

Monthly Report on Short-term Transactions of Electricity in India

July 2022



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



Contents

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

S.No.	List of Tables	Page No.
Table-1	Volume of Short-term Transactions of Electricity in India	10
Table-2	Percentage Share of Electricity Transacted by Trading Licensees	12
Table-3	Price of Electricity Transacted through Traders	13
Table-4	Price of Electricity Transacted through Traders (Time-wise)	13
Table-5	Price of Electricity Transacted in Day Ahead Market through Power Exchanges	13
Table-6	Price of Electricity Transacted in Green Day Ahead Market through Power Exchanges	13
Table-7	Price of Electricity Transacted in Real Time Market through Power Exchanges	13
Table-8	Volume and Price of Electricity in Term Ahead Market of IEX	14
Table-9	Volume and Price of Electricity in Term Ahead Market of PXIL	14
Table-10	Volume and Price of Electricity in Term Ahead Market of HPX	14
Table-11	Volume and Price of Electricity in Green Term Ahead Market of IEX	14
Table-12	Volume and Price of Electricity in Green Term Ahead Market of PXIL	14
Table-13	Price of Electricity Transacted through DSM	14
Table-14	Volume of Electricity Sold through Bilateral	16
Table-15	Volume of Electricity Purchased through Bilateral	18
Table-16	Volume of Electricity Sold in Day Ahead Market through Power Exchanges	19
Table-17	Volume of Electricity Purchased in Day Ahead Market through Power Exchanges	21
Table-18	Volume of Electricity Sold in Green Day Ahead Market through Power Exchanges	22
Table-19	Volume of Electricity Purchased in Green Day Ahead Market through Power Exchanges	23
Table-20	Volume of Electricity Sold in Real Time Market through Power Exchanges	24
Table-21	Volume of Electricity Purchased in Real Time Market through Power Exchanges	26
Table-22	Volume of Electricity Under drawal through DSM	27
Table-23	Volume of Electricity Over drawal through DSM	30
Table-24	Total Volume of Net Short-term Transactions of Electricity (Regional Entity-wise)	33
Table-25	Details of Congestion in Power Exchanges	37
Table-26	Volume of Short-term Transactions of Electricity in India (Day-wise)	38
Table-27(a)	Price of Day Ahead Transactions of Electricity (Day-Wise)	39
Table-27(b)	Price of Green Day Ahead Transactions of Electricity (Day-Wise)	40
Table-27(c)	Price of Real Time Transactions and DSM (Day-Wise)	41
Table-28	Volume of Short-term Transactions of Electricity (Regional Entity-wise)	42
Table-29	Volume and Price of Renewable Energy Certificates (RECs) Transacted through Power Exchanges	46
Table-30	Volume and Price of Cross Border Trade through Day Ahead Market at IEX	46

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

Abbreviations

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

CHUZACHEN HEP	ChuzachenHydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
CLEANSPL_SLR	Clean Solar Jodhpur Pvt Ltd
COASTGEN	Coastal Energen Private Limited
DAGACHU	Dagachhu Hydro Power Corporation
DAM	Day Ahead Market
DB POWER	Diligent Power Pvt. Ltd.
DCPP	Donga Mahua Captive Power Plant
DD&DNH	Daman and Diu & Dadar Nagar Haveli
DGEN MEGA POWER	DGEN Mega Power Project
DGPCL Bhutan	Druk Green Power Corporation Ltd., Bhutan
DHARIWAL POWER	Dhariwal Power Station
DIKCHU HEP	Dikchu Hydro-electric Project, Sikkim
DOYANG HEP	DoyangHydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EDEN_SLR	Eden RE Cite Private limited
EMCO	EMCO Energy Limited
ESPL_RADHANESDA	Electro Solaire Private Limited, Radhanesda
ESSAR POWER	Essar Power Limited
ESSAR STEEL	Essar Steel Ltd
FORTUM1_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada Project 1
FORTUM2_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada Project 2
FRV_ANTP	Fotowatio Renewable Ventures, Anantapur
FRV_NPK	Fotowatio Renewable Ventures, NP Kunta
GIPCL_RADHANESDA	Gujarat Industries Power Company Ltd, Radhanesda
GIWEL_BHUJ	Green infra wind energy Limited, Bhuj
GIWEL_TCN	Green Infra Wind Energy Limited,Tuticorin
GMR CHHATTISGARH	GMR Chhattisgarh Energy Limited
GMR KAMALANGA	GMR Kamalanga Energy Ltd.
G-DAM	Green Day Ahead Market
G-TAM	Green Term Ahead Market
HPX	Hindustan Power Exchange Limited
HVDC ALPD	AlipurduarHigh Voltage Direct Current Link
HVDC CHAMPA	Champa-Kurukshetra High Voltage Direct Current Link
HVDC PUS	PasauliHigh Voltage Direct Current Link
HVDC RAIGARH	Raigarh-Pugalur High Voltage Direct Current Link
IEX	Indian Energy Exchange Limited
IGSTPS	Indira Gandhi Super Thermal Power Station Jhajjar
IL&FS	Infrastructure Leasing & Financial Services Limited
INOX_BHUJ	INOX Wind Limited, Bhuj, Gujarat
J&K	Jammu & Kashmir
JAYPEE NIGRIE	Jaypee Nigrie Super Thermal Power Project
JHABUA POWER MP	Jhabua Thermal Power Project
JINDAL POWER	Jindal Power Limited
JINDAL STAGE-II	Jindal Power Ltd Stage II
JITPL	Jindal India Thermal Power Ltd.
JORETHANG	Jorethang Loop Hydroelectric Power Project
KAPP 3&4	Kakrapar Atomic Power Station Unit 3 & 4
KARCHAM WANGTOO	Karcham Wangtoo H.E. Project
KORBA WEST POWER	Korba West Power Company Limited
KOTESHWAR	Koteshwar Hydro Power project
KREDL_PVGD	Karnataka Renewable Energy Development Ltd,Pavagada
KSK MAHANADI	KSK Mahanadi Power Ltd

KSMPL_SLR	Kilaj Solar (Maharashtra) Private Limited
KURICHU HEP	Kurichhu Hydro-electric Power Station, Bhutan
LANKO_AMK	LancoAmarkantak Power Private Limited
LANKO BUDHIL	LancoBudhil Hydro Power Private Limited
LANKOKONDAPALLY	Lanco Kondapally Power Private Limited
LOKTAK	Loktak Power Project
MAHINDRA_RUMS	Mahindra Rewa Ultra Mega Solar Project
MAHOBA_SLR	Mahoba Solar Power Project
MALANA	Malana Hydroelectric Plant
MANGDECHU HEP	Mangdechhu Hydroelectric Project, Mangdechhu River, Bhutan
Maruti Coal	Maruti Clean Coal and Power Limited
MB POWER	MB Power Ltd
MEENAKSHI	Meenakshi Energy Private Limited
MP	Madhya Pradesh
MRPL	Mahindra Renewables Private Limited
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_TCN	Mytrah Energy (India) Private Limited, Tuticorin
MU	Million Units
NAPP	Narora Atomic Power Plant
NCR ALLAHABAD	North Central Railway, Allahabad
NEEPCO	North Eastern Electric Power Corporation Limited
NEP	Nepal
NFL	National Fertilisers Limited
NHPC STATIONS	National Hydro Electric Power Corporation Ltd. Stations
NJPC	Nathpa Jhakri Hydroelectric Power Station
NLC	Neyveli Lignite Corporation Limited
NLDC	National Load Dispatch Centre
NPGC	Nabinagar Power Generating Company (Pvt.) Limited
NSPCL	NTPC - SAIL Power Company Private Limited
NTECLVallur	NTPC Tamil Nadu Energy Company Limited Vallur
NTPC_ANTP	NTPC Anantapur
NTPC STATIONS	National Thermal Power Corporation Ltd. Stations
NTPL	NLC Tamil Nadu Power Limited
NVVN	NTPC Vidyut Vyapar Nigam Limited
ONGC Platana	ONGC Tripura Power Company
OPGC	Odisha Power Generation Corporation
ORANGE_TCN	Orange Renewable Power Pvt. Ltd, Tuticorin
OSTRO	Ostro Energy Private Limited
OTC	Over The Counter
PARAM_PVGD	Parampujya Solar Energy Private Ltd
PARE HEP	Pare hydroelectric project, Arunachal Pradesh
PX	Power Exchange
PXIL	Power Exchange India Limited
RAIL	Indian Railways
RAMPUR HEP	Rampur Hydro Electric Power Project
RANGIT HEP	Rangit Hydroelectric power project
RANGANADI HEP	Ranganadi Hydro Electric Power Project, Arunachal Pradesh
RAP-B	Rajasthan Atomic Power Plant-B
RAP-C	Rajasthan Atomic Power Plant-C
REC	Renewable Energy Certificate
REGL	Raigarh Energy Generation Limited
RENEW_BHACHAU	ReNew Power Limited, Bhachau
RENEW_BHUJ	ReNew Power Limited, Bhuj
RENEW_PVGD	ReNew Wind Energy (TN2) Private Limited

RENEW_SLR_BKN	Renew Solar Bikaner
RENEWJH_SLR	Renew Solar Energy (Jharkhand Three) Private Limited
RENEWURJA_SLR	ReNew Solar Urja Private Limited
RGPPL_IR	Ratnagiri Gas and Power Private Ltd., supply to Indian Railways
RGPPL_OTHER	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Dispatch Centre
RONGNICHU HEP	Rongnichu Hydro Electric Power Project
RPREL	Raipur Energen Limited
RSTPS_FSPP	NTPC Ramagundam STPS- Floating Solar PV Project
RTC	Round The Clock
RTM	Real Time Market
SasanUMPP	Sasan Ultra Mega Power Project
SB_SLR	Soft Bank Solar
SB6_POKARAN	SB Energy SixPrivate Limited, Pokaran
SBG_CLEANTECH_SLR	SBG Cleantech Ltd
SBG_NPK	SB Energy Solar Private Limited,NP Kunta
SBG_PVGD	SB Energy Solar Private Limited,Pavagada
SBSR_SLR	SBSR Power Cleantech Eleven Private Limited
SEMBCORP	Sembcorp Gayatri Power Ltd
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SINGOLI BHATWARI HEP	Singoli-Bhatwari Hydroelectric Project, Uttarakhand
SPRNG_NPKUNTA	Sprng Energy, NP Kunta
SPRING_PUGALUR	Spring Solar Power Private Limited, Pugalur
TALA HEP	Tala Hydroelectric Project, Bhutan
TASHIDENG HEP	Tashiding Hydro Electric Project, Sikkim
TATA_ANTP	TATA Power Anantapur
TATA_PVGD	Tata Power Renewable Energy Ltd
TATA_SLR	Tata Solar
TEESTA STG3	Teesta Stage 3 Hydro Power Project
TEHRI	Tehri Hydro Electric Power Project
TAM	Term Ahead Market
THAR1_SLR	Thar Surya Ravi One Pvt Ltd
THERMAL POWERTECH	Thermal Powertech Corporation India Limited
TPREL_RADHANESDA	Tata Power Renewable Energy Limited, Radhanesda
VINDHYACHAL HVDC	Vindhyachal High Voltage Direct Current Link
YARROW_PVGD	Yarrow Infra Structure Private Ltd

1. Introduction

1.1. A well-functioning electricity market requires an effective market monitoring process. The monthly report on short-term transactions of electricity, published by CERC since 2008 as part of its market monitoring process, provides a snapshot of key aspects of short-term transactions of electricity in India. Here, “short-term transactions of electricity” refers to the contracts of less than one year period, for electricity transacted (inter-State) through inter-State Trading Licensees and directly by the Distribution Licensees, Power Exchanges (Indian Energy Exchange Ltd (IEX), 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 **July 2022** is presented in the following sections.

2. Volume of Short-term Transactions of Electricity

2.1. During July 2022, total electricity generation, excluding generation from renewable and captive power plants in India was 118882.45 MU (Table-1). Of the total electricity generation, 14.20% was transacted through short-term, comprising of 6.68% through bilateral (through traders and term-ahead contracts on power exchanges, and directly between distribution companies), followed by 5.16% through power exchanges {Day Ahead Market (DAM) (including G-DAM) and Real Time Market (RTM)} and 2.35% through DSM (Table-1 & Figure-1).

2.2. Of the total short-term transactions (16879.05 MU), 47.08% was transacted through bilateral (30.87% through traders and term-ahead contracts on power exchanges, and 16.21% directly between distribution companies), followed by 36.37% through power exchanges {DAM (including G-DAM) and RTM} and 16.56% through DSM (Table-1 & Figure-2). Daily volume of short-term transactions is shown in Table-26 & Figure-4.

2.3. Of the total volume of electricity transacted through power exchanges, 53.10% of the volume was transacted in DAM (including G-DAM), followed by 28.46% in RTM and 18.44% in Term Ahead Market (TAM) (including G-TAM) (Figure-3).

2.4. The share of electricity traded by each trading licensee is given in Table-2 & Figure-5. The volume of electricity transacted by the trading licensees includes bilateral transactions and the transactions undertaken through power exchanges. There were 45 trading licensees as of July 2022. Of which, 29 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., Manikaran Power Ltd. and Adani Enterprises Ltd. had a share of 79.07% 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 0.1832 for the month of July 2022, 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 3516.65 MU, 31.78 MU and 1.43 MU respectively. The volume of total buy bids and sell bids was 5748.96 MU and 6694.73 MU respectively in IEX, 105.05 MU and 182.42 MU respectively in PXIL, while the same was 7.11 MU and 2.16 MU respectively in HPX.

2.7. Of the total volume of electricity transacted in the DAM of IEX, volume sold by the neighboring countries of India was 235.59 MU and the volume purchased was 19.39 MU, under the Cross Border Trade of electricity through power exchange (Table-30). No Cross Border transaction of electricity was undertaken through PXIL and HPX.

2.8. The volume of electricity transacted in the G-DAM of IEX and PXIL was 446.42 MU and 0.16 respectively, while no electricity was transacted in the G-DAM of HPX. The volume

of total buy bids and sell bids was 1498.62 MU and 709.36 MU respectively in IEX, while the same was 17.75 MU and 2.94 MU respectively in PXIL. No bids were received at HPX.

2.9. The volume of electricity transacted in the RTM of IEX and PXIL was 2130.98 MU and 10.73 MU respectively, while no electricity was transacted in the RTM of HPX. The volume of total buy bids and sell bids was 3389.40 MU and 3622.69 MU respectively in IEX, while the same was 13.19 MU and 32.77 MU respectively in PXIL. The volume of total buy bids was 0.01 MU in HPX, while no sell bids were received. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

2.10. The volume of electricity transacted in the TAM of IEX, PXIL and HPX was 439.80 MU, 531.89 MU and 221.96 MU respectively (Table-8, Table-9 & Table-10). The volume of electricity transacted in the Green Term Ahead Market (G-TAM) of IEX and PXIL was 142.26 MU and 51.61 MU respectively (Table-11 & Table-12). No electricity was transacted in G-TAM of HPX.

