

Monthly Report on Short-term Transactions of Electricity in India

January, 2020



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Abbreviations

Abbreviation	Expanded Version
ABSP_ANTP	Acme Bhiwadi Solar Power Private Limited, Anantpur
ACBIL	ACB (India) Limited
ACP	Area Clearing Price
ACV	Area Clearing Volume
ACME_SLR	ACME Solar Power Project
ACME_RUMS	Acme Rewa Ultra Mega Solar Project
ADY1_PVGD	Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park
ADY13_PVGD	Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park
ADY2_PVGD	Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park
AGEMPL BHUJ	Adani Green Energy (MP) Ltd., Bhuj
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
ARINSUM_RUMS	Solenergi Rewa Ultra Mega Solar Project
ARS_PVGD	ACME REWARI Solar Power Pvt Ltd.
AVAADA_PVGD	Avaada Solar Energy Private Ltd., Pavagada
AZURE_ANTP	Azure Power, Anantpur
AZURE_SLR	Azure Power Solar Power Project
AZURE34_SLR	Azure Power 34 Pvt. Ltd. Solar Power Project
BALCO	Bharat Aluminum Company Limited
BARC	Bhabha Atomic Research Centre
BBMB	Bhakra Beas Management Board
BETAM_TCN	Betam Wind Energy Private Limited, Tuticorin
BHADRAVATHI HVDC	Bhadravathi High Voltage Direct Current Link
BRBCL	Bhartiya Rail Bijlee Company Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGPL	Coastal Gujarat Power Limited
CHUKHA HEP	Chhukha Hydroelectric Project, Bhutan
CHUZACHEN HEP	Chuzachen Hydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
COASTGEN	Coastal Energen Private Limited
DAGACHU	Dagachhu Hydro Power Corporation
DB POWER	Diligent Power Pvt. Ltd.
DCPP	Donga Mahua Captive Power Plant
DGEN MEGA POWER	DGEN Mega Power Project
DHARIWAL POWER	Dhariwal Power Station
DIKCHU HEP	Dikchu Hydro-electric Project, Sikkim
DOYANG HEP	Doyang Hydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EMCO	EMCO Energy Limited
ESSAR POWER	Essar Power Limited
ESSAR STEEL	Essar Steel Ltd
FORTUM_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada
FRV_ANTP	Fotowatio Renewable Ventures, Anantapur
FRV_NPK	Fotowatio Renewable Ventures, NP Kunta
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.
HVDC ALPD	Alipurduar High Voltage Direct Current Link
HVDC CHAMPA	Champa-Kurukshetra High Voltage Direct Current Link
HVDC PUS	Pasauli High Voltage Direct Current Link
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
KSK MAHANADI	KSK Mahanadi Power Ltd
KURICHU HEP	Kurichhu Hydro-electric Power Station, Bhutan
LANKO_AMK	Lanco Amarkantak Power Private Limited
LANKO BUDHIL	Lanco Budhil Hydro Power Private Limited
LANKO KONDAPALLY	Lanco Kondapally Power Private Limited
LOKTAK	Loktak Power Project
MAHINDRA_RUMS	Mahindra Rewa Ultra Mega Solar Project
MAHOBASL	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
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_TCN	Mytrah Energy (India) Private Limited, Tuticorin
MUs	Million Units
NAPP	Narora Atomic Power Plant
NEEPCO	North Eastern Electric Power Corporation Limited
NEP	Nepal
NFL	National Fertilisers Limited
NHPC STATIONS	National Hydro Electric Power Corporation Ltd. Stations
NJPC	Nathpa Jhakri Hydroelectric Power Station
NLC	Neyveli Lignite Corporation Limited
NLDC	National Load Dispatch Centre
NPGC	Nabinagar Power Generating Company (Pvt.) Limited
NSPCL	NTPC - SAIL Power Company Private Limited
NTECL Vallur	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
RENEW_BHACHAU	ReNew Power Limited, Bhachau
RENEW_PVGD	ReNew Wind Energy (TN2) Private Limited
RENEW_SLR	Renew Solar
RENEW_SLR_BKN	Renew Solar Bikaner
RGPPL	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Dispatch Centre
RTC	Round The Clock
Sasan UMPP	Sasan Ultra Mega Power Project
SB_SLR	Soft Bank Solar
SBG CLEANTECH_SLR	SBG Cleantech Ltd
SBG_NPK	SB Energy Solar Private Limited, NP Kunta
SBG_PVGD	SB Energy Solar Private Limited, Pavagada
SEMBCORP	Sembcorp Gayatri Power Ltd
SHREE CEMENT	Shree Cement Limited
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SPECTRUM	Spectrum Power Generation Ltd
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
THERMAL POWERTECH	Thermal Powertech Corporation India Limited
URI-II	Uri-II Hydropower Project
VINDHYACHAL HVDC	Vindhyachal High Voltage Direct Current Link
YARROW_PVGD	Yarrow Infra Structure Private Ltd

Introduction

A well-functioning electricity market requires an effective market monitoring process. As part of the market monitoring process, the monthly report on short-term transactions of electricity, is being prepared and posted on the website of CERC since August 2008. Here, “short-term transactions of electricity” refers to the contracts of less than one year period, for electricity transacted (inter-State) through inter-State Trading Licensees and directly by the Distribution Licensees, Power Exchanges (Indian Energy Exchange Ltd (IEX) and Power Exchange India Ltd (PXIL), and Deviation Settlement Mechanism (DSM). The objectives of the report are: (i) to observe the trends in volume and price of the short-term transactions of electricity; (ii) to analyse competition among the market players; (iii) to analyse effect of congestion on volume of electricity transacted through power exchanges; (iv) to analyse bilateral contracts executed by traders; (v) to provide information on volume and price of Renewable Energy Certificates (RECs) transacted through power exchanges; and (vi) to disclose/disseminate all relevant market information. The details of the report for the month of **January, 2020** are as under:

I: Volume of Short-term Transactions of Electricity

During January 2020, total electricity generation excluding generation from renewable and captive power plants in India was 102836.83 MUs (Table-1).

Of the total electricity generation, 10703.64 MUs (10.41%) was transacted through short-term, comprising of 4105.01 MUs (3.99%) through bilateral (through traders and term-ahead contracts on power exchanges and directly between distribution companies), followed by 4791.71 MUs (4.66%) through day ahead collective transactions on power exchanges and 1806.92 MUs (1.76%) through DSM (Table-1 & Figure-2).

Of the total short-term transactions, bilateral constitutes 38.35% (17.53% through traders and term-ahead contracts on power exchanges and 20.83% directly between distribution companies) followed by 44.77% through day ahead collective transactions on power exchanges and 16.88% through DSM (Table-1 & Figure-1). Daily volume of short-term transactions is shown in Table-17 & Figure-3.

The percentage share of electricity traded by each trading licensee in the total volume of electricity traded by all the trading licensees is provided in Table-2 & Figure-4. The volume of electricity transacted by the trading licensees includes bilateral transactions and the transactions undertaken through power exchanges. There were 35 trading licensees as on January 2020. In January 2020, 24 trading licensees were engaged in short term trading. Top 5 trading licensees had a share of 70.91% in the total volume traded by all the licensees. These are PTC India Ltd., Adani Enterprises Ltd., Kreate Energy (I) Pvt. Ltd., Arunachal Pradesh Power Corporation (P) Ltd. and Manikaran Power Ltd.

Herfindahl-Hirschman Index (HHI) 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 0.1354 for the month of January 2020, which indicates non-concentration of market power (Table-2).

The volume of electricity transacted through IEX and PXIL in the day ahead market was 4790.79 MUs and 0.92 MUs respectively. The volume of total buy bids and sell bids was 5715.91 MUs and 11669.78 MUs respectively in IEX while the same was 4.26 MUs and 130.35 MUs respectively in PXIL. The variation in the volume of buy bids and sell bids placed through power exchanges shows variation in the demand and supply position.

The volume of electricity transacted through IEX and PXIL in the term-ahead market was 271.48 MUs and 28.65 MUs respectively (Table-6 & Table-7).

II: Price of Short-term Transactions of Electricity

(i) *Price of electricity transacted through Traders:* The minimum, maximum and weighted average sale prices have been computed for the electricity transacted through traders and the sale prices were ₹3.01/kWh, ₹5.12/kWh and ₹4.48/kWh respectively (Table-3). The weighted average sale prices were also computed for the transactions during

Round the Clock (RTC) and Off-peak periods separately, and the sale prices were ₹4.46/kWh and ₹4.58/kWh respectively. There were no transactions by traders during Peak periods in the month of January 2020 (Table-4).

(ii) Price of electricity transacted through Power Exchanges: The minimum, maximum and weighted average prices have been computed for the electricity transacted through IEX and PXIL. The minimum, maximum and weighted average prices were ₹1.00/kWh, ₹5.00/kWh and ₹3.03/kWh respectively in IEX and these were ₹2.49/kWh, ₹3.35/kWh and ₹2.85/kWh respectively in PXIL (Table-5).

The price of electricity transacted through IEX and PXIL in the term-ahead market was ₹3.66/kWh and ₹3.06/kWh respectively (Table-6 and Table-7).

(iii) Price of electricity transacted through DSM: The average deviation settlement price was ₹2.93/kWh. The minimum and maximum deviation settlement prices were ₹0.00/kWh and ₹8.00/kWh respectively (Table-8).

The prices of electricity transacted through trading licensees, power exchanges and DSM and their comparison is shown in Table-18, Figure-5 & 6.

III: Trading Margin

As per the CERC (Fixation of Trading Margin) Regulations, 2010, the trading licensees are allowed to charge trading margin upto 7 paise/kWh in case the sale price exceeds ₹3/kWh, and 4 paise/kWh where the sale price is less than or equal to ₹3/kWh. The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.040/kWh.

IV: Volume of Short-term Transactions of Electricity (Regional Entity¹-Wise)

Of the total bilateral transactions, top 5 regional entities sold 40.26% of the volume, and these were Punjab, West Bengal, Delhi, KSK Mahanadi Power Ltd. and Haryana. Top 5

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.

regional entities purchased 58.41% of the volume, and these were Madhya Pradesh, Himachal Pradesh, Andhra Pradesh, Uttarakhand and Rajasthan (Table-9 & 10).

Of the total power exchange transactions, top 5 regional entities sold 42.61% of the volume, and these were Sembcorp Gayatri Power Ltd., Madhya Pradesh, Gujarat, GMR Chhattisgarh Energy Ltd. and Odisha. Top 5 regional entities purchased 54.54% of the volume, and these were Telangana, Gujarat, Maharashtra, Tamil Nadu and Jammu & Kashmir (Table-11 & 12).

