

Monthly Report on Short-term Transactions of Electricity in India

May, 2019



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Abbreviations

Abbreviation	Expanded Version
ACBIL	ACB (India) Limited
ACP	Area Clearing Price
ACV	Area Clearing Volume
ACME_RUMS	Acme Rewa Ultra Mega Solar Project
ARINSUM_RUMS	Solenergi Rewa Ultra Mega Solar Project
BALCO	Bharat Aluminum Company Limited
BARC	Bhabha Atomic Research Centre
BBMB	Bhakra Beas Management Board
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
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	DoyangHydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EMCO	EMCO Energy Limited
ESSAR POWER	Essar Power Limited
ESSAR STEEL	Essar Steel Ltd
GMR CHHATTISGARH	GMR Chhattisgarh Energy Limited
GMR KAMALANGA	GMR Kamalanga Energy Ltd.
HVDC CHAMPA	Champa-Kurukshetra 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
J&K	Jammu & Kashmir
JAYPEE NIGRIE	JaypeeNigrie 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	KarchamWangtoo 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
LANCO_AMK	LancoAmarkantak Power Private Limited
LANCO BUDHIL	LancoBudhil Hydro Power Private Limited
LANCO KONDAPALLY	LancoKondapally Power Private Limited
LOKTAK	Loktak Power Project
MAHINDRA_RUMS	Mahindra Rewa Ultra Mega Solar Project
MALANA	Malana Hydroelectric Plant
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
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	NathpaJhakri 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 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
OSTRO	Ostro Energy Private Limited
OTC	Over The Counter
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
RGPPL	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Dispatch Centre
RTC	Round The Clock
Sasan UMPP	Sasan Ultra Mega Power Project
SEMBCORP	SembcorpGayatri 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
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

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 **May, 2019** are as under:

I: Volume of Short-term Transactions of Electricity

During May 2019, total electricity generation excluding generation from renewable and captive power plants in India was 116748.08 MUs (Table-1).

Of the total electricity generation, 11387.47 MUs (9.75%) was transacted through short-term, comprising of 5798.74 MUs (4.97%) through bilateral (through traders and term-ahead contracts on power exchanges and directly between distribution companies), followed by 3773.65 MUs (3.23%) through day ahead collective transactions on power exchanges and 1815.08 MUs (1.55%) through DSM (Table-1 & Figure-2).

Of the total short-term transactions, bilateral constitutes 50.92% (25.54% through traders and term-ahead contracts on power exchanges and 25.38% directly between distribution companies) followed by 33.14% through day ahead collective transactions on power exchanges and 15.94% 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 May, 2019. In May 2019, 23 trading licensees were engaged in short term trading. Top 5 trading licensees had a share of 75.74% in the total volume traded by all the licensees. These are PTC India Ltd., Kreate Energy (I) Pvt. Ltd., Tata Power Trading Company Ltd., Manikaran Power Ltd. and Arunachal Pradesh Power Corporation Pvt. 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 0.2559 for the month of May 2019, which indicates high concentration of market power (Table-2).

The volume of electricity transacted through IEX and PXIL in the day ahead market was 3772.47 MUs and 1.17 MUs respectively. The volume of total buy bids and sell bids was 4785.17 MUs and 7573.59 MUs respectively in IEX while the same was 1.29 MUs and 8 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 317.24 MUs and 122.10 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, ₹7.23/kWh and ₹4.54/kWh respectively (Table-3). The weighted average sale prices were also computed for the transactions during

Round the Clock (RTC), Peak and Off-peak periods separately, and the sale prices were ₹4.18/kWh, ₹6.93/kWh and ₹5.76/kWh respectively (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 ₹1.25/kWh, ₹7.50/kWh and ₹3.51/kWh respectively in IEX and it were ₹1.90/kWh, ₹4.19/kWh and ₹3.55/kWh respectively in PXIL (Table-5).

The price of electricity transacted through IEX and PXIL in the term-ahead market was ₹4.05/kWh and ₹4.85/kWh respectively (Table-6 and Table-7).

(iii) Price of electricity transacted through DSM: The average deviation settlement price was ₹3.23/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 is ₹0.036/kWh.

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

Of the total bilateral transactions, top 5 regional entities sold 40.11% of the volume, and these were Thermal Powertech Corporation India Ltd., Madhya Pradesh, Himachal

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.