3. Price of Short-term Transactions of Electricity

3.1. **Price of electricity transacted through Traders:** The minimum, maximum and weighted average sale prices for the electricity transacted through traders were ₹2.70/kWh, ₹12.00/kWh and ₹4.93/kWh respectively (Table-3). The weighted average sale prices were also computed for the electricity transacted during Round the Clock (RTC), Peak and Off-peak periods separately, and the sale prices were ₹5.02/kWh, ₹7.84/kWh and ₹4.56/kWh respectively (Table-4).

3.2. **Price of electricity transacted through Power Exchanges:** The minimum, maximum and weighted average prices for the electricity transacted in the DAM of IEX were ₹1.50/kWh, ₹12.00/kWh and ₹5.50/kWh respectively. These prices in the DAM of PXIL were ₹2.00/kWh, ₹12.00/kWh and ₹5.03/kWh respectively. The minimum, maximum and weighted average prices for the electricity transacted in the DAM of HPX were ₹4.50/kWh, ₹12.00/kWh and ₹6.51/kWh respectively (Table-5). The minimum, maximum and weighted average prices for the electricity transacted in the G-DAM of IEX were ₹2.80/kWh, ₹12.00/kWh and ₹4.63/kWh respectively. These prices in the G-DAM of PXIL were ₹3.50/kWh, ₹5.00/kWh and ₹4.50/kWh

respectively (Table-6). The minimum, maximum and weighted average prices for the electricity transacted in the RTM of IEX were ₹0.55/kWh, ₹12.00/kWh and ₹4.88/kWh respectively. These prices in the RTM of PXIL were ₹11.90/kWh, ₹12.00/kWh and ₹11.98/kWh respectively (Table-7). The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹5.63/kWh, ₹6.14/kWh and ₹6.26/kWh respectively (Table-8, Table-9 and Table-10). The price of electricity transacted in the G-TAM of IEX and PXIL was ₹5.28/kWh and ₹5.57/kWh respectively (Table-11 and Table-12). No electricity was transacted in G-DAM, RTM and G-TAM of HPX.

3.3. **Price of electricity transacted through DSM:** The minimum, maximum and average price of DSM was ₹0.00/kWh, ₹8.00/kWh and ₹4.35/kWh respectively (Table-13).

3.4. The comparison of weighted average prices of electricity transacted through trading licensees, power exchanges & average price of DSM are shown in Figure-6. The daily prices of electricity transacted through power exchanges & DSM and their comparison are shown in Table-27(a), (b) & (c) and Figure-7.

4. Trading Margin

4.1. As per the CERC (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations 2020, the trading licensees are allowed to charge trading margin of not less than 0 paise/kWh and upto 7 paise/kWh. The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.023/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 43.74% of the volume. These were Madhya Pradesh, Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Maharashtra and Raipur Energen Limited (Table-14). Top 5 regional entities/states purchased 69.32% of the volume, and these were Punjab, Delhi, Uttar Pradesh, Haryana and Maharashtra (Table-15).

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.

5.2. Of the total DAM transactions at power exchanges, top 5 regional entities/states sold 37.08% of the volume, and these were Madhya Pradesh, Rajasthan, Karnataka, Nepal (through NRVN) and Delhi (Table-16). Top 5 regional entities/states purchased 54.39% of the volume, and these were Gujarat, West Bengal, Maharashtra, Uttar Pradesh and Telangana (Table-17).

5.3. Of the total G-DAM transactions at power exchanges, top 5 regional entities/states sold 82.67% of the volume, and these were Andhra Pradesh, Adani Hybrid Energy Jaisalmer Four Limited (Solar), Madhya Pradesh, Adani Wind Energy and Karnataka (Table-18). Top 5 regional entities/states purchased 54.51% of the volume, and these were Maharashtra, Gujarat, Delhi, DVC and Punjab (Table-19).

5.4. Of the total RTM transactions at power exchanges, top 5 regional entities/states sold 48.65% of the volume, and these were Madhya Pradesh, Rajasthan, Bihar, Karnataka and Andhra Pradesh (Table-20). Top 5 regional entities/states purchased 55.13% of the volume, and these were Maharashtra, Telangana, Uttar Pradesh, West Bengal and Tamil Nadu (Table-21).

5.5. Of the total under drawal in July 2022, top 5 regional entities/states under drew 26.09% of the volume, and these were Gujarat, Jammu & Kashmir, Chukha Hydroelectric Project Bhutan, Tamil Nadu and NHPC Stations (Table-22). Top 5 regional entities/states overdrew 27.56% of the total over drawal volume, and these were NTPC Stations (Western Region), Tala Hydroelectric Project Bhutan, NTPC Stations (Northern Region), Uttar Pradesh and Haryana (Table-23).

5.6. The total volume of net short-term transactions of electricity (Regional entity-wise), i.e., volume of net transactions through bilateral, power exchanges and DSM are shown in Table-24 & 28. Top 5 electricity selling regional entities/states were Madhya Pradesh, Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Rajasthan and Karnataka. Top 5 electricity purchasing regional entities/states were Punjab, Uttar Pradesh, Delhi, Gujarat and Haryana.

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 July 2022, congestion was experienced in DAM, G-DAM as well as RTM of IEX and in DAM of PXIL (Table-25).

6.3. The volume of electricity that could not be cleared due to congestion in DAM, G-DAM and RTM of IEX was 0.12%, 0.15% and 0.002% of the unconstrained cleared volume, respectively. In terms of time, congestion occurred was 2.65% in DAM, 1.31% in G-DAM and 0.13% in RTM of IEX during the month. The volume of electricity that could not be cleared due to congestion in DAM of PXIL was 1.35% of the unconstrained cleared volume. In terms of time, congestion occurred was 3.09% in DAM of PXIL during the month (Table-25).

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

7.1. The concept of Renewable Energy Certificates (RECs) seeks to address mismatch between availability of renewable energy and the requirement of the obligated entities to meet

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.

their renewable purchase obligation by purchasing green attributes of renewable energy remotely located, in the form of RECs. The REC mechanism is a market based instrument, to promote renewable sources of energy and development of electricity market.

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

7.3. The details of REC transactions for the month of July 2022 are shown in Table-29. The market clearing volume of solar RECs transacted on IEX and PXIL were 167174 and 24754 respectively and the weighted average market clearing price of these RECs was ₹1100/MWh in IEX and ₹1200/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 307950 and 176701 respectively and the weighted average market clearing price of these RECs was ₹1000/MWh in IEX and ₹1000/MWh in PXIL. No RECs were transacted on HPX.

7.4. The gap between the volume of buy and sell bids of RECs placed through power exchanges shows the variation in demand for both solar and non-solar RECs. For Solar RECs, the ratio of buy bids to sell bids was 0.20 and 0.06 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids 0.14 and 0.21 in IEX and PXIL respectively.

8. Inferences:

- a) The percentage of short-term transactions of electricity to total electricity generation was 14.20%.
- b) Of the total short-term transactions (16879.05 MU), 47.08% was transacted through bilateral (30.87% through traders and term-ahead contracts on power exchanges, and 16.21% directly between distribution companies), followed by 36.37% through power exchanges {DAM (including G-DAM) and RTM} and 16.56% through DSM.
- c) Of the total volume of electricity transacted through power exchanges, 53.10% of the volume was transacted in DAM (including G-DAM), followed by 28.46% in RTM and 18.44% in Term Ahead Market (TAM) (including G-TAM).

- d) Top 5 trading licensees had a share of 79.07% 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 0.1832, indicating moderate concentration of market power.
- f) The weighted average sale price of electricity transacted through trading licensees was ₹4.93/kWh.
- g) The weighted average price of electricity transacted in DAM of IEX, PXIL and HPX was ₹5.50/kWh, ₹5.03/kWh and ₹6.51/kWh respectively. The weighted average price of electricity transacted in G-DAM of IEX and PXIL was ₹4.63/kWh and ₹4.50/kWh respectively. The weighted average price of electricity transacted in RTM of IEX and PXIL was ₹4.88/kWh and ₹11.98/kWh respectively. No electricity was transacted in the G-DAM and RTM of HPX.
- h) The weighted average price of electricity transacted in the TAM of IEX, PXIL and HPX was ₹5.63/kWh, ₹6.14/kWh and ₹6.26/kWh respectively. The weighted average price of electricity transacted in the G-TAM of IEX and PXIL was ₹5.28/kWh and ₹5.57/kWh respectively.
- i) The average price of electricity transacted through DSM was ₹4.35/kWh.
- j) The weighted average trading margin charged by the trading licensees for bilateral transactions was ₹0.023/kWh, which was in line with the Trading Licence Regulations 2020.
- k) Top 5 electricity selling regional entities/states were Madhya Pradesh, Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Rajasthan and Karnataka. Top 5 electricity purchasing regional entities/states were Punjab, Uttar Pradesh, Delhi, Gujarat and Haryana.
- l) During the month, congestion was experienced in DAM, G-DAM as well as RTM of IEX and in DAM of PXIL. The volume of electricity that could not be cleared due to congestion in DAM, G-DAM and RTM of IEX was 0.12%, 0.15% and 0.002% of the unconstrained cleared volume, respectively. In terms of time, congestion occurred was 2.65% in DAM, 1.31% in G-DAM and 0.13% in RTM of IEX during the month. The volume of electricity

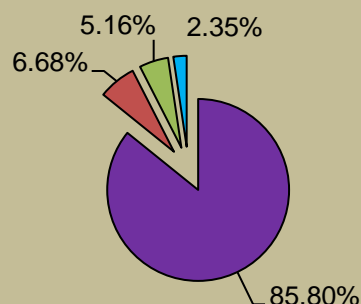
that could not be cleared due to congestion in DAM of PXIL was 1.35% of the unconstrained cleared volume. In terms of time, congestion occurred was 3.09% in DAM of PXIL during the month

- m) The market clearing volume of solar RECs transacted on IEX and PXIL were 167174 and 24754 respectively and the weighted average market clearing price of these RECs was ₹1100/MWh in IEX and ₹1200/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 307950 and 176701 respectively and the weighted average market clearing price of these RECs was ₹1000/MWh in IEX and ₹1000/MWh in PXIL. No RECs were transacted on HPX.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), JULY 2022				
Sr. No	Short-term transactions	Volume (MU)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	7946.10	47.08	6.68
	(i) Through Traders and PXs	5210.74	30.87	4.38
	(ii) Direct	2735.36	16.21	2.30
2	Through Power Exchanges	6138.16	36.37	5.16
	(i) IEX			
	(a) DAM	3516.65	20.83	2.96
	(b) RTM	2130.98	12.63	1.79
	(c) GDAM	446.42	2.64	0.38
	(ii) PXIL			
	(a) DAM	31.78	0.19	0.03
	(b) RTM	10.73	0.06	0.01
	(c) GDAM	0.16	0.00	0.00
	(ii) HPX			
	(a) DAM	1.43	0.01	0.001
	(b) RTM	0.00	0.00	0.00
	(c) GDAM	0.00	0.00	0.00
3	Through DSM	2794.80	16.56	2.35
	Total Short-term transactions	16879.05	-	14.20
	Total Generation	118882.45	-	-

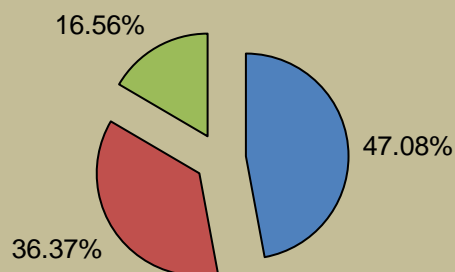
Source: NLDC

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



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

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



■ Bilateral ■ Power Exchanges ■ DSM

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

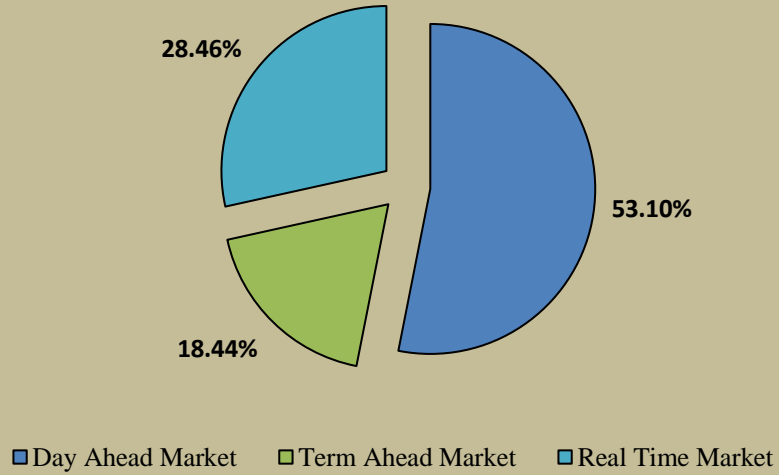


Figure-4: Volume of Short-term Transactions of Electricity, July 2022 (Day-wise)

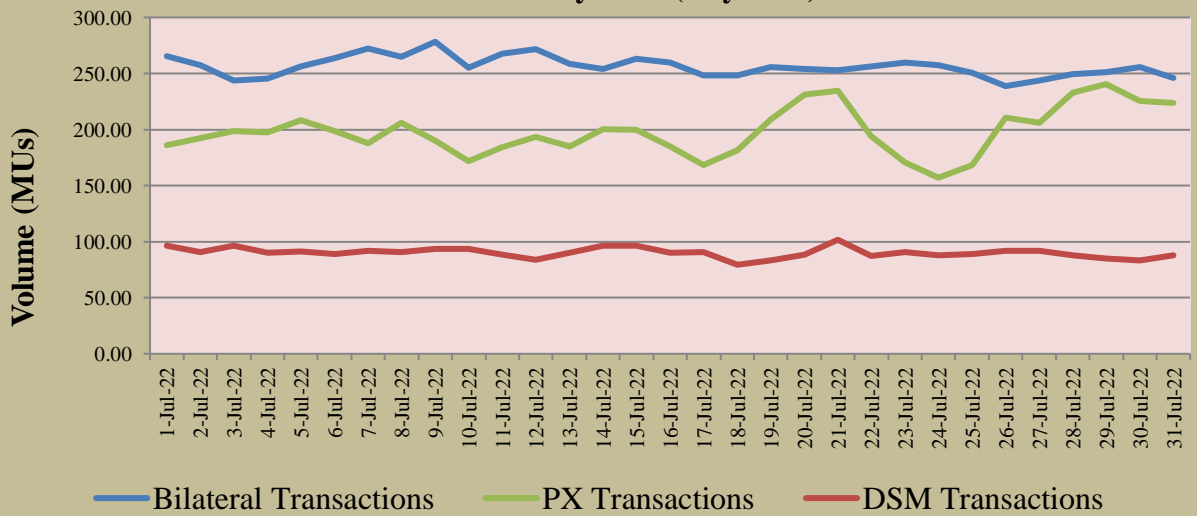


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, JULY 2022			
Sr. No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	35.24	0.1242
2	Tata Power Trading Company (P) Ltd.	14.60	0.0213
3	NTPC Vidyut Vyapar Nigam Ltd.	12.89	0.0166
4	Manikaran Power Ltd.	8.36	0.0070
5	Adani Enterprises Ltd.	7.99	0.0064
6	GMR Energy Trading Ltd.	6.22	0.0039
7	Arunachal Pradesh Power Corporation (P) ltd	5.04	0.0025
8	Kreate Energy (I) Pvt. Ltd.	2.82	0.0008
9	Greenko Energies Pvt Ltd	1.24	0.0002
10	Instinct Infra & Power Ltd.	1.15	0.0001
11	JSW Power Trading Company Ltd	0.77	0.0001
12	NTPC Ltd.	0.59	0.0000
13	Saranyu Power Trading Private Limited	0.54	0.0000
14	RPG Power Trading Company Ltd.	0.50	0.0000
15	Knowledge Infrastructure Systems (P) Ltd	0.49	0.0000
16	Shubheksha Advisors Pvt. Ltd.	0.36	0.0000
17	Statkraft Markets Pvt. Ltd.	0.35	0.0000
18	Kundan International Pvt. Ltd.	0.25	0.0000
19	Ambitious Power Trading Company Ltd.	0.22	0.0000
20	Abja Power Private Limited	0.12	0.0000
21	NLC India Ltd.	0.09	0.0000
22	Instant Venture Pvt. Ltd.	0.07	0.0000
23	Shree Cement Ltd.	0.05	0.0000
24	Refex Industries Ltd.	0.03	0.0000
25	Phillip Commodities India (P) Ltd.	0.01	0.0000
26	Gita Power & Infrastructure Private Limited	0.001	0.0000
27	Reneurja Power LLP	0.001	0.0000
28	Altilium Energie Private Limited	0.001	0.0000
29	Customized Energy Solutions India (P) Ltd.	0.0004	0.0000
TOTAL		100.00%	0.1832
Top 5 trading licensees		79.07%	
<i>Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges.</i>			
<i>Note 2: Volume of electricity transacted by Global Energy Ltd. is not included.</i>			
<i>Source: Information submitted by trading licensees</i>			