Of the total DSM transactions, top 5 regional entities under drew 26.64% of the volume, and these were Neyveli Lignite Corporation Limited, NTPC Station (Western Region), Madhya Pradesh, Rajasthan and Maharashtra (Table-13). Top 5 regional entities overdrew 21.40% of the volume, and these were Rajasthan, Uttar Pradesh, NTPC Station (Northern Region), NTPC Station (Western Region) and Tamil Nadu (Table-14).

Regional entity-wise total volume of net short-term transactions of electricity i.e. volume of net transactions through bilateral, power exchanges and DSM is shown in Table-15 & 19. Top 5 electricity selling regional entities were GMR Chhattisgarh Energy Limited, Sembcorp Gayatri Power Ltd., Punjab, Odisha and KSK Mahanadi Power Ltd. Top 5 electricity purchasing regional entities were Telangana, Tamil Nadu, Andhra Pradesh, Himachal Pradesh and Madhya Pradesh.

V: Congestion² on Inter-State Transmission Corridor for Day-Ahead Market on Power Exchanges

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 step 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

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

the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”³.

In the month of January 2020, congestion only occurred in IEX. The details of congestion are shown in Table-16. 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, the volume of electricity that could not be cleared in IEX due to congestion was 0.51% of the unconstrained cleared volume. In terms of time, congestion occurred was 5.58% in IEX (Table-16).

VI: Volume and Price of Renewable Energy Certificates (RECs)

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.

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.

The details of REC transactions for the month of January, 2020 are shown in Table-20. The market clearing volume of solar RECs transacted on IEX and PXIL were 39413 and 36807 respectively and the weighted average market clearing price of these RECs

³“ Market Splitting” is a mechanism adopted by Power Exchange 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.

was ₹2400/MWh in IEX and ₹2400/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 323647 and 170837 respectively and the weighted average market clearing price of these RECs was ₹2200/MWh in IEX and ₹2100/MWh in PXIL.

The gap between the volume of buy and sell bids of RECs placed through power exchanges shows about the variation in demand for both solar and non-solar RECs. For Solar RECs, the ratio of buy bids to sell bids was 26.72 and 14.11 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids was 2.15 and 6.00 in IEX and PXIL respectively.

VII: Inferences:

- The percentage of short-term transactions of electricity to total electricity generation was 10.41%.
- Of the total short-term transactions, bilateral constitutes 38.35% (17.53% through traders and term-ahead contracts on power exchanges and 20.83% directly between distribution companies) followed by 44.77% through day ahead collective transactions on power exchanges and 16.88% through DSM.
- Top 5 trading licensees had a share of 70.91% in the total volume traded by all the trading licensees.
- The Herfindahl Hirschman Index computed for the volume of electricity traded by trading licensees was 0.1354, indicating non-concentration of market power.
- The weighted average price of electricity transacted through trading licensees was ₹4.48/kWh. The weighted average price of electricity transacted through IEX and PXIL were ₹3.03/kWh and ₹2.85/kWh respectively.
- The average price of electricity transacted through DSM was ₹2.93/kWh.
- The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.040/kWh. The trading margin charged during the month was in line with the Trading Margin regulations.
- Top 5 electricity selling regional entities were GMR Chhattisgarh Energy Limited, Sembcorp Gayatri Power Ltd., Punjab, Odisha and KSK Mahanadi Power Ltd. Top 5 electricity purchasing regional entities were Telangana, Tamil Nadu, Andhra Pradesh, Himachal Pradesh and Madhya Pradesh.
- During the month of January 2020, the volume of electricity that could not be cleared in IEX due to congestion was 0.51% of the unconstrained cleared volume. In terms of time, congestion occurred was 5.58% in IEX. PXIL did not witness any congestion.

- The market clearing volume of solar RECs transacted on IEX and PXIL were 39413 and 36807 respectively and the weighted average market clearing price of these RECs was ₹2400/MWh in IEX and ₹2400/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 323647 and 170837 respectively and the weighted average market clearing price of these RECs was ₹2200/MWh in IEX and ₹2100/MWh in PXIL.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), JANUARY 2020				
Sr. No	Short-term transactions	Volume (MUs)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	4105.01	38.35	3.99
	(i) Through Traders and PXs	1875.95	17.53	1.82
	(ii) Direct	2229.06	20.83	2.17
2	Through Power Exchanges	4791.71	44.77	4.66
	(i) IEX	4790.79	44.76	4.66
	(ii) PXIL	0.92	0.01	0.001
3	Through DSM	1806.92	16.88	1.76
	Total	10703.64	-	10.41
	Total Generation	102836.83	-	-

Source: NLDC

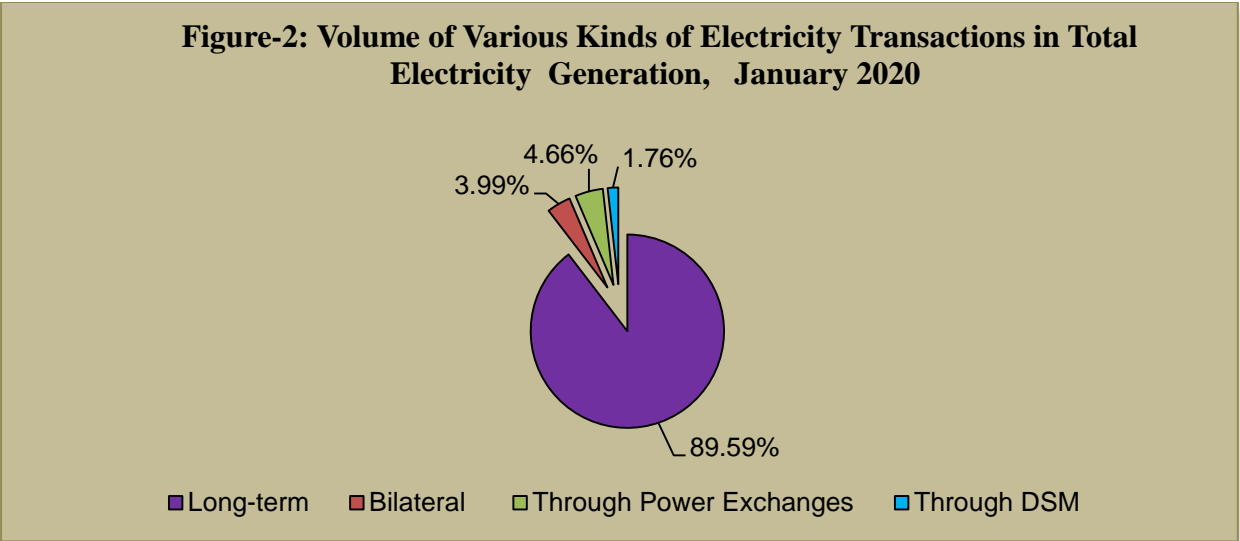
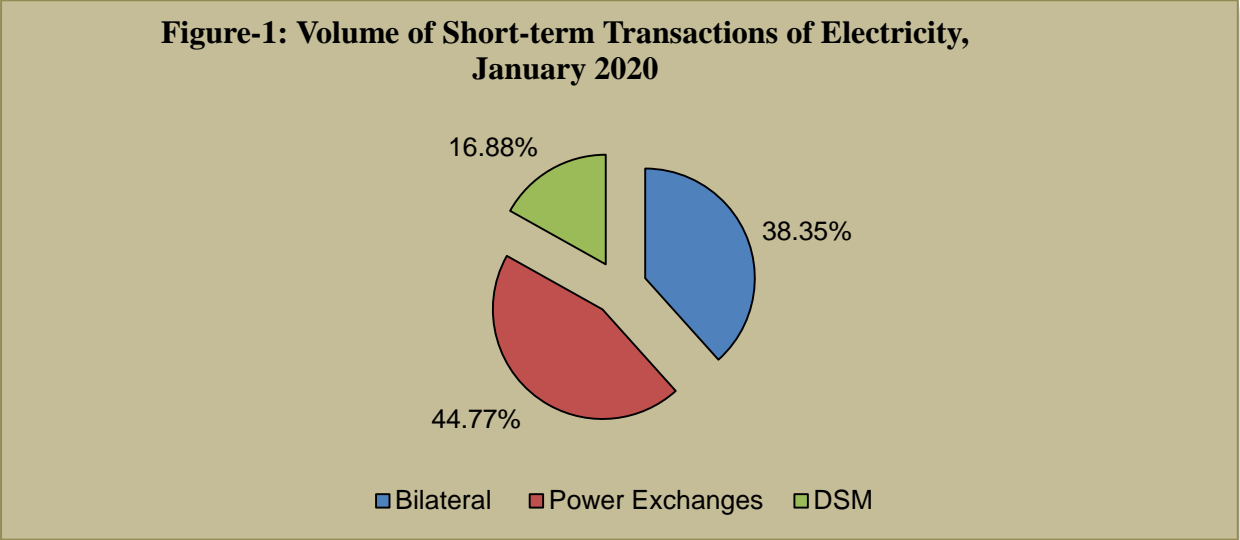


Figure-3: Volume of Short-term Transactions of Electricity, January 2020 (Day-wise)

