.77	30.49	0.05	-30.44	0.97	2.47	-1.50	-101.72
BALCO	1.20	5.98	4.78	6.08	16.66	10.58	4.72	3.52	1.20	16.56
RGPLL	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.70	-0.34	-0.34
CGPL	0.00	0.00	0.00	0.00	3.76	3.76	5.92	0.09	5.83	9.59
DCPP	0.00	0.00	0.00	58.86	0.00	-58.86	0.06	0.63	-0.57	-59.43
EMCO	0.00	0.00	0.00	13.54	0.00	-13.54	0.95	2.85	-1.89	-15.44
KSK MAHANADI	0.00	0.00	0.00	0.00	0.00	0.00	2.20	2.17	0.02	0.02
ESSAR POWER	374.68	0.00	-374.68	85.47	0.56	-84.91	7.94	5.56	2.38	-457.21
JINDAL STAGE-II	644.46	0.00	-644.46	79.45	6.07	-73.38	4.24	18.85	-14.61	-732.45
DB POWER	44.78	0.00	-44.78	173.61	0.00	-173.61	1.05	4.68	-3.630	-222.014
DHARIWAL POWER	0.00	0.00	0.00	0.70	0.00	-0.70	0.25	0.81	-0.56	-1.26
JAYPEE NIGRIE	156.28	0.00	-156.28	78.59	0.00	-78.59	3.90	4.35	-0.45	-235.32
DGEN MEGA POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	1.03	1.03
MB POWER	82.26	0.00	-82.26	94.45	0.00	-94.45	7.24	6.57	0.67	-176.04
MARUTI COAL	0.00	0.00	0.00	32.56	0.00	-32.56	0.00	0.00	0.00	-32.56
JHABUA POWER_MP	0.00	0.00	0.00	28.65	0.00	-28.65	2.86	1.76	1.10	-27.55
SASAN UMPP	0.00	0.00	0.00	9.62	0.00	-9.62	0.51	40.73	-40.22	-49.84
TRN ENERGY	22.32	0.00	-22.32	18.93	0.00	-18.93	1.15	2.31	-1.16	-42.41
RKM POWER	401.45	0.00	-401.45	84.80	0.00	-84.80	2.18	13.67	-11.49	-497.74
SKS POWER	77.00	0.00	-77.00	72.31	0.00	-72.31	0.55	1.90	-1.35	-150.67
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.99	-1.96	-1.96

KAPP 3&4	0.00	0.00	0.00	140.24	0.00	-140.24	5.78	15.58	-9.80	-150.04
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.15	-0.13	-0.13
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.33	3.42	-0.09	-0.09
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	2.67	4.41	-1.75	-1.75
OSTRO	0.00	0.00	0.00	0.31	0.00	-0.31	15.17	4.83	10.33	10.03
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.63	3.89	-0.27	-0.27
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	13.91	4.16	9.75	9.75
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	21.65	9.49	12.16	12.16
INOX_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	0.46	2.14	-1.68	-1.68
AGEMPL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	23.73	8.75	14.98	14.98
REGL	8.56	0.00	-8.56	13.54	0.08	-13.47	0.00	0.00	0.00	-22.03
RPREL	534.31	0.00	-534.31	159.29	0.86	-158.43	4.29	3.67	0.61	-692.13
AMPS Hazira	0.00	204.11	204.11	0.00	119.27	119.27	21.71	19.94	1.77	325.15
HVDC RAIGARH	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.04	0.04	0.04
RGPPL_IR	0.00	0.00	0.00	0.06	0.77	0.70	0.00	0.00	0.00	0.70
ALFANAR_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	11.68	4.82	6.86	6.86
RENEW_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	11.12	5.58	5.54	5.54
ADANI_WIND	0.00	0.00	0.00	0.43	0.00	-0.43	0.00	0.00	0.00	-0.43
TPREL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.82	0.80	1.02	1.02
ESPL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	2.92	1.85	1.07	1.07
GIPCL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	1.79	0.75	1.05	1.05
GSECL_Radhanesda	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.40	-0.34	-0.34
AVIKIRAN	0.00	0.00	0.00	0.00	0.00	0.00	4.65	2.56	2.08	2.08
SESPL	0.00	0.00	0.00	0.00	0.00	0.00	3.71	1.52	2.19	2.19
POWERICA	0.00	0.00	0.00	0.00	0.00	0.00	2.22	1.23	0.98	0.98
SKRPL	0.00	0.00	0.00	0.00	0.00	0.00	10.19	5.37	4.82	4.82
SBESS	0.00	0.00	0.00	0.00	0.00	0.00	15.55	8.03	7.53	7.53
NTPC STATIONS-SR	8.59	0.00	-8.59	35.44	0.00	-35.44	49.28	31.37	17.91	-26.13
LANKO KONDAPALLI	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.32	0.32
SIMHAPURI	62.68	0.00	-62.68	5.63	0.00	-5.63	1.80	0.22	1.58	-66.73
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.39	0.39
COASTGEN	299.00	0.00	-299.00	32.42	0.00	-32.42	3.24	1.15	2.09	-329.33
THERMAL POWERTECH	0.00	0.00	0.00	0.00	0.00	0.00	15.16	0.87	14.28	14.28
IL&FS	265.39	0.00	-265.39	10.00	0.00	-10.00	0.49	1.37	-0.88	-276.27
NLC	0.00	0.00	0.00	13.48	0.00	-13.48	16.45	15.25	1.20	-12.28
SEMBCORP	407.36	0.00	-407.36	52.10	0.00	-52.10	4.71	1.92	2.79	-456.67
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	5.85	3.17	2.67	2.67
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	4.43	2.15	2.27	2.27
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.69	-0.14	-0.14
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.76	-0.24	-0.24
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.79	-0.32	-0.32
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.32	0.20	0.20
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.03	0.16	0.16
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.32	0.34	0.34
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	2.68	2.37	0.31	0.31
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	10.54	3.46	7.07	7.07
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.59	2.85	6.74	6.74
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.34	0.25	0.25
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	10.63	4.20	6.43	6.43
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.16	3.03	5.14	5.14
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.67	2.22	0.45	0.45
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	2.07	3.91	-1.84	-1.84
FORTUM1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.14	1.06	0.08	0.08
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.61	0.65	1.96	1.96
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.51	0.07	0.07
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	4.43	3.97	0.46	0.46
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.42	0.28	0.28
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.55	-0.05	-0.05
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.63	-0.17	-0.17
AVAADA1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.11	1.29	0.83	0.83
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	3.60	3.01	0.59	0.59
AZURE_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.38	-0.38	-0.38
FORTUM2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.58	4.63	-3.05	-3.05