Figure 5: Percentage Share of Electricity Transacted by Trading Licensees, July 2022

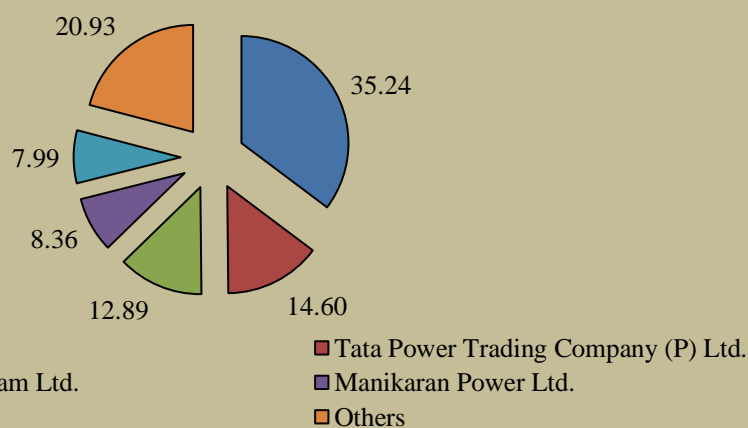


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, JULY 2022		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	2.70
2	Maximum	12.00
3	Weighted Average	4.93

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), JULY 2022		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	5.02
2	PEAK	7.84
3	OFF PEAK	4.56

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2022				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	1.50	2.00	4.50
2	Maximum	12.00	12.00	12.00
3	Weighted Average	5.50	5.03	6.51

Source: IEX, PXIL and HPX

Table-6: PRICE OF ELECTRICITY TRANSACTED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2022				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	2.80	3.50	-
2	Maximum	12.00	5.00	-
3	Weighted Average	4.63	4.50	-

Source: IEX, PXIL and HPX

Table-7: PRICE OF ELECTRICITY TRANSACTED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JULY 2022				
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)	Price in HPX (₹/kWh)
1	Minimum	0.55	11.90	-
2	Maximum	12.00	12.00	-
3	Weighted Average	4.88	11.98	-

Source: IEX, PXIL and HPX

Table-8: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, JULY 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	1.47	11.94
2	Day Ahead Contingency Contracts	399.94	5.76
3	Daily Contracts	4.80	4.00
4	Weekly Contracts	33.60	4.00
	Total	439.80	5.63

Source: IEX

Table-9: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, JULY 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	4.75	11.81
2	Day Ahead Contingency Contracts	527.14	6.09
	Total	531.89	6.14

Source: PXIL

Table-10: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF HPX, JULY 2022			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	1.01	8.41
2	Day Ahead Contingency Contracts	220.95	6.25
	Total	221.96	6.26

Source: HPX

Table-11: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF IEX, JULY 2022			
Sr.No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	1.75	10.03
2	Day Ahead Contingency Contracts	140.12	5.22
	Total	142.26	5.28

Source: IEX

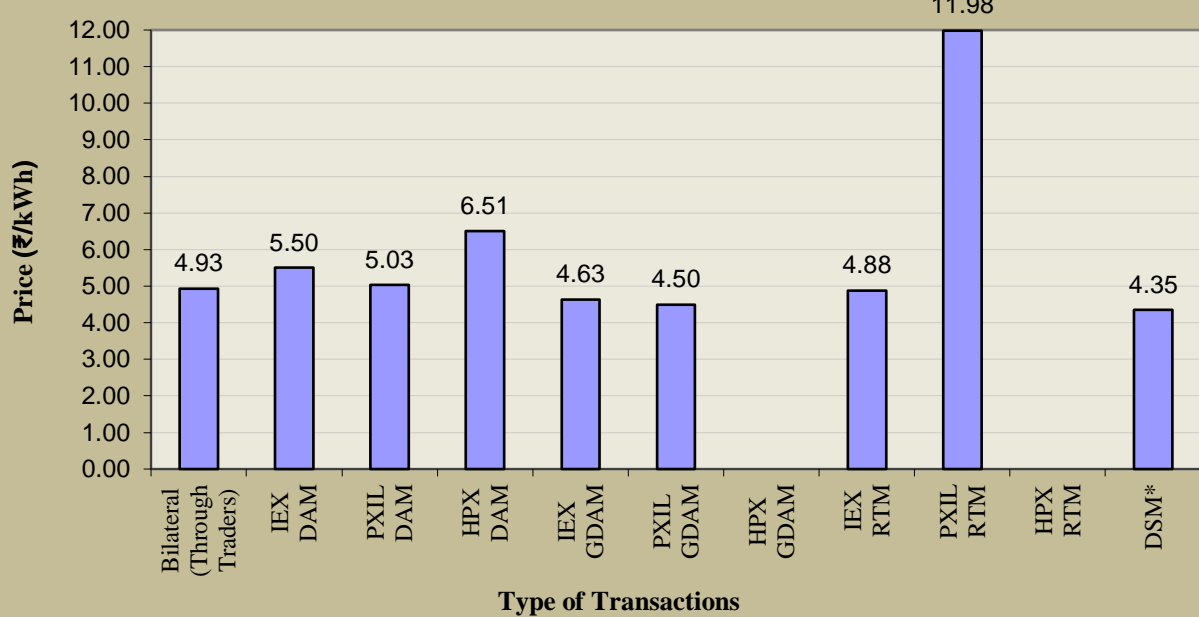
Table-12: VOLUME AND PRICE OF ELECTRICITY IN GREEN TERM AHEAD MARKET OF PXIL, JULY 2022			
Sr.No	Green Term ahead contracts	Actual Scheduled Volume (MU)	Weighted Average Price (₹/kWh)
1	Day Ahead Contingency Contracts	51.61	5.57
	Total	51.61	5.57

Source: PXIL

Table-13: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, JULY 2022		
Sr.No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	4.35

Source: NLDC

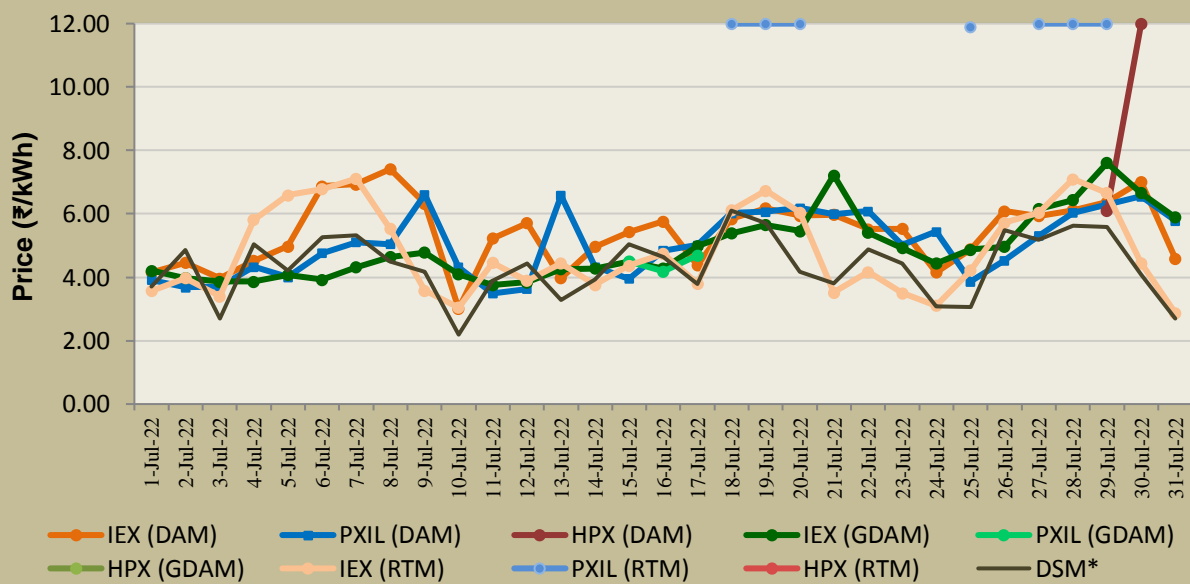
Figure-6: Weighted Average Price of Short-term Transactions of Electricity, July 2022



Note: No electricity was transacted in G-DAM & RTM of HPX during July 2022.

** Simple average price of DSM of the month*

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



Note: On PXIL, transactions were recorded in G-DAM only on 15th – 17th July 2022 and in RTM only on 18th – 20th, 25th and 27th – 29th July 2022. On HPX, DAM was introduced from 28th July 2022 and transactions were recorded only on 29th and 30th July 2022. Further, no electricity was transacted in G-DAM and RTM of HPX during July 2022.

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

Table-14: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, JULY 2022		
Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	1001.39	12.60
HIMACHAL PRADESH	968.99	12.20
TEESTA STG3	652.76	8.22
MAHARASHTRA	504.01	6.34
RPREL	347.82	4.38
TAMIL NADU	275.04	3.46
REGL	251.14	3.16
JAYPEE NIGRIE	216.15	2.72
JITPL	214.37	2.70
DVC	199.24	2.51
SEMBCORP	175.41	2.21
RAJASTHAN	172.84	2.18
KARNATAKA	163.07	2.05
ADHUNIK POWER LTD	154.12	1.94
JINDAL POWER	139.62	1.76
JINDAL STAGE-II	139.19	1.75
KARCHAM WANGTOO	113.00	1.42
J & K	111.60	1.40
MEGHALAYA	110.79	1.39
TELANGANA	110.24	1.39
ESSAR POWER	105.48	1.33
AD HYDRO	104.97	1.32
DAGACHU	87.04	1.10
SKS POWER	86.54	1.09
ANDHRA PRADESH	79.60	1.00
AHEJ4L_SOLAR	78.56	0.99
AHEJ4L_WIND	76.40	0.96
RKM POWER	74.76	0.94
TASHIDENG HEP	74.62	0.94
JORETHANG	73.31	0.92
DIKCHU HEP	62.45	0.79
WEST BENGAL	59.80	0.75
SINGOLI BHATWARI HEP	57.37	0.72
JHABUA POWER_MP	55.69	0.70
MB POWER	55.68	0.70
SAINJ HEP	54.78	0.69
ABC_BHDL2	54.20	0.68
SORANG HEP	46.86	0.59
ACME_HEERGARH	44.34	0.56
CLEANSR_SLR	43.42	0.55
KERALA	41.37	0.52
AHEJ3L_SOLAR	39.56	0.50
SIKKIM	37.23	0.47
UTTAR PRADESH	37.06	0.47
ODISHA	36.56	0.46
AHEJ2L_SOLAR	36.42	0.46
ARUNACHAL PRADESH	34.95	0.44
TATA_SLR	28.31	0.36
MANIPUR	27.68	0.35
UTTARAKHAND	25.46	0.32
RENEW_SLR_BKN	20.97	0.26
THAR1_SLR	19.49	0.25
AHEJ2L_WIND	19.00	0.24
KSK MAHANADI	16.77	0.21
GOA	15.81	0.20

AHEJ3L_WIND	15.32	0.19
OSTRO	15.27	0.19
ADANI_WIND	14.98	0.19
THERMAL POWERTECH	14.73	0.19
NAGALAND	11.53	0.15
BIHAR	11.03	0.14
DB POWER	10.14	0.13
LANKO_AMK	5.21	0.07
HARYANA	3.50	0.04
ASEJTL_SLR	2.48	0.03
CONTINNUM PT	1.96	0.02
JHARKHAND	1.70	0.02
GMR KAMALANGA	1.52	0.02
GUJARAT	1.45	0.02
ACBIL	1.08	0.01
Total	7945.16	100.00
Volume Sold by top 5 Regional Entities	3474.97	43.74

Table-15: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, JULY 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
PUNJAB	2254.94	28.38
DELHI	1219.92	15.35
UTTAR PRADESH	734.67	9.25
HARYANA	658.73	8.29
MAHARASHTRA	639.75	8.05
GUJARAT	516.27	6.50
ODISHA	494.79	6.23
WEST BENGAL	322.12	4.05
JHARKHAND	184.27	2.32
BALCO	173.20	2.18
BANGLADESH	107.74	1.36
MP	88.06	1.11
BIHAR	82.31	1.04
RAJASTHAN	77.69	0.98
AMPS Hazira	65.44	0.82
GOA	57.58	0.72
TELANGANA	56.92	0.72
UTTARAKHAND	48.17	0.61
CHHATTISGARH	35.06	0.44
ASSAM	22.61	0.28
SIKKIM	22.03	0.28
TAMIL NADU	20.77	0.26
PONDICHERRY	18.07	0.23
DD&DNH	17.86	0.22
NCR ALLAHABAD	15.17	0.19
KARNATAKA	6.73	0.08
MEGHALAYA	2.68	0.03
ANDHRA PRADESH	2.54	0.03
TOTAL	7946.10	100.00
Volume Purchased by top 5 Regional Entities	5508.02	69.32