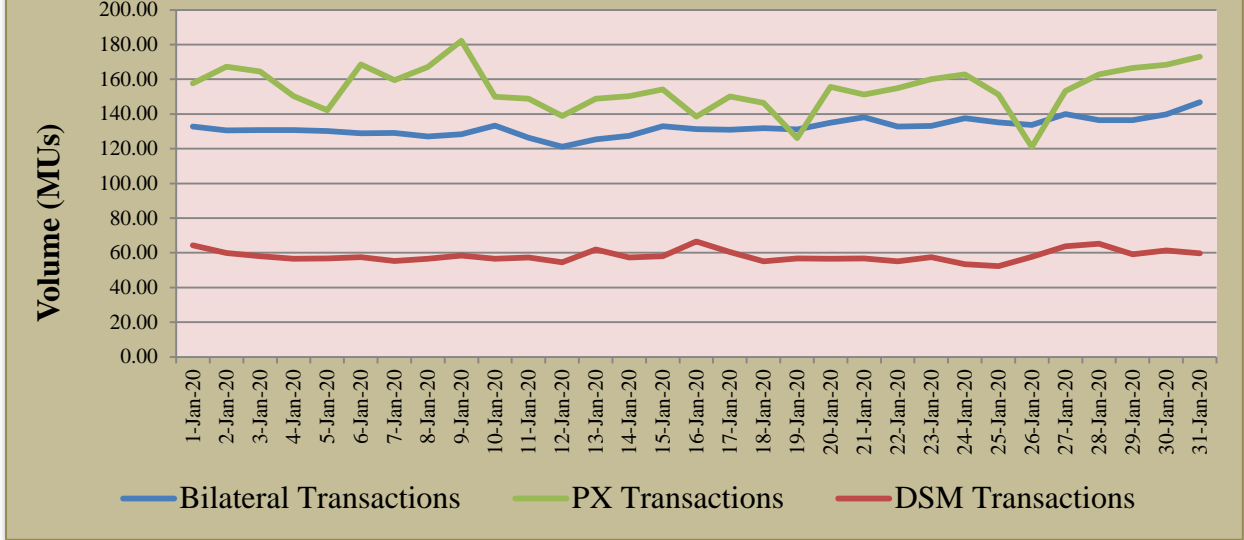


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, JANUARY 2020			
Sr.No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	24.02	0.0577
2	Adani Enterprises Ltd.	20.83	0.0434
3	Kreate Energy (I) Pvt. Ltd.	11.00	0.0121
4	Arunachal Pradesh Power Corporation (P) ltd	7.56	0.0057
5	Manikaran Power Ltd.	7.51	0.0056
6	Tata Power Trading Company (P) Ltd.	6.23	0.0039
7	NHPC Limited	4.94	0.0024
8	Jaiprakash Associates Ltd.	4.48	0.0020
9	GMR Energy Trading Ltd.	3.33	0.0011
10	NTPC Vidyut Vyapar Nigam Ltd.	2.55	0.0007
11	Knowledge Infrastructure Systems (P) Ltd	2.08	0.0004
12	Instinct Infra & Power Ltd.	1.09	0.0001
13	National Energy Trading & Services Ltd.	0.93	0.0001
14	Essar Electric Power Development Corp. Ltd.	0.82	0.0001
15	JSW Power Trading Company Ltd	0.58	0.0000
16	Gita Power & Infrastructure Private Limited	0.42	0.0000
17	Shree Cement Ltd.	0.41	0.0000
18	RPG Power Trading Company Ltd.	0.36	0.0000
19	Abja Power Private Limited	0.28	0.0000
20	Statkraft Markets Pvt. Ltd.	0.26	0.0000
21	IPCL Power Trading Pvt. Ltd.	0.14	0.0000
22	Customized Energy Solutions India (P) Ltd.	0.13	0.0000
23	Phillip Commodities India (P) Ltd.	0.04	0.0000
24	NLC India Ltd.	0.005	0.0000
TOTAL		100.00%	0.1354
Top 5 trading licensees		70.91%	
<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>			

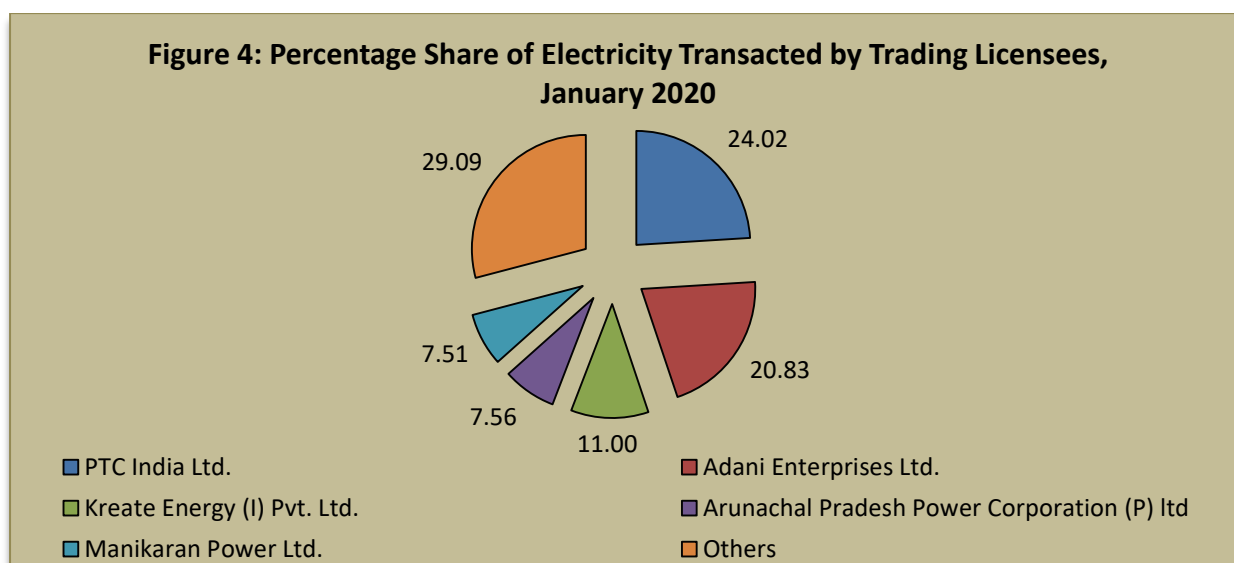


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, JANUARY 2020		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	3.01
2	Maximum	5.12
3	Weighted Average	4.48

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), JANUARY 2020		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	4.46
2	PEAK	-
3	OFF PEAK	4.58

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED THROUGH POWER EXCHANGES, JANUARY 2020			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	1.00	2.49
2	Maximum	5.00	3.35
3	Weighted Average	3.03	2.85

Source: Information submitted by IEX and PXIL

Table-6: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, JANUARY 2020			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	44.46	3.71
2	Day Ahead Contingency Contracts	117.05	3.56
3	Daily Contracts	98.40	3.85
4	Weekly Contracts	11.58	2.93
	Total	271.48	3.66

Source: IEX

Table-7: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, JANUARY 2020			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	13.03	3.18
2	Any Day(s) Contracts	15.62	2.96
3	Weekly Contracts	0.00	0.00
	Total	28.65	3.06

Source: PXIL

Table-8: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, JANUARY 2020		
Sr.No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	2.93

Source: NLDC

Figure-5: Price of Short-term Transactions of Electricity, January 2020

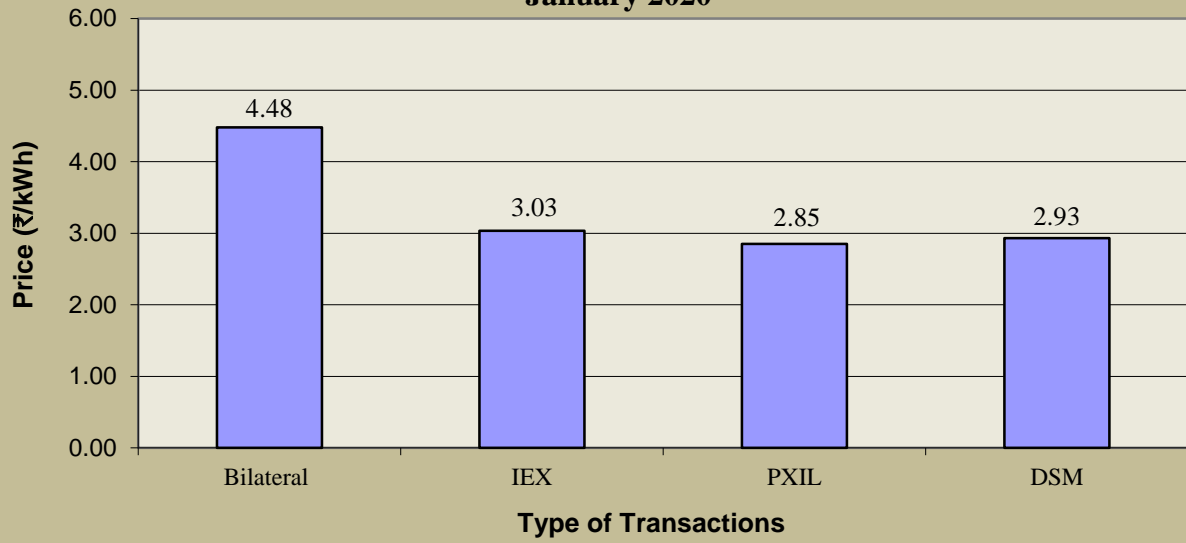
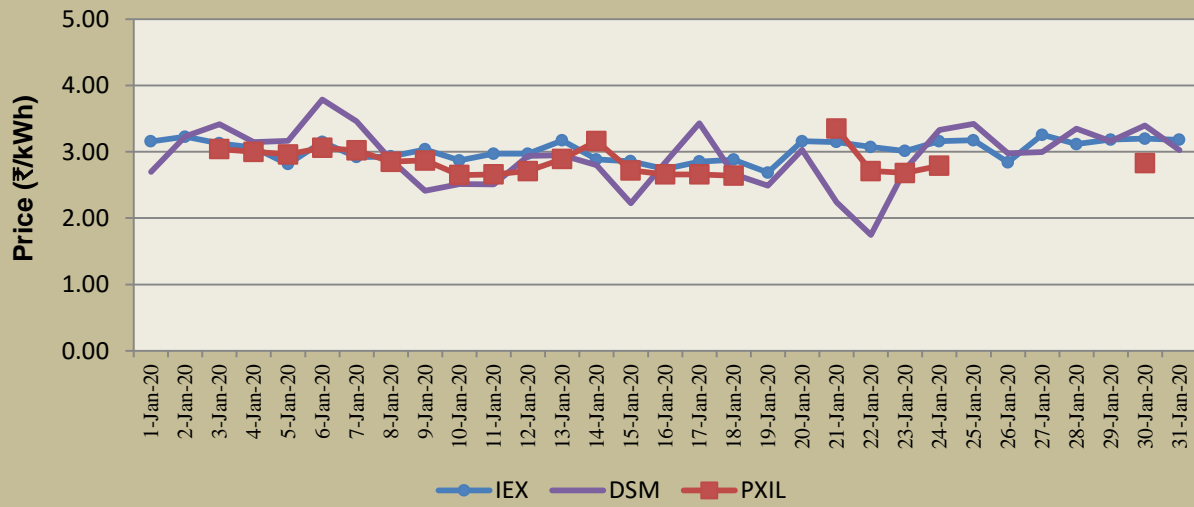


Figure-6: Price of Short-term Transactions of Electricity, January 2020 (Day-wise)



Note: In PXIL, no transactions were recorded on 1st - 2nd, 19th - 20th, 25th - 29th and 31st January 2020