AVAADA2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.82	1.62	0.20	0.20
KREDL_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.96	-0.55	-0.55
AYANA_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	2.87	3.68	-0.81	-0.81
SPRNG_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	1.93	4.20	-2.26	-2.26
SPRING_PUGALUR	0.00	0.00	0.00	0.00	0.00	0.00	10.47	2.94	7.53	7.53
OSTRO Hiriyur	1.60	0.00	-1.60	5.70	0.00	-5.70	11.83	4.40	7.44	0.13
RSTPS_FSPP	0.00	0.00	0.00	0.00	0.00	0.00	1.25	1.34	-0.09	-0.09
GRT_JPL	0.00	0.00	0.00	0.00	0.00	0.00	2.78	1.44	1.34	1.34
JSW RENEW_2	7.75	0.00	-7.75	0.00	0.00	0.00	2.32	0.80	1.53	-6.23
NTPC STATIONS-ER	0.00	0.00	0.00	0.83	0.00	-0.83	77.47	25.88	51.59	50.76
MAITHON POWER LTD	0.00	0.00	0.00	0.02	0.00	-0.02	2.21	8.34	-6.13	-6.15
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	5.39	4.32	1.07	1.07
ADHUNIK POWER LTD	131.21	0.00	-131.21	7.98	0.00	-7.98	4.19	0.86	3.33	-135.86
CHUZACHEN HEP	0.00	0.00	0.00	1.49	0.00	-1.49	0.17	0.27	-0.10	-1.59
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.77	-0.55	-0.55
GMR KAMALANGA	60.73	0.00	-60.73	0.34	0.00	-0.34	1.89	0.60	1.29	-59.78
JITPL	295.69	0.00	-295.69	47.20	0.00	-47.20	2.60	8.46	-5.87	-348.76
TEESTA HEP	0.00	0.00	0.00	19.49	0.00	-19.49	0.03	2.00	-1.97	-21.46
DAGACHU	12.19	0.00	-12.19	0.00	0.00	0.00	0.05	0.84	-0.79	-12.98
JORETHANG	1.63	0.00	-1.63	0.00	0.00	0.00	0.05	1.32	-1.27	-2.90
NEPAL(NVVN)	0.00	0.00	0.00	0.00	221.88	221.88	2.73	14.40	-11.67	210.21
BANGLADESH	0.00	0.00	0.00	0.00	0.00	0.00	4.17	1.43	2.73	2.73
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	-0.15	-0.15
TEESTA STG3	112.38	0.00	-112.38	0.00	0.00	0.00	0.32	1.52	-1.20	-113.59
DIKCHU HEP	10.09	0.00	-10.09	5.34	0.00	-5.34	0.89	0.22	0.67	-14.75
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.03	0.06	0.06
TASHIDENG HEP	0.37	0.00	-0.37	0.00	0.00	0.00	0.10	0.41	-0.31	-0.67
BRBCL, NABINAGAR	0.00	0.00	0.00	0.00	0.00	0.00	5.21	2.80	2.40	2.40
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	2.64	2.20	0.44	0.44
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	20.25	7.62	12.64	12.64
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	31.34	11.71	19.63	19.63
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	8.60	0.23	8.38	8.38
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	61.54	0.77	60.78	60.78
RONGNICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.72	-0.58	-0.58
DGPCL Bhutan	0.00	0.00	0.00	0.00	110.43	110.43	7.68	2.77	4.92	115.35
NTPC STATIONS-NER	0.00	0.00	0.00	4.25	0.00	-4.25	3.63	1.41	2.23	-2.02
NEEPCO STATIONS	26.85	0.00	-26.85	45.51	0.00	-45.51	2.19	20.92	-18.73	-91.09
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.48	1.05	0.43	0.43
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.20	0.05	0.05
ONGC PALATANA	7.59	0.00	-7.59	17.89	0.00	-17.89	0.90	1.10	-0.20	-25.67
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.16	-0.02	-0.02
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.59	-0.35	-0.35
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-31: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, MARCH 2023

Sr. No	Details of REC Transactions	Through Power Exchange			Bilateral through Traders
		IEX	PXIL	HPX	
1	Volume of Buy Bid	901609	106309	22321	-
2	Volume of Sell Bid	3275523	978522	55450	-
3	Ratio of Buy Bid to Sell Bid Volume	0.28	0.11	0.40	-
4	Traded Volume (MWh)	868807	106309	1521	90049
5	Weighted average Price (₹/MWh)	1000	1000	1000	925

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-32: VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, MARCH 2023

Sr. No.	Neighbouring Country	Volume (MU)			Weighted Average Price (₹/kWh)	
		Sale	Purchase	Net*	Sale	Purchase
1	Nepal	0.00	260.15	260.15	-	5.39
2	Bhutan	0.00	110.43	110.43	-	4.62
	Total	0.00	370.59	370.59	-	-

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