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

Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	334.25	9.42
RAJASTHAN	309.39	8.72
KARNATAKA	249.85	7.04
NEPAL(NVVN)	235.59	6.64
DELHI	187.28	5.28
CHHATTISGARH	180.85	5.09
KERALA	174.04	4.90
UTTAR PRADESH	154.87	4.36
HIMACHAL PRADESH	151.05	4.26
BIHAR	145.35	4.09
NEEPCO STATIONS	130.80	3.68
NTPC STATIONS-ER	92.12	2.59
RPREL	77.85	2.19
ANDHRA PRADESH	74.19	2.09
PUNJAB	72.23	2.03
DB POWER	71.87	2.02
JAYPEE NIGRIE	69.14	1.95
MB POWER	55.46	1.56
JINDAL POWER	54.47	1.53
TAMIL NADU	51.36	1.45
JINDAL STAGE-II	46.77	1.32
TELANGANA	43.83	1.23
ACBIL	37.04	1.04
JITPL	31.46	0.89
JHARKHAND	30.82	0.87
REGL	30.72	0.87
HARYANA	29.80	0.84
GOA	29.24	0.82
ARUNACHAL PRADESH	27.11	0.76
MIZORAM	26.16	0.74
SAINJ HEP	23.73	0.67
CGPL	23.61	0.67
ASSAM	22.46	0.63
AD HYDRO	20.49	0.58
RKM POWER	18.00	0.51
MAHARASHTRA	17.40	0.49
KARCHAM WANGTOO	17.38	0.49
THERMAL POWERTECH	16.96	0.48
MARUTI COAL	15.26	0.43
CHANDIGARH	15.24	0.43
UTTARAKHAND	13.12	0.37
ADHUNIK POWER LTD	12.34	0.35
ODISHA	11.66	0.33
WEST BENGAL	11.62	0.33
DVC	10.37	0.29
CHUZACHEN HEP	10.14	0.29
NAGALAND	9.22	0.26
ONGC PALATANA	8.99	0.25
GUJARAT	8.73	0.25
ESSAR POWER	7.44	0.21
SKS POWER	7.13	0.20
LANCO BUDHIL	6.62	0.19
J & K	6.56	0.18
SIKKIM	6.55	0.18

NLC	6.31	0.18
NTPC STATIONS-NR	5.52	0.16
RENEW_SR_SLR	1.87	0.05
AHEJ3L_SOLAR	1.15	0.03
ADANI GREEN	1.12	0.03
AHEJ2L_SOLAR	1.06	0.03
ADANI_WIND	1.02	0.03
IL&FS	0.92	0.03
DIKCHU HEP	0.86	0.02
GMR KAMALANGA	0.76	0.02
AHEJ4L_SOLAR	0.76	0.02
TASHIDENG HEP	0.66	0.02
JORETHANG	0.60	0.02
EMCO	0.54	0.02
SINGOLI BHATWARI HEP	0.49	0.01
DHARIWAL POWER	0.22	0.01
OSTRO	0.04	0.001
SORANG HEP	0.01	0.0004
Total	3549.86	100.00
Volume sold by top 5 Regional Entities	1316.36	37.08

Table-17: VOLUME OF ELECTRICITY PURCHASED IN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
GUJARAT	500.25	14.09
WEST BENGAL	403.15	11.36
MAHARASHTRA	369.79	10.42
UTTAR PRADESH	348.39	9.81
TELANGANA	309.11	8.71
ANDHRA PRADESH	292.70	8.25
TAMIL NADU	235.38	6.63
AMPS Hazira	229.76	6.47
ASSAM	150.13	4.23
ODISHA	133.15	3.75
MP	110.75	3.12
DD&DNH	96.43	2.72
HARYANA	89.23	2.51
PUNJAB	39.44	1.11
DELHI	37.77	1.06
JHARKHAND	36.79	1.04
KARNATAKA	34.52	0.97
UTTARAKHAND	23.16	0.65
NEP	19.39	0.55
RAJASTHAN	17.96	0.51
RAIL	16.21	0.46
BIHAR	15.91	0.45
KERALA	13.08	0.37
TRIPURA	6.49	0.18
GOA	6.11	0.17
MANIPUR	6.05	0.17
MEGHALAYA	4.18	0.12
BALCO	3.13	0.09
CHANDIGARH	1.31	0.04
HIMACHAL PRADESH	0.12	0.003
TOTAL	3549.86	100.00
Volume purchased by top 5 Regional Entities	1930.69	54.39

Table-18: VOLUME OF ELECTRICITY SOLD IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2022

Name of the Entity	Volume of Sale (MUs)	% of Volume
ANDHRA PRADESH	227.59	50.96
AHEJ4L_SOLAR	69.44	15.55
MP	36.25	8.12
ADANI_WIND	21.86	4.90
KARNATAKA	14.06	3.15
AHEJ2L_SOLAR	13.71	3.07
AHEJ3L_SOLAR	13.36	2.99
J & K	12.15	2.72
KERALA	7.08	1.59
MAHARASHTRA	6.22	1.39
ADANI GREEN	5.62	1.26
NTPC STATIONS-SR	5.44	1.22
RAJASTHAN	4.89	1.09
HIMACHAL PRADESH	3.87	0.87
OSTRO	2.54	0.57
TELANGANA	1.36	0.30
DELHI	0.50	0.11
UTTAR PRADESH	0.45	0.10
CONTINNUM PT	0.20	0.05
Total	446.58	100.00
Volume sold by top 5 Regional Entities	369.19	82.67

Table-19: VOLUME OF ELECTRICITY PURCHASED IN GREEN DAY AHEAD MARKET THROUGH POWER EXCHANGES, JULY 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
MAHARASHTRA	73.71	16.50
GUJARAT	67.03	15.01
DELHI	36.90	8.26
DVC	34.77	7.79
PUNJAB	31.05	6.95
DD&DNH	26.70	5.98
ASSAM	24.03	5.38
ODISHA	24.02	5.38
JHARKHAND	22.94	5.14
KARNATAKA	19.40	4.34
AMPS Hazira	18.08	4.05
RAIL	16.83	3.77
RAJASTHAN	11.20	2.51
HARYANA	10.62	2.38
BALCO	9.46	2.12
TAMIL NADU	5.24	1.17
MP	5.05	1.13
KERALA	4.56	1.02
MEGHALAYA	2.47	0.55
UTTAR PRADESH	1.34	0.30
TELANGANA	1.04	0.23
ANDHRA PRADESH	0.15	0.03
TOTAL	446.58	100.00
Volume purchased by top 5 Regional Entities	243.44	54.51

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

Name of the Entity	Volume of Sale (MUs)	% of Volume
MP	407.84	19.04
RAJASTHAN	194.23	9.07
BIHAR	169.54	7.92
KARNATAKA	140.30	6.55
ANDHRA PRADESH	130.04	6.07
DELHI	118.15	5.52
CHHATTISGARH	106.32	4.96
HIMACHAL PRADESH	105.95	4.95
NEEPCO STATIONS	89.39	4.17
ODISHA	81.39	3.80
TELANGANA	57.50	2.68
KERALA	53.00	2.47
PUNJAB	50.95	2.38
UTTAR PRADESH	43.25	2.02
SASAN UMPP	36.58	1.71
NLC	36.53	1.71
ASSAM	36.50	1.70
HARYANA	30.11	1.41
MB POWER	22.19	1.04
TAMIL NADU	20.07	0.94
WEST BENGAL	14.84	0.69
CGPL	14.82	0.69
DVC	13.39	0.63
MAHARASHTRA	12.53	0.58
JITPL	11.76	0.55
ONGC PALATANA	10.10	0.47
SORANG HEP	9.25	0.43
JHARKHAND	8.45	0.39
RPREL	7.81	0.36
AD HYDRO	7.46	0.35
NTPC STATIONS-ER	6.81	0.32
NAGALAND	6.12	0.29
MANIPUR	5.94	0.28
GUJARAT	5.69	0.27
RKM POWER	5.68	0.27
MEGHALAYA	5.23	0.24
TRN ENERGY	4.87	0.23
SKS POWER	4.87	0.23
JINDAL STAGE-II	4.70	0.22
DB POWER	4.68	0.22
GOA	4.65	0.22
SIKKIM	4.21	0.20
DIKCHU HEP	4.00	0.19
TRIPURA	3.84	0.18
REGL	3.67	0.17
JINDAL POWER	3.37	0.16
THERMAL POWERTECH	2.93	0.14
CHANDIGARH	2.63	0.12
ADHUNIK POWER LTD	2.57	0.12
ESSAR POWER	1.95	0.09
ARUNACHAL PRADESH	1.95	0.09
SINGOLI BHATWARI HEP	1.82	0.09
ACBIL	1.11	0.05
RENEW_SR_SLR	1.03	0.05

TASHIDENG HEP	0.99	0.05
OSTRO	0.94	0.04
UTTARAKHAND	0.88	0.04
JORETHANG	0.83	0.04
SAINJ HEP	0.70	0.03
DD&DNH	0.62	0.03
GMR KAMALANGA	0.44	0.02
MARUTI COAL	0.28	0.01
ADANI_WIND	0.26	0.01
CHUZACHEN HEP	0.25	0.01
IL&FS	0.24	0.01
KARCHAM WANGTOO	0.17	0.01
EMCO	0.15	0.01
J & K	0.13	0.01
ADANI GREEN	0.12	0.01
NTPC STATIONS-SR	0.07	0.003
JHABUA POWER_MP	0.04	0.002
MIZORAM	0.03	0.001
LANCO BUDHIL	0.003	0.0002
Total	2141.72	100.00
Volume sold by top 5 Regional Entities	1041.95	48.65

Table-21: VOLUME OF ELECTRICITY PURCHASED IN REAL TIME MARKET THROUGH POWER EXCHANGES, JULY 2022		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
MAHARASHTRA	310.42	14.49
TELANGANA	308.72	14.41
UTTAR PRADESH	214.35	10.01
WEST BENGAL	192.72	9.00
TAMIL NADU	154.45	7.21
ANDHRA PRADESH	133.53	6.23
HARYANA	119.56	5.58
ODISHA	117.45	5.48
PUNJAB	95.95	4.48
GUJARAT	83.39	3.89
RAJASTHAN	77.47	3.62
DELHI	72.22	3.37
AMPS Hazira	45.98	2.15
ASSAM	31.25	1.46
BALCO	28.07	1.31
DD&DNH	28.03	1.31
MP	23.06	1.08
KARNATAKA	19.27	0.90
BIHAR	16.95	0.79
HIMACHAL PRADESH	13.87	0.65
JHARKHAND	10.50	0.49
TRIPURA	9.55	0.45
KERALA	7.44	0.35
RAIL	6.27	0.29
MANIPUR	4.98	0.23
UTTARAKHAND	4.24	0.20
MEGHALAYA	4.05	0.19
DVC	2.74	0.13
GOA	2.01	0.09
CHHATTISGARH	1.35	0.06
ACBIL	0.74	0.03
CHANDIGARH	0.45	0.02
SAINJ HEP	0.29	0.01
SIKKIM	0.15	0.01
ARUNACHAL PRADESH	0.07	0.003
KARCHAM WANGTOO	0.07	0.003
JINDAL STAGE-II	0.07	0.003
SINGOLI BHATWARI HEP	0.02	0.001
TOTAL	2141.72	100.00
Volume purchased by top 5 Regional Entities	1180.66	55.13

Table-22: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, JULY 2022		
Name of the Entity	Volume of Under drawal (MUs)	% of Volume
GUJARAT	174.96	6.16
J & K	167.36	5.89
CHUKHA HEP	152.67	5.37
TAMIL NADU	124.87	4.39
NHPC STATIONS	121.81	4.29
MP	118.79	4.18
NTPC STATIONS-WR	112.40	3.95
RAJASTHAN	92.78	3.26
PUNJAB	91.43	3.22
MAHARASHTRA	83.15	2.93
BIHAR	81.56	2.87
KARNATAKA	65.53	2.31
WEST BENGAL	62.73	2.21
ANDHRA PRADESH	62.14	2.19
TELANGANA	60.23	2.12
UTTAR PRADESH	59.94	2.11
ODISHA	51.90	1.83
NTPC STATIONS-ER	50.13	1.76
KAPP 3&4	48.99	1.72
NTPC STATIONS-NR	45.55	1.60
DELHI	31.20	1.10
JHARKHAND	28.93	1.02
SASAN UMPP	28.60	1.01
MANGDECHU HEP	28.09	0.99
ESSAR POWER	25.96	0.91
HARYANA	25.41	0.89
ADANI_SLR 4	24.97	0.88
DVC	24.42	0.86
CHHATTISGARH	24.09	0.85
KERALA	23.87	0.84
NTPC STATIONS-SR	23.27	0.82
NLC	23.13	0.81
ASSAM	21.30	0.75
ADANI_SLR	17.88	0.63
HIMACHAL PRADESH	17.32	0.61
KURICHU HEP	16.72	0.59
BBMB	16.59	0.58
NEEPCO STATIONS	14.64	0.51
ADANIHB_WIND	14.46	0.51
AGEMPL BHUJ	14.15	0.50
KARCHAM WANGTOO	13.85	0.49
UTTARAKHAND	13.07	0.46
AZURE43_SLR	12.37	0.44
GIWEL_BHUJ	11.95	0.42
AVADARJHN_SLR	11.93	0.42
PONDICHERRY	10.46	0.37
ABC_BHDL2	10.38	0.37
NJPC	9.60	0.34
TEESTA HEP	9.37	0.33
CHANDIGARH	9.21	0.32
IGSTPS	8.66	0.30
GIWEL_TCN	8.62	0.30
ALFANAR_BHUJ	8.50	0.30
AYANA_RP1	8.44	0.30
RENEW_BHUJ	8.39	0.30
AVAADASN_SLR	7.95	0.28
RENEW_BHACHAU	7.91	0.28
BETAM_TCN	7.82	0.28
MAITHON POWER LTD	7.69	0.27
AD HYDRO	7.52	0.26
RENEWSB	7.36	0.26
NPGC	6.87	0.24
CLEANSR_SLR	6.74	0.24
MYTRAH_TCN	6.62	0.23
ORANGE_TCN	6.59	0.23
EDEN_SLR	6.51	0.23
RENEWJH_SLR	6.44	0.23
NEPAL(NVVN)	6.43	0.23

MB POWER	6.37	0.22
BRBCL,NABINAGAR	6.29	0.22
OSTRO	6.22	0.22
ACME_HEERGARH	6.21	0.22
RAIL	6.10	0.21
MAHINDRA_RUMS	6.07	0.21
MRPL	6.01	0.21
TATA_SLR	5.86	0.21
MIZORAM	5.85	0.21
TRN ENERGY	5.85	0.21
ACME_RUMS	5.80	0.20
RENEW_SR_SLR	5.79	0.20
RENEWSW_SLR	5.73	0.20
RENEW_SLR_BKN	5.60	0.20
AZURE_SLR	5.60	0.20
GOA	5.51	0.19
ARERJL_SLR	5.47	0.19
ARINSUM_RUMS	5.47	0.19
MSUPL_BHDL2	5.36	0.19
AZURE41_SLR	5.34	0.19
RENEWURJA_SLR	5.32	0.19
AZURE_MAPLE_SLR	5.30	0.19
ACME_SLR	5.27	0.19
DD&DNH	5.14	0.18
SBSR_SLR	5.11	0.18
SBG_NPK	5.06	0.18
RKM POWER	5.04	0.18
ESPL_RADHANESDA	4.92	0.17
JAYPEE NIGRIE	4.76	0.17
MEGHALAYA	4.38	0.15
RAMPUR HEP	4.29	0.15
TEHRI	4.12	0.15
ARUNACHAL PRADESH	4.04	0.14
CLEAN_SLR	3.99	0.14
TRIPURA	3.91	0.14
NAGALAND	3.84	0.14
JINDAL POWER	3.49	0.12
SBG_PVGD	3.36	0.12
BALCO	3.31	0.12
KOTESHWAR	3.21	0.11
THARI_SLR	3.12	0.11
AVIKIRAN	3.11	0.11
LANKO_AMK	3.01	0.11
AZURE34_SLR	3.00	0.11
SPRING_PUGALUR	3.00	0.11
JINDAL STAGE-II	2.92	0.10
CGPL	2.78	0.10
DB POWER	2.75	0.10
NTPC_ANTP	2.73	0.10
TPREL_RADHANESDA	2.67	0.09
BARC	2.61	0.09
MANIPUR	2.55	0.09
GIPCL_RADHANESDA	2.51	0.09
NTPC STATIONS-NER	2.46	0.09
SIKKIM	2.46	0.09
NEP	2.43	0.09
NETCL VALLUR	2.35	0.08
INOX_BHUJ	2.28	0.08
CHUZACHEN HEP	1.90	0.07
GRT_JPL	1.89	0.07
NSPCL	1.88	0.07
TASHIDENG HEP	1.83	0.06
JHABUA POWER_MP	1.75	0.06
KSK MAHANADI	1.74	0.06
ASEJTL_SLR	1.74	0.06
FORTUMI_PVGD	1.65	0.06
TATA_PVGD	1.64	0.06
THERMAL POWERTECH	1.58	0.06
TATA_ANTP	1.58	0.06
GSECL_Radhnesda	1.56	0.06
RANGANADI HEP	1.56	0.05