Table-9: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, JANUARY 2020		
Name of the Entity	Volume of Sale (MUs)	% of Volume
PUNJAB	495.92	11.94
WEST BENGAL	306.91	7.39
DELHI	303.04	7.30
KSK MAHANADI	287.60	6.93
HARYANA	278.40	6.70
UTTAR PRADESH	270.80	6.52
CHHATTISGARH	234.97	5.66
GMR CHATTISGARH	226.43	5.45
ESSAR POWER	179.71	4.33
ODISHA	153.27	3.69
DVC	148.97	3.59
SHREE CEMENT	144.13	3.47
ADHUNIK POWER LTD	139.36	3.36
GUJARAT	129.47	3.12
DB POWER	93.32	2.25
THERMAL POWERTECH	93.19	2.24
BIHAR	93.09	2.24
JITPL	81.22	1.96
IL&FS	73.75	1.78
MP	54.85	1.32
KARNATAKA	44.09	1.06
RAJASTHAN	43.56	1.05
GMR KAMALANGA	37.16	0.89
JAYPEE NIGRIE	33.68	0.81
ONGC PALATANA	33.48	0.81
TELANGANA	22.53	0.54
SKS POWER	20.89	0.50
DAGACHU	19.32	0.47
TAMIL NADU	18.46	0.44
J & K	17.74	0.43
BALCO	10.57	0.25
MAHARASHTRA	9.55	0.23
HIMACHAL PRADESH	8.91	0.21
ANDHRA PRADESH	8.59	0.21
CHUZACHEN HEP	7.64	0.18
JHABUA POWER_MP	7.32	0.18
LANKO_AMK	5.30	0.13
GOA	4.81	0.12
TRN ENERGY	3.78	0.09
JINDAL POWER	3.05	0.07
MEGHALAYA	1.71	0.04
ACBIL	1.14	0.03
NTPC STATIONS-NER	0.80	0.02
NTPC STATIONS-NR	0.20	0.00
NTPC STATIONS-ER	0.12	0.00
Total	4152.80	100.00
Volume Sold by top 5 Regional Entities	1671.87	40.26

Table-10: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, JANUARY 2020

Name of the Entity	Volume of Purchase (MUs)	% of Volume
MP	1011.78	24.64
HIMACHAL PRADESH	504.51	12.29
ANDHRA PRADESH	332.59	8.10
UTTARAKHAND	275.62	6.71
RAJASTHAN	273.46	6.66
NEPAL(NVVN)	184.94	4.50
ESSAR STEEL	181.03	4.41
TELANGANA	179.95	4.38
WEST BENGAL	162.88	3.97
JHARKHAND	144.38	3.52
BIHAR	119.68	2.92
GUJARAT	113.11	2.76
TAMIL NADU	103.80	2.53
CHHATTISGARH	78.86	1.92
UTTAR PRADESH	71.30	1.74
MANIPUR	63.08	1.54
ASSAM	59.38	1.45
GOA	56.92	1.39
DELHI	44.47	1.08
DADRA & NAGAR HAVELI	41.70	1.02
MEGHALAYA	30.16	0.73
HARYANA	24.26	0.59
MAHARASHTRA	19.51	0.48
ARUNACHAL PRADESH	9.60	0.23
SIKKIM	6.48	0.16
KERALA	4.26	0.10
NAGALAND	4.08	0.10
KARNATAKA	1.28	0.03
PUNJAB	1.15	0.03
ODISHA	0.67	0.02
DVC	0.10	0.00
BARC	0.03	0.00
KERALA	0.63	0.02
TOTAL	4105.64	100.00
Volume Purchased by top 5 Regional Entities	2397.96	58.41

Table-11: VOLUME OF ELECTRICITY SOLD THROUGH POWER EXCHANGES, JANUARY 2020

Name of the Entity	Volume of Sale (MUs)	% of Volume
SEBPCORP	527.61	11.01
MP	493.24	10.29
GUJARAT	426.61	8.90
GMR CHATTISGARH	374.35	7.81
ODISHA	219.90	4.59
MB POWER	211.68	4.42
RAJASTHAN	200.41	4.18
JAYPEE NIGRIE	171.66	3.58
UTTAR PRADESH	162.55	3.39
JINDAL POWER	139.26	2.91
DB POWER	138.10	2.88
ASSAM	136.42	2.85
HIMACHAL PRADESH	130.85	2.73
TEESTA STG3	121.25	2.53
CHHATTISGARH	119.39	2.49
SKS POWER	115.42	2.41
DELHI	96.45	2.01
THERMAL POWERTECH	87.73	1.83
NLC	85.72	1.79
JITPL	63.99	1.34
SPECTRUM	59.70	1.25
WEST BENGAL	50.68	1.06
KARNATAKA	48.98	1.02
MARUTI COAL	48.73	1.02
TRIPURA	46.71	0.97
ESSAR POWER	45.70	0.95
HARYANA	37.97	0.79
JHARKHAND	36.42	0.76
NTPC STATIONS-WR	34.75	0.73
BIHAR	31.82	0.66
GOA	31.80	0.66
JHABUA POWER_MP	28.89	0.60
MANIPUR	21.81	0.46
ANDHRA PRADESH	20.22	0.42
MAHARASHTRA	18.77	0.39
ACBIL	18.67	0.39
UTTARAKHAND	17.72	0.37
AD HYDRO	13.37	0.28
KARCHAM WANGTOO	13.30	0.28
JORETHANG	12.10	0.25
IL&FS	11.48	0.24
SAINJ HEP	11.37	0.24
TASHIDENG HEP	10.78	0.23
NTPC STATIONS-ER	9.84	0.21
SIKKIM	9.31	0.19
NTPC STATIONS-NR	8.38	0.17
MIZORAM	7.90	0.16
NTPC STATIONS-SR	7.36	0.15
DIKCHU HEP	6.98	0.15
TELANGANA	5.91	0.12
SHREE CEMENT	5.82	0.12

CHANDIGARH	5.67	0.12
TAMIL NADU	5.66	0.12
DVC	3.69	0.08
NTPC STATIONS-NER	3.42	0.07
GMR KAMALANGA	3.41	0.07
KERALA	3.35	0.07
ONGC PALATANA	2.88	0.06
ARUNACHAL PRADESH	2.26	0.05
ADHUNIK POWER LTD	1.28	0.03
CHUZACHEN HEP	1.20	0.03
EMCO	0.82	0.02
LANCO BUDHIL	0.66	0.01
J & K	0.61	0.01
BRBCL,NABINAGAR	0.40	0.01
DHARIWAL POWER	0.22	0.00
BALCO	0.20	0.00
NTPL	0.16	0.003
DADRA & NAGAR HAVELI	0.01	0.000
Total	4791.71	100.00
Volume sold by top 5 Regional Entities	2041.72	42.61

Table-12: VOLUME OF ELECTRICITY PURCHASED THROUGH POWER EXCHANGES, JANUARY 2020		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
TELANGANA	920.41	19.21
GUJARAT	525.95	10.98
MAHARASHTRA	435.65	9.09
TAMIL NADU	382.14	7.97
J & K	349.19	7.29
DELHI	311.38	6.50
RAJASTHAN	303.42	6.33
BIHAR	206.79	4.32
PUNJAB	152.99	3.19
HARYANA	139.41	2.91
CHHATTISGARH	134.38	2.80
UTTAR PRADESH	133.27	2.78
ANDHRA PRADESH	130.78	2.73
KARNATAKA	105.03	2.19
UTTARAKHAND	98.95	2.07
WEST BENGAL	88.83	1.85
DADRA & NAGAR HAVELI	87.79	1.83
KERALA	63.38	1.32
DAMAN AND DIU	42.05	0.88
HIMACHAL PRADESH	38.61	0.81
ASSAM	33.27	0.69
MEGHALAYA	30.41	0.63
ODISHA	28.18	0.59
CHANDIGARH	14.81	0.31
JHARKHAND	12.67	0.26
MP	9.36	0.20
GOA	7.12	0.15
ESSAR STEEL	3.19	0.07
NAGALAND	1.62	0.03
MANIPUR	0.40	0.01
ARUNACHAL PRADESH	0.28	0.01
TOTAL	4791.71	100.00
Volume purchased by top 5 Regional Entities	2613.34	54.54

Table-13: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, JANUARY 2020

Name of the Entity	Volume of Under drawal (MUs)	% of Volume
NLC	132.77	6.72
NTPC STATIONS-WR	128.88	6.52
MP	102.44	5.18
RAJASTHAN	83.30	4.22
MAHARASHTRA	78.90	3.99
KARNATAKA	77.81	3.94
UTTAR PRADESH	77.15	3.90
NTPC STATIONS-NR	72.01	3.64
TELANGANA	69.75	3.53
J & K	68.58	3.47
GUJARAT	68.23	3.45
NHPC STATIONS	67.35	3.41
SASAN UMPP	59.66	3.02
PUNJAB	50.19	2.54
BIHAR	47.71	2.42
CHHATTISGARH	45.55	2.31
TAMIL NADU	43.31	2.19
ANDHRA PRADESH	38.66	1.96
HARYANA	34.10	1.73
DELHI	32.30	1.63
NTPC STATIONS-ER	27.10	1.37
ODISHA	26.72	1.35
NTPC STATIONS-SR	24.63	1.25
WEST BENGAL	24.04	1.22
DVC	23.33	1.18
ESSAR STEEL	22.72	1.15
HIMACHAL PRADESH	20.70	1.05
GIWEL_BHUJ	20.49	1.04
GOA	18.92	0.96
CHUKHA HEP	18.43	0.93
UTTARAKHAND	17.95	0.91
OSTRO	13.23	0.67
JHARKHAND	12.01	0.61
BBMB	11.01	0.56
PONDICHERRY	10.52	0.53
TRIPURA	10.01	0.51
RENEW_BHACHAU	9.66	0.49
NEEPCO STATIONS	8.93	0.45
BANGLADESH	8.09	0.41
ASSAM	8.02	0.41
BRBCL,NABINAGAR	7.34	0.37
MAITHON POWER LTD	6.91	0.35
NEPAL(NVVN)	6.78	0.34
GIWEL_TCN	6.53	0.33
RAIL	5.92	0.30
KARCHAM WANGTOO	5.46	0.28
JAYPEE NIGRIE	5.31	0.27
CGPL	5.08	0.26
RGPPL (DABHOL)	5.05	0.26
NJPC	4.86	0.25
AZURE_SLR	4.53	0.23
DADRA & NAGAR HAVELI	4.37	0.22
ACME_SLR	4.36	0.22
TEESTA HEP	4.36	0.22