NAPP	1.51	0.05
ADY3_PVGD	1.50	0.05
ADY6_PVGD	1.50	0.05
FRV_NPK	1.35	0.05
EMCO	1.30	0.05
ACBIL	1.27	0.04
RENEW_SLR	1.27	0.04
DIKCHU HEP	1.26	0.04
ADHUNIK POWER LTD	1.26	0.04
OSTRO Hiriyur	1.20	0.04
ADY1_PVGD	1.18	0.04
ADY2_PVGD	1.18	0.04
ADY13_PVGD	1.18	0.04
ADY10_PVGD	1.18	0.04
FRV_ANTP	1.18	0.04
AYANA_NPKUNTA	1.17	0.04
ONGC PALATANA	1.17	0.04
RANGIT HEP	1.13	0.04
ABSP_ANTP	1.12	0.04
MTPS II	1.08	0.04
RPREL	1.07	0.04
AKSP_ANTP	0.99	0.03
AHSP_ANTP	0.95	0.03
SPRNG_NPKUNTA	0.94	0.03
RAP B	0.94	0.03
AZURE_ANTP	0.90	0.03
FORTUM2_PVGD	0.88	0.03
PARE HEP	0.86	0.03
SKS POWER	0.82	0.03
JITPL	0.78	0.03
SAINJ HEP	0.77	0.03
BANGLADESH	0.74	0.03
TEESTA STG3	0.73	0.03
TALA HEP	0.69	0.02
PARAM_PVGD	0.63	0.02
AVAADA1_PVGD	0.62	0.02
NTPL	0.57	0.02
RONGNICHU HEP	0.55	0.02
SORANG HEP	0.52	0.02
SINGOLI BHATWARI HEP	0.51	0.02
RSTPS_FSPP	0.50	0.02
AVAADA2_PVGD	0.45	0.02
AZURE_PVGD	0.45	0.02
COASTGEN	0.45	0.02
RGPPL	0.33	0.01
LOKTAK	0.32	0.01
DAGACHU	0.32	0.01
AKS_PVGD	0.25	0.01
YARROW_PVGD	0.24	0.01
GMR KAMALANGA	0.23	0.01
RENEW_PVGD	0.22	0.01
NFF	0.22	0.01
KREDL_PVGD	0.21	0.01
DHARIWAL POWER	0.21	0.01
ARS_PVGD	0.20	0.01
DOYANG HEP	0.14	0.01
VINDHYACHAL HVDC	0.13	0.005
IL&FS	0.11	0.004
SHREE CEMENT	0.10	0.003
RAP C	0.08	0.003
SEMBCORP	0.06	0.002
HVDC PUS	0.05	0.002
LANCO BUDHIL	0.05	0.002
HVDC ALPD	0.04	0.002
HVDC RAIGARH	0.03	0.001
JORETHANG	0.01	0.0005
HVDC CHAMPA	0.01	0.0004
DCPP	0.01	0.0002
BHADRAVATHI HVDC	0.002	0.0001
Total	2842.36	100.00
Volume Exported by top 5 Regional Entities	741.67	26.09

Table-23: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, JULY 2022		
Name of the Entity	Volume of Over drawal (MUs)	% of Volume
NTPC STATIONS-WR	232.20	8.36
TALA HEP	158.17	5.69
NTPC STATIONS-NR	153.40	5.52
UTTAR PRADESH	115.64	4.16
HARYANA	106.35	3.83
RAJASTHAN	91.34	3.29
NTPC STATIONS-ER	87.62	3.15
MAHARASHTRA	80.36	2.89
TAMIL NADU	77.56	2.79
GUJARAT	68.83	2.48
KARNATAKA	68.48	2.46
ANDHRA PRADESH	66.25	2.38
NTPC STATIONS-SR	61.09	2.20
TELANGANA	54.24	1.95
ADANI_SLR 4	50.79	1.83
PUNJAB	39.51	1.42
DELHI	34.88	1.26
UTTARAKHAND	30.73	1.11
THERMAL POWERTECH	30.17	1.09
CHHATTISGARH	29.89	1.08
ESSAR POWER	29.75	1.07
MP	29.57	1.06
ODISHA	29.30	1.05
DAGACHU	26.87	0.97
DVC	26.09	0.94
NLC	24.61	0.89
KERALA	23.24	0.84
BIHAR	22.64	0.81
AGEMPL BHUJ	22.31	0.80
SEMBCORP	22.30	0.80
HIMACHAL PRADESH	21.21	0.76
GIWEL_BHUJ	19.94	0.72
NHPC STATIONS	18.40	0.66
WEST BENGAL	18.37	0.66
SORANG HEP	18.18	0.65
JHARKHAND	18.00	0.65
NETCL VALLUR	17.22	0.62
NPGC	17.08	0.61
J & K	16.20	0.58
OSTRO	16.10	0.58
ASSAM	15.38	0.55
CLEAN_SLR	14.90	0.54
AVADARJHN_SLR	14.68	0.53
IGSTPS	14.19	0.51
NEPAL(NVVN)	14.16	0.51
RPREL	13.13	0.47
TEESTA STG3	12.08	0.43
KAPP 3&4	11.79	0.42
TRIPURA	11.54	0.42
AZURE43_SLR	11.32	0.41
ADANI_SLR	11.06	0.40
ADANIHB_WIND	10.99	0.40
AVAADASN_SLR	10.86	0.39
GOA	10.84	0.39
RENEW_BHACHAU	10.79	0.39
NEP	10.52	0.38
CGPL	9.98	0.36
NTPC STATIONS-NER	9.95	0.36
NTPL	9.90	0.36
ALFANAR_BHUJ	9.84	0.35
MB POWER	9.79	0.35
RAIL	9.41	0.34
GIWEL_TCN	9.03	0.32
DB POWER	8.76	0.32
ABC_BHDL2	8.29	0.30
ORANGE_TCN	8.20	0.30
MYTRAH_TCN	7.90	0.28
ACME_HEERGARH	7.89	0.28
RENEWSB	7.85	0.28

RENEWURJA_SLR	7.69	0.28
IL&FS	7.67	0.28
JORETHANG	7.29	0.26
AD HYDRO	7.12	0.26
DD&DNH	7.05	0.25
CLEANSR_SLR	7.04	0.25
NSPCL	6.89	0.25
RENEW_BHUJ	6.87	0.25
BETAM_TCN	6.77	0.24
TATA_SLR	6.75	0.24
ACME_SLR	6.55	0.24
RENEWSW_SLR	6.53	0.24
RENEWJH_SLR	6.25	0.22
MRPL	5.97	0.21
MSUPL_BHDL2	5.91	0.21
JHABUA POWER_MP	5.91	0.21
EDEN_SLR	5.90	0.21
KARCHAM WANGTOO	5.73	0.21
BRBCL_NABINAGAR	5.56	0.20
AYANA_RP1	5.51	0.20
RKM POWER	5.48	0.20
ADHUNIK POWER LTD	5.46	0.20
MEGHALAYA	5.44	0.20
AZURE41_SLR	5.34	0.19
ACME_RUMS	5.28	0.19
MAHINDRA_RUMS	5.25	0.19
ARUNACHAL PRADESH	5.25	0.19
BALCO	5.24	0.19
JINDAL STAGE-II	5.13	0.18
RENEW_SLR_BKN	5.12	0.18
JAYPEE NIGRIE	5.09	0.18
ARERJL_SLR	5.00	0.18
SBG_PVGD	4.99	0.18
NTPC_ANTP	4.83	0.17
INOX_BHUJ	4.82	0.17
ARINSUM_RUMS	4.75	0.17
SBG_NPK	4.74	0.17
JITPL	4.47	0.16
NAPP	4.45	0.16
GMR KAMALANGA	4.21	0.15
CHANDIGARH	4.16	0.15
MANGDECHU HEP	4.14	0.15
THAR1_SLR	4.07	0.15
MTPS II	4.07	0.15
AVIKIRAN	4.06	0.15
BBMB	3.99	0.14
COASTGEN	3.97	0.14
ESPL_RADHANESDA	3.93	0.14
AZURE_MAPLE_SLR	3.93	0.14
PONDICHERRY	3.92	0.14
SBSR_SLR	3.91	0.14
RAP C	3.76	0.14
SINGOLI BHATWARI HEP	3.74	0.13
RENEW_SR_SLR	3.61	0.13
AZURE_SLR	3.59	0.13
TASHIDENG HEP	3.46	0.12
MAITHON POWER LTD	3.46	0.12
AZURE34_SLR	3.16	0.11
RGPPL	3.12	0.11
BANGLADESH	2.83	0.10
ACBIL	2.80	0.10
SIKKIM	2.66	0.10
TEHRI	2.63	0.09
JINDAL POWER	2.35	0.08
TPREL_RADHANESDA	2.33	0.08
TATA_ANTP	2.25	0.08
GIPCL_RADHANESDA	2.25	0.08
MANIPUR	2.16	0.08
LANKO_AMK	2.10	0.08
GRT_JPL	2.02	0.07
EMCO	1.91	0.07
NJPC	1.91	0.07

DIKCHU HEP	1.90	0.07
TATA_PVGD	1.88	0.07
ASEJTL_SLR	1.69	0.06
SASAN UMPP	1.59	0.06
FORTUM1_PVGD	1.59	0.06
LANCO BUDHIL	1.58	0.06
SAINJ HEP	1.57	0.06
RENEW_SLR	1.55	0.06
ADY1_PVGD	1.52	0.05
ADY2_PVGD	1.52	0.05
ADY13_PVGD	1.52	0.05
ADY10_PVGD	1.52	0.05
SPRING_PUGALUR	1.45	0.05
DHARIWAL POWER	1.45	0.05
OSTRO Hiriyur	1.35	0.05
NEEPCO STATIONS	1.34	0.05
SPRNG_NPKUNTA	1.30	0.05
FORTUM2_PVGD	1.28	0.05
ADY3_PVGD	1.26	0.05
ADY6_PVGD	1.26	0.05
DGEN MEGA POWER	1.12	0.04
RANGANADI HEP	1.11	0.04
KOTESHWAR	1.10	0.04
SKS POWER	1.08	0.04
SHREE CEMENT	1.04	0.04
AYANA_NPKUNTA	0.99	0.04
AVAADA1_PVGD	0.98	0.04
AHSP_ANTP	0.94	0.03
AVAADA2_PVGD	0.93	0.03
AKSP_ANTP	0.90	0.03
ABSP_ANTP	0.88	0.03
FRV_ANTP	0.80	0.03
TRN ENERGY	0.74	0.03
AZURE_ANTP	0.72	0.03
FRV_NPK	0.71	0.03
CHUZACHEN HEP	0.68	0.02
RAMPUR HEP	0.68	0.02
PARAM_PVGD	0.67	0.02
NAGALAND	0.61	0.02
SIMHAPURI	0.59	0.02
MIZORAM	0.59	0.02
RSTPS_FSPP	0.55	0.02
ONGC PALATANA	0.53	0.02
AZURE_PVGD	0.49	0.02
LANKO KONDAPALLI	0.49	0.02
RAP B	0.48	0.02
PARE HEP	0.43	0.02
MEENAKSHI	0.41	0.01
KSK MAHANADI	0.41	0.01
RENEW_PVGD	0.33	0.01
RANGIT HEP	0.29	0.01
RONGNICHU HEP	0.28	0.01
LOKTAK	0.28	0.01
ARS_PVGD	0.27	0.01
KREDL_PVGD	0.26	0.01
KURICHU HEP	0.25	0.01
BARC	0.25	0.01
YARROW_PVGD	0.24	0.01
AKS_PVGD	0.22	0.01
HVDC CHAMPA	0.17	0.01
GSECL_Radhansda	0.17	0.01
HVDC RAIGARH	0.11	0.004
NFF	0.11	0.004
BHADRAVATHI HVDC	0.08	0.003
HVDC ALPD	0.07	0.003
DOYANG HEP	0.05	0.002
DCPP	0.04	0.001
TEESTA HEP	0.01	0.001
HVDC PUS	0.01	0.0003
TOTAL	2778.71	100.00
Volume Imported by top 5 Regional Entities	765.75	27.56

Table-24: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), JULY 2022		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	PUNJAB	2246.27
2	UTTAR PRADESH	1118.83
3	DELHI	1064.55
4	GUJARAT	1044.94
5	HARYANA	895.67
6	MAHARASHTRA	850.73
7	WEST BENGAL	787.38
8	ODISHA	617.21
9	TELANGANA	456.87
10	AMPS Hazira	359.26
11	BALCO	215.80
12	JHARKHAND	202.62
13	DD&DNH	170.31
14	ASSAM	163.15
15	TALA HEP	157.48
16	NTPC STATIONS-WR	119.80
17	BANGLADESH	109.83
18	NTPC STATIONS-NR	102.33
19	UTTARAKHAND	53.76
20	RAIL	42.62
21	NTPC STATIONS-SR	32.31
22	NEP	27.48
23	ADANI_SLR 4	25.82
24	TAMIL NADU	22.07
25	GOA	21.33
26	TRIPURA	19.83
27	NCR ALLAHABAD	15.17
28	NETCL VALLUR	14.87
29	PONDICHERRY	11.53
30	CLEAN_SLR	10.91
31	NPGC	10.21
32	NTPL	9.33
33	AGEMPL BHUJ	8.16
34	GIWEL_BHUJ	7.99
35	NTPC STATIONS-NER	7.48
36	IL&FS	6.41
37	IGSTPS	5.52
38	NSPCL	5.01
39	RAP C	3.68
40	COASTGEN	3.52
41	MTPS II	2.98
42	NAPP	2.94
43	AVAADASN_SLR	2.91
44	RENEW_BHACHAU	2.88
45	RGPPL	2.80
46	AVADARJHN_SLR	2.75
47	INOX_BHUJ	2.53
48	RENEWURJA_SLR	2.37
49	NTPC_ANTP	2.10
50	SBG_PVGD	1.62
51	ORANGE_TCN	1.61
52	ALFANAR_BHUJ	1.34
53	ACME_SLR	1.28
54	MYTRAH_TCN	1.28
55	GMR KAMALANGA	1.25
56	DGEN MEGA POWER	1.12
57	DHARIWAL POWER	1.01
58	AVIKIRAN	0.95
59	SHREE CEMENT	0.94
60	RENEWSW_SLR	0.81
61	TATA_ANTP	0.67
62	SIMHAPURI	0.59

63	MSUPL_BHDL2	0.55
64	RENEWSB	0.49
65	LANKO KONDAPALLI	0.49
66	AVAADA2_PVGD	0.48
67	FORTUM2_PVGD	0.41
68	MEENAKSHI	0.41
69	GIWEL_TCN	0.40
70	AVAADA1_PVGD	0.36
71	SPRNG_NPKUNTA	0.36
72	ADY1_PVGD	0.34
73	ADY2_PVGD	0.34
74	ADY13_PVGD	0.34
75	ADY10_PVGD	0.34
76	RENEW_SLR	0.28
77	TATA_PVGD	0.23
78	HVDC CHAMPA	0.16
79	AZURE34_SLR	0.16
80	OSTRO Hiriyur	0.15
81	GRT_JPL	0.13
82	RENEW_PVGD	0.12
83	BHADRAVATHI HVDC	0.08
84	HVDC RAIGARH	0.08
85	ARS_PVGD	0.07
86	RSTPS_FSPP	0.05
87	AZURE_PVGD	0.04
88	KREDL_PVGD	0.04
89	PARAM_PVGD	0.04
90	HVDC ALPD	0.03
91	DCPP	0.03
92	AZURE41_SLR	0.00
93	YARROW_PVGD	0.00
94	AHSP_ANTP	-0.01
95	AKS_PVGD	-0.02
96	HVDC PUS	-0.04
97	MRPL	-0.04
98	LOKTAK	-0.05
99	FORTUM1_PVGD	-0.06
100	EMCO	-0.08
101	AKSP_ANTP	-0.09
102	DOYANG HEP	-0.09
103	NFF	-0.11
104	VINDHYACHAL HVDC	-0.13
105	AYANA_NPKUNTA	-0.18
106	AZURE_ANTP	-0.18
107	RENEWJH_SLR	-0.19
108	ADY3_PVGD	-0.23
109	ADY6_PVGD	-0.23
110	ABSP_ANTP	-0.24
111	GIPCL_RADHANESDA	-0.26
112	RONGNICHU HEP	-0.27
113	SBG_NPK	-0.32
114	TPREL_RADHANESDA	-0.35
115	FRV_ANTP	-0.38
116	PARE HEP	-0.43
117	RANGANADI HEP	-0.45
118	RAP B	-0.46
119	ARERJL_SLR	-0.47
120	ACME_RUMS	-0.52
121	EDEN_SLR	-0.62
122	FRV_NPK	-0.64
123	ARINSUM_RUMS	-0.72
124	BRBCL,NABINAGAR	-0.72
125	MAHINDRA_RUMS	-0.81
126	RANGIT HEP	-0.83
127	ESPL_RADHANESDA	-0.99
128	BETAM_TCN	-1.05

129	AZURE43_SLR	-1.05
130	SBSR_SLR	-1.20
131	AZURE_MAPLE_SLR	-1.37
132	GSECL_Radhanesda	-1.40
133	TEHRI	-1.49
134	RENEW_BHUJ	-1.52
135	SPRING_PUGALUR	-1.55
136	AZURE_SLR	-2.01
137	KOTESHWAR	-2.11
138	CONTINNUM PT	-2.16
139	BARC	-2.36
140	ASEJTL_SLR	-2.53
141	AYANA_RP1	-2.92
142	ADANIHB_WIND	-3.46
143	RAMPUR HEP	-3.61
144	MAITHON POWER LTD	-4.23
145	LANCO BUDHIL	-5.08
146	RENEW_SR_SLR	-5.09
147	THERMAL POWERTECH	-6.03
148	LANKO_AMK	-6.11
149	ADANI_SLR	-6.82
150	ADANI GREEN	-6.87
151	NJPC	-7.69
152	OSTRO	-8.93
153	TEESTA HEP	-9.36
154	TRN ENERGY	-9.97
155	CHUZACHEN HEP	-11.60
156	BBMB	-12.60
157	AHEJ3L_WIND	-15.32
158	MARUTI COAL	-15.54
159	KURICHU HEP	-16.47
160	KSK MAHANADI	-18.10
161	THARI_SLR	-18.54
162	AHEJ2L_WIND	-19.00
163	ONGC PALATANA	-19.74
164	CHANDIGARH	-21.15
165	RENEW_SLR_BKN	-21.45
166	MANIPUR	-22.97
167	MANGDECHU HEP	-23.95
168	SIKKIM	-25.60
169	TATA_SLR	-27.42
170	NAGALAND	-30.11
171	CGPL	-31.23
172	MIZORAM	-31.45
173	ACBIL	-36.97
174	KAPP 3&4	-37.20
175	ADANI_WIND	-38.12
176	SORANG HEP	-38.45
177	NLC	-41.36
178	ACME_HEERGARH	-42.66
179	CLEANSR_SLR	-43.13
180	AHEJ2L_SOLAR	-51.19
181	JHABUA POWER_MP	-51.56
182	AHEJ3L_SOLAR	-54.06
183	ABC_BHDL2	-56.29
184	SINGOLI BHATWARI HEP	-56.41
185	DAGACHU	-60.50
186	NTPC STATIONS-ER	-61.43
187	ARUNACHAL PRADESH	-62.72
188	SASAN UMPP	-63.58
189	DIKCHU HEP	-66.67
190	JORETHANG	-67.47
191	TASHIDENG HEP	-74.63
192	AHEJ4L_WIND	-76.40
193	SAINJ HEP	-78.11
194	ANDHRA PRADESH	-78.38

195	DB POWER	-80.67
196	RKM POWER	-98.00
197	SKS POWER	-98.28
198	MEGHALAYA	-101.59
199	NHPC STATIONS	-103.41
200	ESSAR POWER	-111.08
201	MB POWER	-129.92
202	AD HYDRO	-133.31
203	KARCHAM WANGTOO	-138.61
204	AHEJ4L_SOLAR	-148.75
205	CHUKHA HEP	-152.67
206	SEMBCORP	-153.17
207	ADHUNIK POWER LTD	-164.82
208	DVC	-183.81
209	JINDAL STAGE-II	-188.37
210	JINDAL POWER	-198.59
211	NEPAL(NVVN)	-227.86
212	NEEPCO STATIONS	-233.49
213	CHHATTISGARH	-244.98
214	KERALA	-251.02
215	JITPL	-253.91
216	BIHAR	-269.66
217	J & K	-281.59
218	JAYPEE NIGRIE	-284.96
219	REGL	-285.53
220	RPREL	-421.42
221	KARNATAKA	-484.38
222	RAJASTHAN	-498.48
223	TEESTA STG3	-641.41
224	HIMACHAL PRADESH	-1211.99
225	MP	-1642.04
* 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-25: DETAILS OF CONGESTION IN POWER EXCHANGES, JULY 2022

	Details of Congestion	Day Ahead Market			Green Day Ahead Market			Real Time Market		
		IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX
A	Unconstrained Cleared Volume (MUs)	3520.80	32.21	1.43	447.11	0.16	0.00	2131.02	10.73	0.00
B	Actual Cleared Volume and hence scheduled (MUs)	3516.65	31.78	1.43	446.42	0.16	0.00	2130.98	10.73	0.00
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) *	4.15	0.44	0.00	0.69	0.00	0.00	0.04	0.00	0.00
D	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.12%	1.35%	0.00%	0.15%	0.00%	0.00%	0.002%	0.00%	0.00%
F	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/ Total number of hours in the month)	2.65%	3.09%	0.00%	1.31%	0.00%	0.00%	0.13%	0.00%	0.00%
G	Congestion occurrence (%) time block wise									
	0.00 - 6.00 hours	0.00%	17.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6.00 - 12.00 hours	39.24%	30.43%	0.00%	28.21%	0.00%	0.00%	100.00%	0.00%	0.00%
	12.00 - 18.00 hours	60.76%	26.09%	0.00%	71.79%	0.00%	0.00%	0.00%	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	26.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

Source: IEX, PXIL, HPX & NLDC

Table-26: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), JULY 2022

Date	Bilateral		Day Ahead Market [#]			Green Day Ahead Market [#]			Real Time Market [#]			Deviation Settlement (Over Drawl + Under Generation)	Total Electricity Generation (MU) as given at CEA Website*
	Through Traders and PXs**	Direct	IEX	PXIL	HPX	IEX	PXIL	HPX	IEX	PXIL	HPX		
1-Jul-22	179.01	86.17	105.82	0.71	0.00	12.51	0.00	0.00	66.75	0.00	0.00	96.63	3775.26
2-Jul-22	169.43	87.95	114.89	1.01	0.00	10.76	0.00	0.00	65.87	0.00	0.00	90.52	3878.90
3-Jul-22	163.71	80.26	122.22	0.92	0.00	15.77	0.00	0.00	59.81	0.00	0.00	96.43	3759.25
4-Jul-22	165.54	79.76	114.14	2.06	0.00	20.33	0.00	0.00	61.00	0.00	0.00	90.19	3997.63
5-Jul-22	172.04	84.34	108.67	1.21	0.00	15.16	0.00	0.00	83.19	0.00	0.00	91.01	4055.75
6-Jul-22	175.30	88.53	118.57	0.89	0.00	17.51	0.00	0.00	61.79	0.00	0.00	88.95	4058.80
7-Jul-22	182.97	89.46	94.18	0.67	0.00	15.75	0.00	0.00	77.10	0.00	0.00	91.77	4060.18
8-Jul-22	174.04	90.84	104.06	0.85	0.00	16.25	0.00	0.00	84.61	0.00	0.00	90.83	4001.55
9-Jul-22	178.30	99.98	106.34	1.06	0.00	16.59	0.00	0.00	66.07	0.00	0.00	93.81	3749.44
10-Jul-22	159.87	95.19	84.42	1.32	0.00	20.58	0.00	0.00	65.37	0.00	0.00	93.65	3486.23
11-Jul-22	175.18	92.65	85.83	1.01	0.00	34.74	0.00	0.00	62.71	0.00	0.00	88.50	3655.55
12-Jul-22	180.73	90.89	97.39	0.86	0.00	28.27	0.00	0.00	66.92	0.00	0.00	83.71	3698.06
13-Jul-22	169.76	88.88	93.38	0.92	0.00	22.20	0.00	0.00	68.58	0.00	0.00	89.94	3748.27
14-Jul-22	163.78	90.47	110.21	1.10	0.00	20.79	0.00	0.00	68.06	0.00	0.00	96.68	3710.75
15-Jul-22	168.93	94.20	111.46	1.60	0.00	21.27	0.14	0.00	65.30	0.00	0.00	96.52	3713.47
16-Jul-22	172.81	87.04	109.37	1.98	0.00	16.21	0.01	0.00	57.32	0.00	0.00	90.19	3745.33
17-Jul-22	165.79	82.56	97.38	1.69	0.00	9.55	0.01	0.00	59.78	0.00	0.00	90.81	3615.57
18-Jul-22	166.66	81.75	108.03	0.79	0.00	9.87	0.00	0.00	61.84	0.75	0.00	79.41	3923.06
19-Jul-22	167.84	87.80	122.97	1.52	0.00	9.69	0.00	0.00	71.85	2.69	0.00	83.04	4069.37
20-Jul-22	160.60	93.35	128.42	1.02	0.00	10.59	0.00	0.00	89.17	2.20	0.00	88.50	3890.71
21-Jul-22	160.67	91.92	144.49	1.52	0.00	10.54	0.00	0.00	78.28	0.00	0.00	101.69	3692.47
22-Jul-22	171.33	84.74	116.75	0.84	0.00	11.37	0.00	0.00	65.27	0.00	0.00	87.41	3818.53
23-Jul-22	183.17	76.45	107.51	0.54	0.00	8.69	0.00	0.00	53.64	0.00	0.00	90.76	3748.15
24-Jul-22	180.03	77.64	91.78	0.39	0.00	10.75	0.00	0.00	54.12	0.00	0.00	87.75	3534.60
25-Jul-22	167.05	83.40	91.91	0.39	0.00	9.27	0.00	0.00	64.98	1.65	0.00	88.76	3779.72
26-Jul-22	159.08	79.68	115.02	0.60	0.00	9.43	0.00	0.00	85.29	0.00	0.00	91.63	4009.99
27-Jul-22	152.08	91.90	121.00	0.57	0.00	6.85	0.00	0.00	75.41	2.45	0.00	91.91	4066.09
28-Jul-22	155.04	94.33	159.86	0.89	0.00	7.59	0.00	0.00	64.26	0.40	0.00	87.84	4027.24
29-Jul-22	152.23	98.93	145.62	1.53	1.33	8.62	0.00	0.00	82.83	0.60	0.00	84.74	4012.48
30-Jul-22	157.72	98.28	154.29	0.71	0.10	9.14	0.00	0.00	61.35	0.00	0.00	83.38	3917.15
31-Jul-22	160.06	86.00	130.69	0.60	0.00	9.79	0.00	0.00	82.45	0.00	0.00	87.85	3682.90
Total	5210.74	2735.36	3516.65	31.78	1.43	446.42	0.16	0.00	2130.98	10.73	0.00	2794.80	118882.45

Source: NLDC

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

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

Scheduled volume of all the bid areas.