AGEMPL BHUJ	4.34	0.22
RAMPUR HEP	4.07	0.21
MB POWER	4.02	0.20
MAHINDRA_RUMS	3.93	0.20
MYTRAH_TCN	3.84	0.19
INOX_BHUJ	3.82	0.19
RENEW_SLR_BKN	3.75	0.19
ACBIL	3.69	0.19
TATA_SLR	3.59	0.18
NTPC_ANTP	3.56	0.18
CLEAN_SLR	3.52	0.18
ORANGE_TCN	3.51	0.18
CHANDIGARH	3.51	0.18
NPGC	3.50	0.18
TEHRI	3.46	0.18
RAP B	3.43	0.17
ARINSUM_RUMS	3.36	0.17
SBG_PVGD	3.35	0.17
SEMBCORP	3.26	0.17
SIKKIM	3.12	0.16
ADHUNIK POWER LTD	3.10	0.16
LANKO_AMK	3.07	0.16
JINDAL STAGE-II	3.05	0.15
ACME_RUMS	3.03	0.15
AZURE34_SLR	2.98	0.15
MAHOBA_SLR	2.89	0.15
EMCO	2.84	0.14
NTPC STATIONS-NER	2.82	0.14
SB_SLR	2.79	0.14
TRN ENERGY	2.77	0.14
MANGDECHU HEP	2.64	0.13
MANIPUR	2.63	0.13
MIZORAM	2.56	0.13
TATA_ANTP	2.40	0.12
KOTESHWAR	2.38	0.12
KERALA	2.37	0.12
MEGHALAYA	2.32	0.12
BARC	2.17	0.11
COASTGEN	2.04	0.10
JINDAL POWER	2.01	0.10
NTPL	1.99	0.10
BALCO	1.95	0.10
TATA_PVGD	1.93	0.10
NAGALAND	1.88	0.10
NEP	1.81	0.09
ARUNACHAL PRADESH	1.78	0.09
KSK MAHANADI	1.75	0.09
THERMAL POWERTECH	1.73	0.09
RKM POWER	1.65	0.08
GMR CHATTISGARH	1.62	0.08
DHARIWAL POWER	1.54	0.08
PARAM_PVGD	1.52	0.08
AVAADA_PVGD	1.42	0.07
ESSAR POWER	1.33	0.07
ADY2_PVGD	1.27	0.06
TEESTA STG3	1.25	0.06
ABSP_ANTP	1.24	0.06
RANGANADI HEP	1.20	0.06

NSPCL	1.16	0.06
MTPS II	1.14	0.06
LOKTAK	1.06	0.05
FRV_NPK	1.04	0.05
AHSP_ANTP	1.03	0.05
AZURE_ANTP	0.97	0.05
AKSP_ANTP	0.96	0.05
IGSTPS	0.93	0.05
FORTUM_PVGD	0.93	0.05
NETCL VALLUR	0.92	0.05
DB POWER	0.85	0.04
DAMAN AND DIU	0.85	0.04
SKS POWER	0.84	0.04
JITPL	0.81	0.04
KORBA WEST POWER	0.79	0.04
FRV_ANTP	0.76	0.04
JORETHANG	0.75	0.04
ONGC PALATANA	0.71	0.04
BETAM_TCN	0.68	0.03
RANGIT HEP	0.68	0.03
DCPP	0.62	0.03
ADY1_PVGD	0.61	0.03
RENEW_SLR	0.59	0.03
SBG_NPK	0.59	0.03
GMR KAMALANGA	0.56	0.03
LANCO BUDHIL	0.56	0.03
AD HYDRO	0.55	0.03
SAINJ HEP	0.55	0.03
TASHIDENG HEP	0.52	0.03
ARS_PVGD	0.51	0.03
JHABUA POWER_MP	0.49	0.03
YARROW_PVGD	0.46	0.02
CHUZACHEN HEP	0.44	0.02
IL&FS	0.42	0.02
AKS_PVGD	0.38	0.02
DOYANG HEP	0.37	0.02
BHADRAVATHI HVDC	0.35	0.02
PARE HEP	0.34	0.02
RAP C	0.33	0.02
NAPP	0.33	0.02
DIKCHU HEP	0.32	0.02
KURICHU HEP	0.29	0.01
SHREE CEMENT	0.27	0.01
RENEW_PVGD	0.24	0.01
VINDHYACHAL HVDC	0.20	0.01
HVDC PUS	0.18	0.01
NFF	0.15	0.01
HVDC ALPD	0.12	0.01
ADY13_PVGD	0.09	0.004
HVDC CHAMPA	0.05	0.003
DAGACHU	0.02	0.001
TALA HEP	0.00	0.0001
Total	1975.74	100.00
Volume Exported by top 5 Regional Entities	526.29	26.64

**Table-14: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM,
JANUARY 2020**

Name of the Entity	Volume of Over drawal (MUs)	% of Volume
RAJASTHAN	79.86	4.88
UTTAR PRADESH	69.61	4.25
NTPC STATIONS-NR	68.18	4.16
NTPC STATIONS-WR	67.95	4.15
TAMIL NADU	64.99	3.97
TALA HEP	57.10	3.49
GUJARAT	54.88	3.35
KARNATAKA	51.07	3.12
HARYANA	48.37	2.95
KERALA	45.52	2.78
BIHAR	41.09	2.51
MAHARASHTRA	34.35	2.10
NTPC STATIONS-ER	33.31	2.03
J & K	31.18	1.90
TELANGANA	31.17	1.90
ANDHRA PRADESH	29.49	1.80
UTTARAKHAND	28.14	1.72
NTPC STATIONS-SR	28.11	1.72
CGPL	27.54	1.68
MP	27.00	1.65
JHARKHAND	26.47	1.62
HIMACHAL PRADESH	24.78	1.51
WEST BENGAL	24.52	1.50
DVC	23.60	1.44
ODISHA	23.32	1.42
RGPPL (DABHOL)	20.51	1.25
RAP B	19.13	1.17
MEGHALAYA	18.88	1.15
ESSAR STEEL	18.34	1.12
NHPC STATIONS	17.85	1.09
GMR CHATTISGARH	17.38	1.06
KORBA WEST POWER	16.73	1.02
PUNJAB	16.27	0.99
DB POWER	15.28	0.93
GIWEL_BHUI	14.04	0.86
KURICHU HEP	13.57	0.83
DAMAN AND DIU	12.94	0.79
JHABUA POWER_MP	12.72	0.78
CHHATTISGARH	12.56	0.77
DELHI	12.24	0.75
NLC	11.29	0.69
ASSAM	10.22	0.62
GIWEL_TCN	9.83	0.60
GOA	9.42	0.57
ARUNACHAL PRADESH	9.30	0.57
NETCL VALLUR	9.22	0.56
MB POWER	8.93	0.55
ORANGE_TCN	8.84	0.54
MYTRAH_TCN	8.41	0.51
CHANDIGARH	8.40	0.51
GMR KAMALANGA	8.34	0.51
BALCO	8.23	0.50
SHREE CEMENT	7.67	0.47
NTPC STATIONS-NER	7.32	0.45

OSTRO	6.95	0.42
BANGLADESH	6.65	0.41
MAHINDRA_RUMS	6.62	0.40
RENEW_BHACHAU	5.97	0.36
JITPL	5.79	0.35
RAP C	5.72	0.35
TRIPURA	5.65	0.34
ESSAR POWER	5.28	0.32
SIKKIM	5.26	0.32
NPGC	5.20	0.32
IL&FS	5.16	0.31
BRBCL,NABINAGAR	4.97	0.30
IGSTPS	4.93	0.30
NEPAL(NVVN)	4.85	0.30
NTPL	4.72	0.29
DAGACHU	4.58	0.28
EMCO	4.31	0.26
DADRA & NAGAR HAVELI	4.23	0.26
AGEMPL BHUJ	4.20	0.26
ARINSUM_RUMS	3.97	0.24
SEMBCORP	3.86	0.24
BBMB	3.68	0.22
ACME_RUMS	3.60	0.22
NAGALAND	3.47	0.21
MAHOBA_SLR	3.35	0.20
RENEW_SLR_BKN	3.22	0.20
TEESTA STG3	2.98	0.18
THERMAL POWERTECH	2.94	0.18
SBG_PVGD	2.89	0.18
INOX_BHUJ	2.86	0.17
MIZORAM	2.80	0.17
MANGDECHU HEP	2.74	0.17
MTPS II	2.73	0.17
NAPP	2.59	0.16
MAITHON POWER LTD	2.59	0.16
CLEAN_SLR	2.59	0.16
JINDAL STAGE-II	2.57	0.16
MANIPUR	2.49	0.15
AZURE_SLR	2.49	0.15
SB_SLR	2.48	0.15
KAPP 3&4	2.43	0.15
CHUKHA HEP	2.40	0.15
AZURE34_SLR	2.33	0.14
BETAM_TCN	2.32	0.14
ADHUNIK POWER LTD	2.27	0.14
NTPC_ANTP	2.25	0.14
NEP	2.17	0.13
KARCHAM WANGTOO	2.14	0.13
TATA_SLR	2.13	0.13
COASTGEN	2.09	0.13
RAIL	2.09	0.13
PONDICHERRY	2.09	0.13
NJPC	2.00	0.12
ACME_SLR	1.97	0.12
TEHRI	1.94	0.12
ACBIL	1.92	0.12
NSPCL	1.79	0.11
TASHIDENG HEP	1.69	0.10

JORETHANG	1.65	0.10
SBG_NPK	1.62	0.10
KSK MAHANADI	1.59	0.10
KOTESHWAR	1.56	0.09
RANGANADI HEP	1.37	0.08
JINDAL POWER	1.35	0.08
DCPP	1.20	0.07
SKS POWER	1.05	0.06
RENEW_SLR	0.96	0.06
TATA_ANTP	0.91	0.06
JAYPEE NIGRIE	0.88	0.05
AHSP_ANTP	0.81	0.05
DGEN MEGA POWER	0.80	0.05
SASAN UMPP	0.79	0.05
FRV_ANTP	0.76	0.05
AKSP_ANTP	0.74	0.05
RKM POWER	0.73	0.04
NEEPCO STATIONS	0.69	0.04
FRV_NPK	0.68	0.04
ABSP_ANTP	0.66	0.04
AZURE_ANTP	0.62	0.04
TATA_PVGD	0.59	0.04
LANKO KONDAPALLI	0.58	0.04
AD HYDRO	0.57	0.04
LANKO_AMK	0.54	0.03
TRN ENERGY	0.53	0.03
MEENAKSHI	0.51	0.03
HVDC CHAMPA	0.49	0.03
ONGC PALATANA	0.47	0.03
SIMHAPURI	0.45	0.03
DOYANG HEP	0.36	0.02
LOKTAK	0.36	0.02
RAMPUR HEP	0.35	0.02
PARAM_PVGD	0.31	0.02
TEESTA HEP	0.28	0.02
RANGIT HEP	0.27	0.02
DHARIWAL POWER	0.25	0.02
DIKCHU HEP	0.25	0.02
RENEW_PVGD	0.24	0.01
FORTUM_PVGD	0.23	0.01
LANCO BUDHIL	0.22	0.01
PARE HEP	0.21	0.01
CHUZACHEN HEP	0.17	0.01
AKS_PVGD	0.16	0.01
ARS_PVGD	0.13	0.01
ADY13_PVGD	0.13	0.01
AVAADA_PVGD	0.10	0.01
SAINJ HEP	0.10	0.01
YARROW_PVGD	0.09	0.01
ADY1_PVGD	0.06	0.004
ADY2_PVGD	0.06	0.003
NFF	0.05	0.003
BARC	0.05	0.003
HVDC ALPD	0.04	0.003
BHADRAVATHI HVDC	0.02	0.001
HVDC PUS	0.009	0.001
TOTAL	1638.09	100.00
Volume Imported by top 5 Regional Entities	350.59	21.40

Table-15: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), JANUARY 2020		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	TELANGANA	1033.34
2	TAMIL NADU	483.50
3	ANDHRA PRADESH	425.40
4	HIMACHAL PRADESH	407.43
5	MP	397.62
6	MAHARASHTRA	382.29
7	UTTARAKHAND	367.05
8	RAJASTHAN	329.46
9	J & K	293.44
10	BIHAR	194.93
11	NEPAL(NVVN)	183.01
12	ESSAR STEEL	179.84
13	JHARKHAND	135.08
14	DADRA & NAGAR HAVELI	129.34
15	KERALA	107.44
16	MEGHALAYA	75.41
17	GUJARAT	69.62
18	TALA HEP	57.10
19	DAMAN AND DIU	54.14
20	MANIPUR	41.54
21	CGPL	22.46
22	GOA	17.93
23	KORBA WEST POWER	15.93
24	RAP B	15.70
25	RGPPL (DABHOL)	15.47
26	ARUNACHAL PRADESH	15.14
27	CHANDIGARH	14.03
28	KURICHU HEP	13.28
29	NETCL VALLUR	8.30
30	NAGALAND	7.30
31	RAP C	5.39
32	ORANGE_TCN	5.33
33	MYTRAH_TCN	4.57
34	IGSTPS	4.00
35	GIWEL_TCN	3.30
36	MAHINDRA_RUMS	2.69
37	NTPL	2.56
38	KAPP 3&4	2.43
39	NAPP	2.27
40	NPGC	1.70
41	BETAM_TCN	1.63
42	MTPS II	1.59
43	SBG_NPK	1.03
44	DGEN MEGA POWER	0.80
45	EMCO	0.65
46	NSPCL	0.62
47	ARINSUM_RUMS	0.61
48	DCPP	0.58

49	LANCO KONDAPALLI	0.58
50	ACME_RUMS	0.57
51	MEENAKSHI	0.51
52	MAHOBA_SLR	0.46
53	SIMHAPURI	0.45
54	HVDC CHAMPA	0.44
55	NEP	0.37
56	RENEW_SLR	0.37
57	NTPC STATIONS-NER	0.28
58	RANGANADI HEP	0.17
59	MANGDECHU HEP	0.10
60	COASTGEN	0.05
61	ADY13_PVGD	0.04
62	RENEW_PVGD	0.001
63	FRV_ANTP	-0.01
64	DOYANG HEP	-0.01
65	HVDC ALPD	-0.08
66	NFF	-0.10
67	PARE HEP	-0.13
68	AGEMPL BHUJ	-0.14
69	HVDC PUS	-0.17
70	VINDHYACHAL HVDC	-0.20
71	AKSP_ANTP	-0.22
72	AHSP_ANTP	-0.22
73	AKS_PVGD	-0.23
74	SB_SLR	-0.31
75	BHADRAVATHI HVDC	-0.33
76	AZURE_ANTP	-0.35
77	FRV_NPK	-0.36
78	YARROW_PVGD	-0.37
79	ARS_PVGD	-0.39
80	RANGIT HEP	-0.41
81	SBG_PVGD	-0.46
82	JINDAL STAGE-II	-0.48
83	RENEW_SLR_BKN	-0.53
84	ADY1_PVGD	-0.55
85	ABSP_ANTP	-0.57
86	AZURE34_SLR	-0.65
87	SIKKIM	-0.69
88	FORTUM_PVGD	-0.69
89	LOKTAK	-0.71
90	KOTESHWAR	-0.82
91	RKM POWER	-0.92
92	CLEAN_SLR	-0.93
93	INOX_BHUJ	-0.96
94	LANCO BUDHIL	-1.00
95	ADY2_PVGD	-1.21
96	PARAM_PVGD	-1.21
97	NTPC_ANTP	-1.31
98	AVAADA_PVGD	-1.32
99	TATA_PVGD	-1.34

100	BANGLADESH	-1.43
101	TATA_SLR	-1.45
102	TATA_ANTP	-1.49
103	DHARIWAL POWER	-1.51
104	TEHRI	-1.53
105	AZURE_SLR	-2.04
106	BARC	-2.09
107	ACME_SLR	-2.39
108	BRBCL,NABINAGAR	-2.77
109	NJPC	-2.85
110	RENEW_BHACHAU	-3.69
111	RAMPUR HEP	-3.71
112	NTPC STATIONS-ER	-3.75
113	RAIL	-3.83
114	NTPC STATIONS-SR	-3.88
115	TEESTA HEP	-4.08
116	MAITHON POWER LTD	-4.32
117	BALCO	-4.48
118	TRN ENERGY	-6.03
119	OSTRO	-6.28
120	GIWEL_BHUJ	-6.46
121	DIKCHU HEP	-7.05
122	BBMB	-7.32
123	MIZORAM	-7.67
124	LANKO_AMK	-7.82
125	NEEPCO STATIONS	-8.24
126	PONDICHERRY	-8.43
127	CHUZACHEN HEP	-9.11
128	TASHIDENG HEP	-9.60
129	JORETHANG	-11.20
130	SAINJ HEP	-11.82
131	NTPC STATIONS-NR	-12.40
132	AD HYDRO	-13.35
133	KARNATAKA	-13.50
134	DAGACHU	-14.76
135	CHUKHA HEP	-16.03
136	KARCHAM WANGTOO	-16.62
137	ACBIL	-21.58
138	JHABUA POWER_MP	-23.99
139	GMR KAMALANGA	-32.78
140	ONGC PALATANA	-36.60
141	ASSAM	-41.56
142	MARUTI COAL	-48.73
143	NHPC STATIONS	-49.50
144	TRIPURA	-51.07
145	SASAN UMPP	-58.87
146	SPECTRUM	-59.70
147	DELHI	-63.70
148	IL&FS	-80.49
149	NTPC STATIONS-WR	-95.69
150	WEST BENGAL	-105.39

151	TEESTA STG3	-119.52
152	SKS POWER	-136.10
153	HARYANA	-138.43
154	JITPL	-140.22
155	ADHUNIK POWER LTD	-141.47
156	SHREE CEMENT	-142.55
157	JINDAL POWER	-142.97
158	DVC	-152.29
159	CHHATTISGARH	-174.11
160	THERMAL POWERTECH	-179.71
161	MB POWER	-206.77
162	NLC	-207.19
163	JAYPEE NIGRIE	-209.78
164	DB POWER	-216.98
165	ESSAR POWER	-221.47
166	UTTAR PRADESH	-236.32
167	KSK MAHANADI	-287.76
168	ODISHA	-347.72
169	PUNJAB	-375.70
170	SEMBCORP	-527.01
171	GMR CHATTISGARH	-585.03
* Total volume of net short-term transactions of electricity includes net of transactions of electricity through bilateral, power exchange and UI		
(-) indicates sale and (+) indicates purchase		

Table-16: DETAILS OF CONGESTION IN POWER EXCHANGES, JANUARY 2020			
	Details of Congestion	IEX	PXIL
A	Unconstrained Cleared Volume (MUs)	4815.33	0.92
B	Actual Cleared Volume and hence scheduled (MUs)	4790.79	0.92
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs)	23.34	0.00
D	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs)*	1.20	0.00
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.51%	0.00%
F	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/Total number of hours in the month)	5.58%	0.00%
G	Congestion occurrence (%) time block wise		
	0.00 - 6.00 hours	54.22%	0.00%
	6.00 - 12.00 hours	33.13%	0.00%
	12.00 - 18.00 hours	0.60%	0.00%
	18.00 - 24.00 hours	12.05%	0.00%
* This power could not be cleared due to real time curtailment of 0.3 MU on 05 th January, 0.43 MU on 06 th January, 0.07 MU on 11 th January and 0.25 MU on 13 th January 2020			
Source: IEX & PXIL & NLDC			

Table-17: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), JANUARY 2020						
Date	Bilateral		Power Exchange (Area Clearing Volume [#] of Day Ahead Market)		Deviation Settlement (Over Drawl+Under Generation)	Total Electricity Generation (MU) as given at CEA Website*
	Through Traders and PXs**	Direct	IEX	PXIL		
1-Jan-20	66.42	66.36	157.64	0.00	64.39	3271.85
2-Jan-20	62.59	67.90	167.18	0.00	59.85	3324.93
3-Jan-20	62.66	68.04	164.49	0.04	58.05	3345.99
4-Jan-20	62.56	68.17	150.22	0.02	56.55	3345.51
5-Jan-20	63.33	66.85	142.04	0.08	56.76	3201.30
6-Jan-20	60.45	68.39	168.44	0.07	57.44	3282.17
7-Jan-20	61.22	67.89	159.43	0.06	55.31	3340.78
8-Jan-20	59.13	67.88	167.03	0.03	56.55	3304.84
9-Jan-20	59.18	69.24	182.11	0.04	58.43	3269.05
10-Jan-20	61.79	71.62	149.81	0.04	56.52	3244.02
11-Jan-20	57.66	68.60	148.76	0.04	57.31	3301.08
12-Jan-20	55.60	65.61	138.77	0.04	54.49	3271.75
13-Jan-20	56.91	68.41	148.70	0.05	61.90	3366.66
14-Jan-20	58.22	69.14	150.33	0.03	57.38	3323.56
15-Jan-20	66.76	66.12	154.11	0.04	58.04	3183.71
16-Jan-20	57.44	73.92	138.54	0.04	66.61	3138.89
17-Jan-20	56.29	74.63	150.08	0.04	60.54	3270.93
18-Jan-20	57.08	74.73	146.43	0.04	55.03	3302.85
19-Jan-20	57.44	73.70	126.06	0.00	56.79	3158.97
20-Jan-20	58.71	76.30	155.57	0.00	56.62	3324.79
21-Jan-20	60.63	77.47	151.26	0.03	56.82	3367.56
22-Jan-20	59.18	73.64	154.75	0.08	55.08	3262.06
23-Jan-20	59.44	73.68	160.06	0.03	57.56	3290.10
24-Jan-20	60.26	77.39	162.73	0.09	53.48	3408.00
25-Jan-20	58.95	76.25	151.24	0.00	52.40	3469.74
26-Jan-20	60.13	73.59	121.03	0.00	57.61	3265.94
27-Jan-20	61.81	78.15	153.26	0.00	63.81	3376.24
28-Jan-20	60.40	76.00	162.92	0.00	65.20	3432.34
29-Jan-20	60.16	76.38	166.54	0.00	59.23	3466.32
30-Jan-20	63.20	76.53	168.30	0.03	61.42	3457.74
31-Jan-20	70.36	76.48	172.98	0.00	59.74	3467.16
Total	1875.95	2229.06	4790.79	0.92	1806.92	102836.83

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.