Table-27(a): PRICE OF DAY AHEAD TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JULY 2022									
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Day ahead market of HPX		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*
1-Jul-22	2.06	7.77	4.16	2.21	9.00	3.91	-	-	-
2-Jul-22	3.00	7.04	4.46	2.50	6.99	3.68	-	-	-
3-Jul-22	1.80	6.00	3.97	2.95	4.92	3.70	-	-	-
4-Jul-22	2.83	8.55	4.52	2.50	6.99	4.33	-	-	-
5-Jul-22	2.95	10.45	4.97	2.38	6.99	4.01	-	-	-
6-Jul-22	3.19	12.00	6.88	2.38	9.00	4.76	-	-	-
7-Jul-22	2.85	12.00	6.94	2.40	12.00	5.11	-	-	-
8-Jul-22	3.15	12.00	7.41	3.05	12.00	5.05	-	-	-
9-Jul-22	3.23	12.00	6.33	2.40	12.00	6.61	-	-	-
10-Jul-22	1.50	5.26	3.00	2.57	6.99	4.32	-	-	-
11-Jul-22	2.89	12.00	5.23	2.00	6.10	3.49	-	-	-
12-Jul-22	2.92	12.00	5.72	2.77	6.10	3.63	-	-	-
13-Jul-22	2.00	9.85	3.97	3.04	12.00	6.58	-	-	-
14-Jul-22	2.00	12.00	4.97	2.50	9.00	4.33	-	-	-
15-Jul-22	2.47	12.00	5.43	2.58	9.00	3.95	-	-	-
16-Jul-22	2.19	12.00	5.76	3.10	9.00	4.84	-	-	-
17-Jul-22	1.56	9.95	4.38	2.00	11.00	5.02	-	-	-
18-Jul-22	2.41	12.00	5.84	2.40	12.00	6.02	-	-	-
19-Jul-22	3.15	12.00	6.18	2.86	12.00	6.07	-	-	-
20-Jul-22	2.77	12.00	5.95	3.40	11.00	6.19	-	-	-
21-Jul-22	2.84	12.00	5.97	3.40	12.00	5.99	-	-	-
22-Jul-22	3.00	12.00	5.52	2.85	12.00	6.09	-	-	-
23-Jul-22	3.11	12.00	5.53	2.40	10.50	5.01	-	-	-
24-Jul-22	1.99	7.40	4.16	3.60	12.00	5.44	-	-	-
25-Jul-22	3.00	10.40	4.89	2.40	9.00	3.86	-	-	-
26-Jul-22	3.25	12.00	6.09	3.20	8.40	4.53	-	-	-
27-Jul-22	3.00	12.00	5.93	3.20	12.00	5.31	-	-	-
28-Jul-22	3.25	12.00	6.11	3.25	12.00	6.03	-	-	-
29-Jul-22	3.69	12.00	6.36	3.75	11.00	6.29	4.50	12.00	6.09
30-Jul-22	3.69	12.00	7.01	3.90	12.00	6.55	12.00	12.00	12.00
31-Jul-22	2.07	12.00	4.59	3.90	6.99	5.78	-	-	-
	1.50[#]	12.00[#]	5.50	2.00[#]	12.00[#]	5.03	4.50[#]	12.00[#]	6.51

Source: IEX, PXIL and HPX

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

Maximum/Minimum in the month

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

Market Segment	Green Day ahead market of IEX			Green Day ahead market of PXIL			Green Day ahead market of HPX		
	Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP
1-Jul-22	3.35	6.30	4.20	-	-	-	-	-	-
2-Jul-22	3.00	6.50	3.98	-	-	-	-	-	-
3-Jul-22	2.80	6.50	3.86	-	-	-	-	-	-
4-Jul-22	3.00	6.00	3.87	-	-	-	-	-	-
5-Jul-22	3.30	12.00	4.07	-	-	-	-	-	-
6-Jul-22	3.18	12.00	3.93	-	-	-	-	-	-
7-Jul-22	3.50	12.00	4.31	-	-	-	-	-	-
8-Jul-22	3.50	12.00	4.64	-	-	-	-	-	-
9-Jul-22	3.50	12.00	4.78	-	-	-	-	-	-
10-Jul-22	3.37	7.00	4.10	-	-	-	-	-	-
11-Jul-22	3.27	5.00	3.76	-	-	-	-	-	-
12-Jul-22	3.46	6.00	3.85	-	-	-	-	-	-
13-Jul-22	3.76	6.50	4.26	-	-	-	-	-	-
14-Jul-22	3.50	6.10	4.28	-	-	-	-	-	-
15-Jul-22	3.50	12.00	4.49	4.50	4.50	4.50	-	-	-
16-Jul-22	3.50	12.00	4.27	3.50	5.00	4.19	-	-	-
17-Jul-22	3.36	12.00	4.99	3.92	5.00	4.69	-	-	-
18-Jul-22	3.50	12.00	5.39	-	-	-	-	-	-
19-Jul-22	3.51	12.00	5.65	-	-	-	-	-	-
20-Jul-22	3.50	12.00	5.46	-	-	-	-	-	-
21-Jul-22	4.00	12.00	7.21	-	-	-	-	-	-
22-Jul-22	4.00	11.00	5.41	-	-	-	-	-	-
23-Jul-22	4.00	12.00	4.92	-	-	-	-	-	-
24-Jul-22	3.50	6.20	4.44	-	-	-	-	-	-
25-Jul-22	3.89	8.51	4.88	-	-	-	-	-	-
26-Jul-22	4.00	12.00	4.96	-	-	-	-	-	-
27-Jul-22	4.00	12.00	6.15	-	-	-	-	-	-
28-Jul-22	4.00	12.00	6.43	-	-	-	-	-	-
29-Jul-22	5.00	12.00	7.61	-	-	-	-	-	-
30-Jul-22	4.00	12.00	6.66	-	-	-	-	-	-
31-Jul-22	3.25	12.00	5.90	-	-	-	-	-	-
	2.80[#]	12.00[#]	4.63	3.50[#]	5.00[#]	4.50	-	-	-

Source: IEX, PXIL and HPX

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

Maximum/Minimum in the month

Table-27(c): PRICE OF REAL TIME TRANSACTIONS AND DSM (DAY-WISE) (₹/kWh), JULY 2022

Market Segment	Real Time market of IEX			Real Time market of PXIL			Real Time market of HPX			Under Drawl/Over Drawl from the Grid (DSM)			
	Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	All India Grid		
											Minimum Price	Maximum Price	Average Price**
1-Jul-22	1.96	6.00	3.57	-	-	-	-	-	-	-	0.00	8.00	3.71
2-Jul-22	1.00	10.13	3.97	-	-	-	-	-	-	-	0.00	8.00	4.87
3-Jul-22	1.49	6.17	3.39	-	-	-	-	-	-	-	0.00	7.76	2.70
4-Jul-22	2.25	12.00	5.81	-	-	-	-	-	-	-	0.00	8.00	5.04
5-Jul-22	2.21	12.00	6.59	-	-	-	-	-	-	-	0.00	8.00	4.21
6-Jul-22	2.15	12.00	6.78	-	-	-	-	-	-	-	0.00	8.00	5.27
7-Jul-22	2.47	12.00	7.11	-	-	-	-	-	-	-	0.00	8.00	5.32
8-Jul-22	3.00	8.99	5.53	-	-	-	-	-	-	-	0.00	8.00	4.50
9-Jul-22	1.49	6.50	3.58	-	-	-	-	-	-	-	0.00	7.91	4.17
10-Jul-22	0.55	6.27	3.05	-	-	-	-	-	-	-	0.00	8.00	2.19
11-Jul-22	1.66	12.00	4.46	-	-	-	-	-	-	-	0.00	8.00	3.89
12-Jul-22	1.62	7.00	3.89	-	-	-	-	-	-	-	0.00	8.00	4.43
13-Jul-22	1.50	9.85	4.43	-	-	-	-	-	-	-	0.00	7.75	3.29
14-Jul-22	1.83	8.00	3.77	-	-	-	-	-	-	-	0.00	8.00	3.93
15-Jul-22	1.83	12.00	4.37	-	-	-	-	-	-	-	0.00	8.00	5.04
16-Jul-22	2.06	12.00	4.74	-	-	-	-	-	-	-	0.00	8.00	4.64
17-Jul-22	1.68	8.01	3.81	-	-	-	-	-	-	-	0.00	8.00	3.79
18-Jul-22	2.30	12.00	6.11	12.00	12.00	12.00	-	-	-	-	1.17	8.00	6.10
19-Jul-22	2.00	12.00	6.73	12.00	12.00	12.00	-	-	-	-	0.00	8.00	5.71
20-Jul-22	2.13	12.00	6.05	12.00	12.00	12.00	-	-	-	-	0.00	8.00	4.16
21-Jul-22	1.96	12.00	3.52	-	-	-	-	-	-	-	0.00	7.56	3.81
22-Jul-22	2.80	8.50	4.16	-	-	-	-	-	-	-	0.00	7.44	4.87
23-Jul-22	1.61	5.50	3.50	-	-	-	-	-	-	-	0.00	8.00	4.43
24-Jul-22	1.50	5.50	3.10	-	-	-	-	-	-	-	0.00	8.00	3.09
25-Jul-22	1.80	12.00	4.21	11.90	11.90	11.90	-	-	-	-	0.00	7.41	3.07
26-Jul-22	2.50	12.00	5.72	-	-	-	-	-	-	-	0.00	8.00	5.49
27-Jul-22	2.90	12.00	6.04	12.00	12.00	12.00	-	-	-	-	0.00	8.00	5.18
28-Jul-22	3.19	12.00	7.10	12.00	12.00	12.00	-	-	-	-	0.00	8.00	5.62
29-Jul-22	2.37	12.00	6.66	12.00	12.00	12.00	-	-	-	-	0.00	8.00	5.58
30-Jul-22	2.16	7.40	4.45	-	-	-	-	-	-	-	0.00	7.87	4.09
31-Jul-22	1.40	5.80	2.87	-	-	-	-	-	-	-	0.00	6.06	2.70
	0.55[#]	12.00[#]	4.88	11.90[#]	12.00[#]	11.98	-	-	-	-	0.00[#]	8.00[#]	4.35

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

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

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

Maximum/Minimum in the month

Table-28: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), JULY 2022

Name of the Entity	Through Bilateral			Through Power Exchange (DAM + GDAM + RTM)			Through DSM with Regional Grid			Total Net***
	Sale	Purchase	Net**	Sale	Purchase	Net**	Import (Over Drawl)	Export (Under Drawl)	Net**	
PUNJAB	0.00	2254.94	2254.94	123.18	166.43	43.25	39.51	91.43	-51.93	2246.27
HARYANA	3.50	658.73	655.23	59.92	219.41	159.49	106.35	25.41	80.94	895.67
RAJASTHAN	172.84	77.69	-95.15	508.51	106.62	-401.90	91.34	92.78	-1.44	-498.48
DELHI	0.00	1219.92	1219.92	305.92	146.88	-159.04	34.88	31.20	3.67	1064.55
UTTAR PRADESH	37.06	734.67	697.61	198.56	564.08	365.52	115.64	59.94	55.70	1118.83
UTTARAKHAND	25.46	48.17	22.70	14.00	27.40	13.40	30.73	13.07	17.66	53.76
HIMACHAL PRADESH	968.99	0.00	-968.99	260.87	13.99	-246.88	21.21	17.32	3.88	-1211.99
J & K	111.60	0.00	-111.60	18.84	0.00	-18.84	16.20	167.36	-151.16	-281.59
CHANDIGARH	0.00	0.00	0.00	17.86	1.76	-16.11	4.16	9.21	-5.04	-21.15
MP	1001.39	88.06	-913.34	778.34	138.86	-639.48	29.57	118.79	-89.22	-1642.04
MAHARASHTRA	504.01	639.75	135.74	36.15	753.92	717.77	80.36	83.15	-2.78	850.73
GUJARAT	1.45	516.27	514.82	14.42	650.67	636.25	68.83	174.96	-106.13	1044.94
CHHATTISGARH	0.00	35.06	35.06	287.18	1.35	-285.83	29.89	24.09	5.80	-244.98
GOA	15.81	57.58	41.77	33.89	8.12	-25.77	10.84	5.51	5.33	21.33
DD&DNH	0.00	17.86	17.86	0.62	151.16	150.54	7.05	5.14	1.91	170.31
ANDHRA P	79.60	2.54	-77.06	431.82	426.38	-5.44	66.25	62.14	4.11	-78.38
KARNATAKA	163.07	6.73	-156.34	404.20	73.20	-331.00	68.48	65.53	2.95	-484.38
KERALA	41.37	0.00	-41.37	234.12	25.09	-209.03	23.24	23.87	-0.63	-251.02
TAMIL NADU	275.04	20.77	-254.27	71.43	395.07	323.65	77.56	124.87	-47.31	22.07
PONDICHERRY	0.00	18.07	18.07	0.00	0.00	0.00	3.92	10.46	-6.53	11.53
TELANGANA	110.24	56.92	-53.32	102.69	618.86	516.17	54.24	60.23	-5.98	456.87
WEST BENGAL	59.80	322.12	262.32	26.46	595.87	569.41	18.37	62.73	-44.35	787.38
ODISHA	36.56	494.79	458.23	93.05	274.63	181.57	29.30	51.90	-22.60	617.21
BIHAR	11.03	82.31	71.28	314.89	32.86	-282.03	22.64	81.56	-58.91	-269.66
JHARKHAND	1.70	184.27	182.57	39.26	70.24	30.98	18.00	28.93	-10.93	202.62
SIKKIM	37.23	22.03	-15.20	10.76	0.15	-10.61	2.66	2.46	0.21	-25.60
DVC	199.24	0.00	-199.24	23.75	37.51	13.75	26.09	24.42	1.67	-183.81
ARUNACHAL P	34.95	0.00	-34.95	29.06	0.07	-28.99	5.25	4.04	1.22	-62.72
ASSAM	0.00	22.61	22.61	58.95	205.41	146.46	15.38	21.30	-5.92	163.15
MANIPUR	27.68	0.00	-27.68	5.94	11.04	5.10	2.16	2.55	-0.39	-22.97
MEGHALAYA	110.79	2.68	-108.11	5.23	10.70	5.46	5.44	4.38	1.06	-101.59
MIZORAM	0.00	0.00	0.00	26.18	0.00	-26.18	0.59	5.85	-5.27	-31.45
NAGALAND	11.53	0.00	-11.53	15.34	0.00	-15.34	0.61	3.84	-3.24	-30.11
TRIPURA	0.00	0.00	0.00	3.84	16.04	12.20	11.54	3.91	7.64	19.83
NTPC STATIONS-NR	0.00	0.00	0.00	5.52	0.00	-5.52	153.40	45.55	107.85	102.33
NHPC STATIONS	0.00	0.00	0.00	0.00	0.00	0.00	18.40	121.81	-103.41	-103.41
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.22	-0.11	-0.11
RAIL	0.00	0.00	0.00	0.00	39.32	39.32	9.41	6.10	3.31	42.62
NEP	0.00	0.00	0.00	0.00	19.39	19.39	10.52	2.43	8.09	27.48
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	4.45	1.51	2.94	2.94
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.94	-0.46	-0.46
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	1.91	9.60	-7.69	-7.69
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	2.63	4.12	-1.49	-1.49
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	3.99	16.59	-12.60	-12.60
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	3.76	0.08	3.68	3.68
AD HYDRO	104.97	0.00	-104.97	27.95	0.00	-27.95	7.12	7.52	-0.39	-133.31
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	14.19	8.66	5.52	5.52
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	1.10	3.21	-2.11	-2.11
KARCHAM WANGTOO	113.00	0.00	-113.00	17.56	0.07	-17.48	5.73	13.85	-8.13	-138.61
SHREE CEMENT	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.10	0.94	0.94
LANCO BUDHIL	0.00	0.00	0.00	6.62	0.00	-6.62	1.58	0.05	1.54	-5.08
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.68	4.29	-3.61	-3.61
SORANG HEP	46.86	0.00	-46.86	9.26	0.00	-9.26	18.18	0.52	17.66	-38.45
SAINJ HEP	54.78	0.00	-54.78	24.43	0.29	-24.13	1.57	0.77	0.80	-78.11
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.27	0.28	0.28
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.59	5.60	-2.01	-2.01

ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	6.55	5.27	1.28	1.28
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.16	3.00	0.16	0.16
TATA_SLR	28.31	0.00	-28.31	0.00	0.00	0.00	6.75	5.86	0.89	-27.42
RENEW_SLR_BKN	20.97	0.00	-20.97	0.00	0.00	0.00	5.12	5.60	-0.48	-21.45
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	14.90	3.99	10.91	10.91
ARERJL_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.00	5.47	-0.47	-0.47
ADANI GREEN	0.00	0.00	0.00	6.87	0.00	-6.87	0.00	0.00	0.00	-6.87
ASEJTL_SLR	2.48	0.00	-2.48	0.00	0.00	0.00	1.69	1.74	-0.05	-2.53
SINGOLI BHATWARI HVDC	57.37	0.00	-57.37	2.31	0.02	-2.28	3.74	0.51	3.24	-56.41
AZURE43_SLR	0.00	0.00	0.00	0.00	0.00	0.00	11.32	12.37	-1.05	-1.05
MRPL	0.00	0.00	0.00	0.00	0.00	0.00	5.97	6.01	-0.04	-0.04
EDEN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.90	6.51	-0.62	-0.62
SBSR_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.91	5.11	-1.20	-1.20
RENEWSW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	6.53	5.73	0.81	0.81
RENEWJH_SLR	0.00	0.00	0.00	0.00	0.00	0.00	6.25	6.44	-0.19	-0.19
ADANIHB_WIND	0.00	0.00	0.00	0.00	0.00	0.00	10.99	14.46	-3.46	-3.46
ADANI_SLR	0.00	0.00	0.00	0.00	0.00	0.00	11.06	17.88	-6.82	-6.82
ADANI_SLR 4	0.00	0.00	0.00	0.00	0.00	0.00	50.79	24.97	25.82	25.82
AHEJ2L_SOLAR	36.42	0.00	-36.42	14.77	0.00	-14.77	0.00	0.00	0.00	-51.19
AHEJ2L_WIND	19.00	0.00	-19.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.00
AHEJ3L_SOLAR	39.56	0.00	-39.56	14.50	0.00	-14.50	0.00	0.00	0.00	-54.06
AHEJ3L_WIND	15.32	0.00	-15.32	0.00	0.00	0.00	0.00	0.00	0.00	-15.32
AHEJ4L_WIND	76.40	0.00	-76.40	0.00	0.00	0.00	0.00	0.00	0.00	-76.40
AHEJ4L_SOLAR	78.56	0.00	-78.56	70.19	0.00	-70.19	0.00	0.00	0.00	-148.75
RENEWSB	0.00	0.00	0.00	0.00	0.00	0.00	7.85	7.36	0.49	0.49
AZURE41_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.34	5.34	0.00	0.00
AYANA_RP1	0.00	0.00	0.00	0.00	0.00	0.00	5.51	8.44	-2.92	-2.92
AVAADASN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	10.86	7.95	2.91	2.91
RENEWURJA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	7.69	5.32	2.37	2.37
AVADARJHN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	14.68	11.93	2.75	2.75
NCR ALLAHABAD	0.00	15.17	15.17	0.00	0.00	0.00	0.00	0.00	0.00	15.17
RENEW_SR_SLR	0.00	0.00	0.00	2.91	0.00	-2.91	3.61	5.79	-2.18	-5.09
AZURE_MAPLE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.93	5.30	-1.37	-1.37
THARI_SLR	19.49	0.00	-19.49	0.00	0.00	0.00	4.07	3.12	0.95	-18.54
CLEANSR_SLR	43.42	0.00	-43.42	0.00	0.00	0.00	7.04	6.74	0.30	-43.13
ACME_HEERGARH	44.34	0.00	-44.34	0.00	0.00	0.00	7.89	6.21	1.68	-42.66
ABC_BHDL2	54.20	0.00	-54.20	0.00	0.00	0.00	8.29	10.38	-2.09	-56.29
MSUPL_BHDL2	0.00	0.00	0.00	0.00	0.00	0.00	5.91	5.36	0.55	0.55
NTPC STATIONS-WR	0.00	0.00	0.00	0.00	0.00	0.00	232.20	112.40	119.80	119.80
BHADRAVATHI HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.08
VINDHYACHAL HVDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	-0.13	-0.13
JINDAL POWER	139.62	0.00	-139.62	57.84	0.00	-57.84	2.35	3.49	-1.13	-198.59
LANKO_AMK	5.21	0.00	-5.21	0.00	0.00	0.00	2.10	3.01	-0.91	-6.11
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	6.89	1.88	5.01	5.01
ACBIL	1.08	0.00	-1.08	38.15	0.74	-37.42	2.80	1.27	1.52	-36.97
BALCO	0.00	173.20	173.20	0.00	40.67	40.67	5.24	3.31	1.93	215.80
RGPPL	0.00	0.00	0.00	0.00	0.00	0.00	3.12	0.33	2.80	2.80
CGPL	0.00	0.00	0.00	38.43	0.00	-38.43	9.98	2.78	7.20	-31.23
DCPP	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.03	0.03
EMCO	0.00	0.00	0.00	0.69	0.00	-0.69	1.91	1.30	0.61	-0.08
KSK MAHANADI	16.77	0.00	-16.77	0.00	0.00	0.00	0.41	1.74	-1.33	-18.10
ESSAR POWER	105.48	0.00	-105.48	9.39	0.00	-9.39	29.75	25.96	3.786	-111.081
JINDAL STAGE-II	139.19	0.00	-139.19	51.46	0.07	-51.39	5.13	2.92	2.21	-188.37
DB POWER	10.14	0.00	-10.14	76.54	0.00	-76.54	8.76	2.75	6.01	-80.67
DHARIWAL POWER	0.00	0.00	0.00	0.22	0.00	-0.22	1.45	0.21	1.23	1.01
JAYPEE NIGRIE	216.15	0.00	-216.15	69.14	0.00	-69.14	5.09	4.76	0.34	-284.96
DGEN MEGA POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.00	1.12	1.12
MB POWER	55.68	0.00	-55.68	77.66	0.00	-77.66	9.79	6.37	3.42	-129.92
MARUTI COAL	0.00	0.00	0.00	15.54	0.00	-15.54	0.00	0.00	0.00	-15.54
JHABUA POWER_MP	55.69	0.00	-55.69	0.04	0.00	-0.04	5.91	1.75	4.16	-51.56
SASAN UMPP	0.00	0.00	0.00	36.58	0.00	-36.58	1.59	28.60	-27.00	-63.58
TRN ENERGY	0.00	0.00	0.00	4.87	0.00	-4.87	0.74	5.85	-5.10	-9.97
RKM POWER	74.76	0.00	-74.76	23.68	0.00	-23.68	5.48	5.04	0.44	-98.00

SKS POWER	86.54	0.00	-86.54	11.99	0.00	-11.99	1.08	0.82	0.25	-98.28
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.25	2.61	-2.36	-2.36
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	11.79	48.99	-37.20	-37.20
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.01	0.16	0.16
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	5.25	6.07	-0.81	-0.81
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	4.75	5.47	-0.72	-0.72
OSTRO	15.27	0.00	-15.27	3.53	0.00	-3.53	16.10	6.22	9.87	-8.93
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	5.28	5.80	-0.52	-0.52
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	10.79	7.91	2.88	2.88
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	19.94	11.95	7.99	7.99
INOX_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	4.82	2.28	2.53	2.53
AGEMPL BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	22.31	14.15	8.16	8.16
REGL	251.14	0.00	-251.14	34.39	0.00	-34.39	0.00	0.00	0.00	-285.53
RPREL	347.82	0.00	-347.82	85.66	0.00	-85.66	13.13	1.07	12.06	-421.42
AMPS Hazira	0.00	65.44	65.44	0.00	293.82	293.82	0.00	0.00	0.00	359.26
HVDC RAIGARH	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.03	0.08	0.08
ALFANAR_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	9.84	8.50	1.34	1.34
RENEW_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	6.87	8.39	-1.52	-1.52
ADANI_WIND	14.98	0.00	-14.98	23.14	0.00	-23.14	0.00	0.00	0.00	-38.12
CONTINNUM PT	1.96	0.00	-1.96	0.20	0.00	-0.20	0.00	0.00	0.00	-2.16
TPREL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	2.33	2.67	-0.35	-0.35
ESPL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	3.93	4.92	-0.99	-0.99
GIPCL_RADHANESDA	0.00	0.00	0.00	0.00	0.00	0.00	2.25	2.51	-0.26	-0.26
GSECL_Radhanesda	0.00	0.00	0.00	0.00	0.00	0.00	0.17	1.56	-1.40	-1.40
AVIKIRAN	0.00	0.00	0.00	0.00	0.00	0.00	4.06	3.11	0.95	0.95
NTPC STATIONS-SR	0.00	0.00	0.00	5.51	0.00	-5.51	61.09	23.27	37.82	32.31
LANKO KONDAPALLI	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.49	0.49
SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.59	0.59
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.41	0.41
COASTGEN	0.00	0.00	0.00	0.00	0.00	0.00	3.97	0.45	3.52	3.52
THERMAL POWERTECH	14.73	0.00	-14.73	19.89	0.00	-19.89	30.17	1.58	28.59	-6.03
IL&FS	0.00	0.00	0.00	1.16	0.00	-1.16	7.67	0.11	7.57	6.41
NLC	0.00	0.00	0.00	42.85	0.00	-42.85	24.61	23.13	1.49	-41.36
SEMBCORP	175.41	0.00	-175.41	0.00	0.00	0.00	22.30	0.06	22.24	-153.17
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	17.22	2.35	14.87	14.87
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	9.90	0.57	9.33	9.33
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.95	-0.01	-0.01
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.99	-0.09	-0.09
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.88	1.12	-0.24	-0.24
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.90	-0.18	-0.18
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	2.25	1.58	0.67	0.67
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.80	1.18	-0.38	-0.38
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	4.83	2.73	2.10	2.10
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.03	8.62	0.40	0.40
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	7.90	6.62	1.28	1.28
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.71	1.35	-0.64	-0.64
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.20	6.59	1.61	1.61
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	6.77	7.82	-1.05	-1.05
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	4.99	3.36	1.62	1.62
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	4.74	5.06	-0.32	-0.32
FORTUM1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.59	1.65	-0.06	-0.06
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.63	0.04	0.04
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.00	0.00
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.88	1.64	0.23	0.23
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.22	0.12	0.12
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.25	-0.02	-0.02
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.20	0.07	0.07
AVAADA1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.62	0.36	0.36
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.18	0.34	0.34
ADY2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.18	0.34	0.34
ADY13_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.18	0.34	0.34
ADY3_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.26	1.50	-0.23	-0.23
ADY6_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.26	1.50	-0.23	-0.23

ADY10_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.18	0.34	0.34
AZURE_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.45	0.04	0.04
FORTUM2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.28	0.88	0.41	0.41
AVAADA2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.45	0.48	0.48
KREDL_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.21	0.04	0.04
AYANA_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	0.99	1.17	-0.18	-0.18
SPRNG_NPKUNTA	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.94	0.36	0.36
SPRING_PUGALUR	0.00	0.00	0.00	0.00	0.00	0.00	1.45	3.00	-1.55	-1.55
OSTRO Hiriyur	0.00	0.00	0.00	0.00	0.00	0.00	1.35	1.20	0.15	0.15
RSTPS_FSPP	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.50	0.05	0.05
GRT_JPL	0.00	0.00	0.00	0.00	0.00	0.00	2.02	1.89	0.13	0.13
NTPC STATIONS-ER	0.00	0.00	0.00	98.93	0.00	-98.93	87.62	50.13	37.49	-61.43
MAITHON POWER LTD	0.00	0.00	0.00	0.00	0.00	0.00	3.46	7.69	-4.23	-4.23
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	17.08	6.87	10.21	10.21
ADHUNIK POWER LTD	154.12	0.00	-154.12	14.91	0.00	-14.91	5.46	1.26	4.21	-164.82
CHUZACHEN HEP	0.00	0.00	0.00	10.39	0.00	-10.39	0.68	1.90	-1.21	-11.60
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.29	1.13	-0.83	-0.83
GMR KAMALANGA	1.52	0.00	-1.52	1.20	0.00	-1.20	4.21	0.23	3.98	1.25
JITPL	214.37	0.00	-214.37	43.23	0.00	-43.23	4.47	0.78	3.69	-253.91
TEESTA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.01	9.37	-9.36	-9.36
DAGACHU	87.04	0.00	-87.04	0.00	0.00	0.00	26.87	0.32	26.54	-60.50
JORETHANG	73.31	0.00	-73.31	1.43	0.00	-1.43	7.29	0.01	7.27	-67.47
NEPAL(NVVN)	0.00	0.00	0.00	235.59	0.00	-235.59	14.16	6.43	7.73	-227.86
BANGLADESH	0.00	107.74	107.74	0.00	0.00	0.00	2.83	0.74	2.09	109.83
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	-0.04	-0.04
TEESTA STG3	652.76	0.00	-652.76	0.00	0.00	0.00	12.08	0.73	11.35	-641.41
DIKCHU HEP	62.45	0.00	-62.45	4.86	0.00	-4.86	1.90	1.26	0.63	-66.67
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.04	0.03	0.03
TASHIDENG HEP	74.62	0.00	-74.62	1.65	0.00	-1.65	3.46	1.83	1.64	-74.63
BRBCL,NABINAGAR	0.00	0.00	0.00	0.00	0.00	0.00	5.56	6.29	-0.72	-0.72
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	4.07	1.08	2.98	2.98
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	158.17	0.69	157.48	157.48
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	152.67	-152.67	-152.67
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.25	16.72	-16.47	-16.47
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	4.14	28.09	-23.95	-23.95
RONGNICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.55	-0.27	-0.27
NTPC STATIONS-NER	0.00	0.00	0.00	0.00	0.00	0.00	9.95	2.46	7.48	7.48
NEEPCO STATIONS	0.00	0.00	0.00	220.19	0.00	-220.19	1.34	14.64	-13.29	-233.49
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.11	1.56	-0.45	-0.45
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.14	-0.09	-0.09
ONGC PALATANA	0.00	0.00	0.00	19.10	0.00	-19.10	0.53	1.17	-0.64	-19.74
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.32	-0.05	-0.05
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.86	-0.43	-0.43

Source: NLDC

* in case of a state, the entities which are "selling" also include generators connected to state grid and the entities which are "buying" also include open access consumers.

** (-) indicates sale and (+) indicates purchase.

*** Total net includes net of transactions through bilateral, power exchange and DSM

Table-29: VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, JULY 2022					
Sr. No.	Details of REC Transactions	IEX		PXIL	
		Solar	Non-Solar	Solar	Non-Solar
A	Volume of Buy Bid	285203	307950	24754	176701
B	Volume of Sell Bid	1426327	2156822	446062	840005
C	Ratio of Buy Bid to Sell Bid Volume	0.20	0.14	0.06	0.21
D	Market Clearing Volume (MWh)	167174	307950	24754	176701
E	Weighted average Market Clearing Price (₹/MWh)	1100	1000	1200	1000

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

Table-30: VOLUME AND PRICE OF CROSS BORDER TRADE THROUGH DAY AHEAD MARKET AT IEX, JULY 2022						
Sr. No.	Neighbouring Country	Volume (MU)			Weighted Average Price (₹/kWh)	
		Sale	Purchase	Net*	Sale	Purchase
1	Nepal	235.59	19.39	-216.20	5.37	4.29
2	Bhutan	-	-	-	-	-

Source: IEX
* Net indicates difference of volume purchased and sold by the respective neighbouring country
Note: No Cross Border transactions were recorded in DAM at PXIL and HPX