Area Clearing Volume represents the scheduled volume of all the bid areas.

Table-18: PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), JANUARY 2020									
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Under Drawl/Over Drawl from the Grid (DSM)		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	All India Grid		
							Minimum Price	Maximum Price	Average Price**
1-Jan-20	1.90	4.50	3.16	-	-	-	0.00	8.00	2.69
2-Jan-20	1.84	4.50	3.23	-	-	-	0.00	8.00	3.23
3-Jan-20	1.77	4.54	3.13	3.03	3.05	3.04	0.00	8.00	3.42
4-Jan-20	1.55	4.35	3.06	2.85	3.10	3.00	0.00	8.00	3.14
5-Jan-20	1.80	3.80	2.81	2.93	3.10	2.96	0.00	7.67	3.16
6-Jan-20	1.79	4.37	3.15	2.74	3.15	3.06	0.00	8.00	3.79
7-Jan-20	1.70	4.00	2.92	2.85	3.30	3.02	0.00	8.00	3.46
8-Jan-20	1.79	3.75	2.93	2.82	2.91	2.85	0.00	8.00	2.88
9-Jan-20	1.94	3.81	3.03	2.83	2.93	2.87	0.00	6.40	2.41
10-Jan-20	1.00	4.39	2.87	2.59	2.73	2.65	0.00	8.00	2.51
11-Jan-20	1.00	4.50	2.97	2.54	2.85	2.66	0.00	6.75	2.51
12-Jan-20	1.00	4.20	2.97	2.59	2.89	2.71	0.00	7.05	2.94
13-Jan-20	1.60	4.50	3.17	2.70	3.05	2.89	0.00	7.68	2.95
14-Jan-20	1.92	3.74	2.88	3.16	3.16	3.16	0.00	8.00	2.80
15-Jan-20	1.60	3.83	2.86	2.59	2.91	2.72	0.00	5.01	2.23
16-Jan-20	1.00	3.55	2.74	2.51	2.89	2.66	0.00	7.66	2.84
17-Jan-20	1.67	3.67	2.85	2.51	2.89	2.66	0.00	8.00	3.43
18-Jan-20	1.90	3.81	2.88	2.49	2.87	2.64	0.00	5.69	2.66
19-Jan-20	1.91	3.59	2.69	-	-	-	0.00	6.66	2.49
20-Jan-20	1.80	4.30	3.16	-	-	-	0.00	6.43	3.03
21-Jan-20	1.96	4.50	3.15	-	3.35	3.35	0.00	8.00	2.24
22-Jan-20	1.99	4.74	3.07	2.54	3.35	2.71	0.00	4.52	1.74
23-Jan-20	1.89	4.07	3.01	2.55	2.88	2.68	0.00	6.41	2.73
24-Jan-20	1.98	4.60	3.16	2.54	3.10	2.79	0.00	6.75	3.33
25-Jan-20	2.00	5.00	3.17	-	-	-	0.00	8.00	3.42
26-Jan-20	2.18	4.05	2.84	-	-	-	0.00	8.00	2.98
27-Jan-20	1.86	4.70	3.26	-	-	-	0.00	8.00	2.99
28-Jan-20	2.10	4.37	3.12	-	-	-	0.00	7.06	3.35
29-Jan-20	2.00	4.71	3.18	-	-	-	0.00	8.00	3.16
30-Jan-20	1.96	4.90	3.20	2.75	2.94	2.83	0.61	7.69	3.40
31-Jan-20	1.98	4.74	3.18	-	-	-	0.00	7.08	3.02
	1.00[#]	5.00[#]	3.03	2.49[#]	3.35[#]	2.85	0.00[#]	8.00[#]	2.93

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

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

** 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-19: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*- WISE) (MUs), JANUARY 2020										
Name of the Entity	Through Bilateral			Through Power Exchange			Through DSM with Regional Grid			Total Net***
	Sale	Purchase	Net**	Sale	Purchase	Net**	Import (Over Drawl)	Export (Under Drawl)	Net**	
PUNJAB	495.92	1.15	-494.78	0.00	152.99	152.99	16.27	50.19	-33.91	-375.70
HARYANA	278.40	24.26	-254.14	37.97	139.41	101.45	48.37	34.10	14.27	-138.43
RAJASTHAN	43.56	273.46	229.90	200.41	303.42	103.01	79.86	83.30	-3.44	329.46
DELHI	303.04	44.47	-258.57	96.45	311.38	214.93	12.24	32.30	-20.06	-63.70
UP	270.80	71.30	-199.50	162.55	133.27	-29.28	69.61	77.15	-7.54	-236.32
UTTARAKHAND	0.00	275.62	275.62	17.72	98.95	81.24	28.14	17.95	10.19	367.05
H P	8.91	504.51	495.59	130.85	38.61	-92.24	24.78	20.70	4.08	407.43
J & K	17.74	0.00	-17.74	0.61	349.19	348.58	31.18	68.58	-37.41	293.44
CHANDIGARH	0.00	0.00	0.00	5.67	14.81	9.14	8.40	3.51	4.89	14.03
M P	54.85	1011.78	956.93	493.24	9.36	-483.87	27.00	102.44	-75.44	397.62
MAHARASHTRA	9.55	19.51	9.96	18.77	435.65	416.88	34.35	78.90	-44.54	382.29
GUJARAT	129.47	113.11	-16.36	426.61	525.95	99.33	54.88	68.23	-13.35	69.62
CHHATTISGARH	234.97	78.86	-156.11	119.39	134.38	14.99	12.56	45.55	-32.99	-174.11
GOA	4.81	56.92	52.11	31.80	7.12	-24.68	9.42	18.92	-9.51	17.93
DAMAN AND DIU	0.00	0.00	0.00	0.00	42.05	42.05	12.94	0.85	12.09	54.14
DADRA & NAGAR H	0.00	41.70	41.70	0.01	87.79	87.78	4.23	4.37	-0.15	129.34
ANDHRA P	8.59	332.59	324.00	20.22	130.78	110.57	29.49	38.66	-9.17	425.40
KARNATAKA	44.09	1.28	-42.81	48.98	105.03	56.06	51.07	77.81	-26.74	-13.50
KERALA	0.00	4.26	4.26	3.35	63.38	60.04	45.52	2.37	43.15	107.44
TAMIL NADU	18.46	103.80	85.34	5.66	382.14	376.48	64.99	43.31	21.68	483.50
PONDICHERRY	0.00	0.00	0.00	0.00	0.00	0.00	2.09	10.52	-8.43	-8.43
TELANGANA	22.53	179.95	157.42	5.91	920.41	914.50	31.17	69.75	-38.58	1033.34
WEST BENGAL	306.91	162.88	-144.03	50.68	88.83	38.15	24.52	24.04	0.49	-105.39
ODISHA	153.27	0.67	-152.60	219.90	28.18	-191.73	23.32	26.72	-3.39	-347.72
BIHAR	93.09	119.68	26.59	31.82	206.79	174.97	41.09	47.71	-6.63	194.93
JHARKHAND	0.00	144.38	144.38	36.42	12.67	-23.76	26.47	12.01	14.46	135.08
SIKKIM	0.00	6.48	6.48	9.31	0.00	-9.31	5.26	3.12	2.14	-0.69
DVC	148.97	0.10	-148.87	3.69	0.00	-3.69	23.60	23.33	0.27	-152.29
ARUNACHAL P	0.00	9.60	9.60	2.26	0.28	-1.98	9.30	1.78	7.52	15.14
ASSAM	0.00	59.38	59.38	136.42	33.27	-103.14	10.22	8.02	2.20	-41.56
MANIPUR	0.00	63.08	63.08	21.81	0.40	-21.41	2.49	2.63	-0.13	41.54
MEGHALAYA	1.71	30.16	28.44	0.00	30.41	30.41	18.88	2.32	16.56	75.41
MIZORAM	0.00	0.00	0.00	7.90	0.00	-7.90	2.80	2.56	0.23	-7.67
NAGALAND	0.00	4.08	4.08	0.00	1.62	1.62	3.47	1.88	1.60	7.30
TRIPURA	0.00	0.00	0.00	46.71	0.00	-46.71	5.65	10.01	-4.36	-51.07
NTPC STNS-NR	0.20	0.00	-0.20	8.38	0.00	-8.38	68.18	72.01	-3.83	-12.40
NHPC STNS	0.00	0.00	0.00	0.00	0.00	0.00	17.85	67.35	-49.50	-49.50
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.15	-0.10	-0.10
RAIL	0.00	0.00	0.00	0.00	0.00	0.00	2.09	5.92	-3.83	-3.83
NEP	0.00	0.00	0.00	0.00	0.00	0.00	2.17	1.81	0.37	0.37
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.33	2.27	2.27
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	19.13	3.43	15.70	15.70
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	2.00	4.86	-2.85	-2.85
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	1.94	3.46	-1.53	-1.53
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	3.68	11.01	-7.32	-7.32
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	5.72	0.33	5.39	5.39
AD HYDRO	0.00	0.00	0.00	13.37	0.00	-13.37	0.57	0.55	0.02	-13.35
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	4.93	0.93	4.00	4.00
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	1.56	2.38	-0.82	-0.82
KARCHAM WANGTI	0.00	0.00	0.00	13.30	0.00	-13.30	2.14	5.46	-3.32	-16.62
SHREE CEMENT	144.13	0.00	-144.13	5.82	0.00	-5.82	7.67	0.27	7.40	-142.55
LANCO BUDHIL	0.00	0.00	0.00	0.66	0.00	-0.66	0.22	0.56	-0.34	-1.00
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.35	4.07	-3.71	-3.71
SAINJ HEP	0.00	0.00	0.00	11.37	0.00	-11.37	0.10	0.55	-0.45	-11.82
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.59	0.37	0.37
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.49	4.53	-2.04	-2.04
SB_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.48	2.79	-0.31	-0.31

MAHOBA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.35	2.89	0.46	0.46
ACME_SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.97	4.36	-2.39	-2.39
AZURE34_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.33	2.98	-0.65	-0.65
TATA_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.13	3.59	-1.45	-1.45
RENEW_SLR_BKN	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.75	-0.53	-0.53
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.59	3.52	-0.93	-0.93
NTPC STNS-WR	0.00	0.00	0.00	34.75	0.00	-34.75	67.95	128.88	-60.94	-95.69
BHADRAVATHI HV	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.35	-0.33	-0.33
VINDHYACHAL HV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	-0.20	-0.20
JINDAL POWER	3.05	0.00	-3.05	139.26	0.00	-139.26	1.35	2.01	-0.66	-142.97
LANKO_AMK	5.30	0.00	-5.30	0.00	0.00	0.00	0.54	3.07	-2.53	-7.82
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	1.79	1.16	0.62	0.62
ACBIL	1.14	0.00	-1.14	18.67	0.00	-18.67	1.92	3.69	-1.77	-21.58
BALCO	10.57	0.00	-10.57	0.20	0.00	-0.20	8.23	1.95	6.28	-4.48
RGPPL (DABHOL)	0.00	0.00	0.00	0.00	0.00	0.00	20.51	5.05	15.47	15.47
CGPL	0.00	0.00	0.00	0.00	0.00	0.00	27.54	5.08	22.46	22.46
DCPP	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.62	0.58	0.58
EMCO	0.00	0.00	0.00	0.82	0.00	-0.82	4.31	2.84	1.47	0.65
ESSAR STEEL	0.00	181.03	181.03	0.00	3.19	3.19	18.34	22.72	-4.38	179.84
KSK MAHANADI	287.60	0.00	-287.60	0.00	0.00	0.00	1.59	1.75	-0.16	-287.76
ESSAR POWER	179.71	0.00	-179.71	45.70	0.00	-45.70	5.28	1.33	3.95	-221.47
JINDAL STAGE-II	0.00	0.00	0.00	0.00	0.00	0.00	2.57	3.05	-0.48	-0.48
DB POWER	93.32	0.00	-93.32	138.10	0.00	-138.10	15.28	0.85	14.43	-216.98
DHARIWAL POWER	0.00	0.00	0.00	0.22	0.00	-0.22	0.25	1.54	-1.29	-1.51
JAYPEE NIGRIE	33.68	0.00	-33.68	171.66	0.00	-171.66	0.88	5.31	-4.44	-209.78
DGEN MEGA POWE	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.80	0.80
GMR CHATTISGAR	226.43	0.00	-226.43	374.35	0.00	-374.35	17.38	1.62	15.76	-585.03
KORBA WEST POW	0.00	0.00	0.00	0.00	0.00	0.00	16.73	0.79	15.93	15.93
MB POWER	0.00	0.00	0.00	211.68	0.00	-211.68	8.93	4.02	4.91	-206.77
MARUTI COAL	0.00	0.00	0.00	48.73	0.00	-48.73	0.00	0.00	0.00	-48.73
SPECTRUM	0.00	0.00	0.00	59.70	0.00	-59.70	0.00	0.00	0.00	-59.70
JHABUA POWER_M	7.32	0.00	-7.32	28.89	0.00	-28.89	12.72	0.49	12.23	-23.99
SASAN UMPP	0.00	0.00	0.00	0.00	0.00	0.00	0.79	59.66	-58.87	-58.87
TRN ENERGY	3.78	0.00	-3.78	0.00	0.00	0.00	0.53	2.77	-2.25	-6.03
RKM POWER	0.00	0.00	0.00	0.00	0.00	0.00	0.73	1.65	-0.92	-0.92
SKS POWER	20.89	0.00	-20.89	115.42	0.00	-115.42	1.05	0.84	0.21	-136.10
BARC	0.00	0.03	0.03	0.00	0.00	0.00	0.05	2.17	-2.12	-2.09
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	2.43	0.00	2.43	2.43
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.05	0.44	0.44
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	6.62	3.93	2.69	2.69
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.97	3.36	0.61	0.61
OSTRO	0.00	0.00	0.00	0.00	0.00	0.00	6.95	13.23	-6.28	-6.28
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.60	3.03	0.57	0.57
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	5.97	9.66	-3.69	-3.69
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	14.04	20.49	-6.46	-6.46
INOX_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	2.86	3.82	-0.96	-0.96
AGEMPL BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	4.20	4.34	-0.14	-0.14
NTPC STNS-SR	0.00	0.00	0.00	7.36	0.00	-7.36	28.11	24.63	3.48	-3.88
LANKO KONDAPAI	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.58	0.58
SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.45	0.45
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.51	0.51
COASTGEN	0.00	0.00	0.00	0.00	0.00	0.00	2.09	2.04	0.05	0.05
THERMAL POWER T	93.19	0.00	-93.19	87.73	0.00	-87.73	2.94	1.73	1.21	-179.71
IL&FS	73.75	0.00	-73.75	11.48	0.00	-11.48	5.16	0.42	4.74	-80.49
NLC	0.00	0.00	0.00	85.72	0.00	-85.72	11.29	132.77	-121.47	-207.19
SEMBCORP	0.00	0.00	0.00	527.61	0.00	-527.61	3.86	3.26	0.60	-527.01
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	9.22	0.92	8.30	8.30
NTPL	0.00	0.00	0.00	0.16	0.00	-0.16	4.72	1.99	2.72	2.56
AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.81	1.03	-0.22	-0.22
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.96	-0.22	-0.22
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.66	1.24	-0.57	-0.57
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.97	-0.35	-0.35
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.91	2.40	-1.49	-1.49
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.76	-0.01	-0.01

NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	2.25	3.56	-1.31	-1.31
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.83	6.53	3.30	3.30
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.41	3.84	4.57	4.57
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.68	1.04	-0.36	-0.36
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.84	3.51	5.33	5.33
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	2.32	0.68	1.63	1.63
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.89	3.35	-0.46	-0.46
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	1.62	0.59	1.03	1.03
FORTUM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.93	-0.69	-0.69
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.31	1.52	-1.21	-1.21
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.46	-0.37	-0.37
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.59	1.93	-1.34	-1.34
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.001	0.001
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.38	-0.23	-0.23
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.51	-0.39	-0.39
AVAADA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.10	1.42	-1.32	-1.32
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.61	-0.55	-0.55
ADY2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.06	1.27	-1.21	-1.21
ADY13_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.09	0.04	0.04
NTPC STNS-ER	0.12	0.00	-0.12	9.84	0.00	-9.84	33.31	27.10	6.20	-3.75
MAITHON POWER	0.00	0.00	0.00	0.00	0.00	0.00	2.59	6.91	-4.32	-4.32
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	5.20	3.50	1.70	1.70
ADHUNIK POWER	139.36	0.00	-139.36	1.28	0.00	-1.28	2.27	3.10	-0.83	-141.47
CHUZACHEN HEP	7.64	0.00	-7.64	1.20	0.00	-1.20	0.17	0.44	-0.27	-9.11
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.68	-0.41	-0.41
GMR KAMALANGA	37.16	0.00	-37.16	3.41	0.00	-3.41	8.34	0.56	7.78	-32.78
JITPL	81.22	0.00	-81.22	63.99	0.00	-63.99	5.79	0.81	4.98	-140.22
TEESTA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.28	4.36	-4.08	-4.08
DAGACHU	19.32	0.00	-19.32	0.00	0.00	0.00	4.58	0.02	4.56	-14.76
JORETHANG	0.00	0.00	0.00	12.10	0.00	-12.10	1.65	0.75	0.90	-11.20
NEPAL(NVVN)	0.00	184.94	184.94	0.00	0.00	0.00	4.85	6.78	-1.92	183.01
BANGLADESH	0.00	0.00	0.00	0.00	0.00	0.00	6.65	8.09	-1.43	-1.43
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18	-0.17	-0.17
TEESTA STG3	0.00	0.00	0.00	121.25	0.00	-121.25	2.98	1.25	1.73	-119.52
DIKCHU HEP	0.00	0.00	0.00	6.98	0.00	-6.98	0.25	0.32	-0.07	-7.05
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.12	-0.08	-0.08
TASHIDENG HEP	0.00	0.00	0.00	10.78	0.00	-10.78	1.69	0.52	1.18	-9.60
BRBCL,NABINAGA	0.00	0.00	0.00	0.40	0.00	-0.40	4.97	7.34	-2.36	-2.77
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	2.73	1.14	1.59	1.59
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	57.10	0.00	57.10	57.10
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	2.40	18.43	-16.03	-16.03
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	13.57	0.29	13.28	13.28
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	2.74	2.64	0.10	0.10
NTPC STNS-NER	0.80	0.00	-0.80	3.42	0.00	-3.42	7.32	2.82	4.50	0.28
NEEPCO STNS	0.00	0.00	0.00	0.00	0.00	0.00	0.69	8.93	-8.24	-8.24
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.37	1.20	0.17	0.17
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.37	-0.01	-0.01
ONGC PALATANA	33.48	0.00	-33.48	2.88	0.00	-2.88	0.47	0.71	-0.24	-36.60
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.36	1.06	-0.71	-0.71
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.34	-0.13	-0.13

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-20 : VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, JANUARY 2020					
Sr. No.	Details of REC Transactions	IEX		PXIL	
		Solar	Non-Solar	Solar	Non Solar
A	Volume of Buy Bid	1052954	773557	519403	1043459
B	Volume of Sell Bid	39413	359639	36807	173813
C	Ratio of Buy Bid to Sell Bid Volume	26.72	2.15	14.11	6.00
D	Market Clearing Volume (MWh)	39413	323647	36807	170837
E	Weighted average Market Clearing Price (₹/MWh)	2400	2200	2400	2100

Source: IEX and PXIL

Note 1: 1 REC = 1 MWh

Note 2:

<i>Forbearance and Floor Price w.e.f 1st April 2017</i>		
Type of REC	Floor Price (₹/MWh)	Forbearance Price (₹/MWh)
<i>Solar</i>	<i>1000.00</i>	<i>2400.00</i>
<i>Non-Solar</i>	<i>1000.00</i>	<i>3000.00</i>