Pradesh, Essar Power Ltd. and Infrastructure Leasing & Financial Services Limited. Top 5 regional entities purchased 57.23% of the volume, and these were Uttar Pradesh, Tamil Nadu, West Bengal, Delhi and Haryana (Table-9 & 10).

Of the total power exchange transactions, top 5 regional entities sold 38.55% of the volume, and these were Teesta Stage 3 Hydro Power Project, SembCorp Gayatri Power Ltd., Himachal Pradesh, Maharashtra and Assam. Top 5 regional entities purchased 53.44% of the volume, and these were Maharashtra, Bihar, West Bengal, Tamil Nadu and Andhra Pradesh (Table-11 & 12).

Of the total DSM transactions, top 5 regional entities under drew 25.53% of the volume, and these were NTPC Station (Western Region), Uttar Pradesh, Gujarat, Tamil Nadu and Rajasthan (Table-13). Top 5 regional entities overdrew 22.50% of the volume, and these were NTPC Station (Western Region), Rajasthan, Uttar Pradesh, NTPC Station (Northern Region) and NTPC Station (Eastern Region) (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 Thermal Powertech Corporation India Ltd., Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Madhya Pradesh and Essar Power Ltd. Top 5 electricity purchasing regional entities were Tamil Nadu, Uttar Pradesh, West Bengal, Bihar and Haryana.

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 May 2019, congestion occurred both in IEX and PXIL. The details of congestion are shown in Table-16. The volume of electricity that could not be cleared due to congestion and could not be transacted through power exchanges is the difference between unconstrained cleared volume (volume of electricity that would have been scheduled, had there been no congestion) and actual cleared volume.

During the month, the volume of electricity that could not be cleared in IEX and PXIL due to congestion was 0.10% and 9.29% of the unconstrained cleared volume respectively. In terms of time, congestion occurred was 2.55% and 1.61% respectively in IEX and PXIL (Table-16).

VI: Bilateral Contracts executed by Traders

The above sections covered an analysis on short-term transactions of electricity in May, 2019. This section covers an analysis of bilateral contracts executed in June, 2019.

(i) Duration of bilateral contracts: During June 2019, a total of 117 bilateral contracts (excluding banking/swap contracts) have been executed by traders for the volume of 779.75 MUs. Figure-7 shows the percentage of contracts categorized according to the period of power supply. It can be observed from the figure that 82.91% of the bilateral contracts were executed for duration of up to one week, 17.09% of the contracts were executed for duration of more than a week and up to one month, and no contracts were executed for duration of more than one month and up to twelve months.

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.

During the month, 62 banking/swapping bilateral contracts were also executed for the volume of 1535.69 MUs.

(ii) Forward Curve based on price of bilateral contracts: A forward curve reflects present day's expectation of prices for a future period. The forward curve of electricity prices are based on sale prices of bilateral contracts executed by traders. The price of each contract for each day is taken into consideration while constructing the forward curve. On the basis of these prices, the weighted average price for each day is calculated using various sale prices of contracts for delivery on that particular day.

Figure-8 represents the forward curve of electricity sale prices for the period from 1st June, 2019 to 30th September, 2019 based on the bilateral contracts⁴ executed till June, 2019. Forward curves have been drawn for the contracts executed in May, 2019 and June, 2019 for the purpose of comparison. No significant variation is observed on comparing the forward contract prices for the contracts executed in June 2019 with the contracts executed in May 2019.

VII: 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 May, 2019 are shown in Table-20. The market clearing volume of solar RECs transacted on IEX and PXIL were 134688 and 52491 respectively and the weighted average market clearing price of these

⁴Excluding Banking/Swapping contracts

RECs was ₹2000/MWh in IEX and ₹2000/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 416264 and 147349 respectively and the weighted average market clearing price of these RECs was ₹1500/MWh in IEX and ₹1450/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 3.62 and 2.09 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids was 2.63 and 1.19 in IEX and PXIL respectively.

VIII: Inferences:

- The percentage of short-term transactions of electricity to total electricity generation was 9.75%.
- Of the total short-term transactions, bilateral constitutes 50.92% (25.54% through traders and term-ahead contracts on power exchanges and 25.38% directly between distribution companies) followed by 33.14% through day ahead collective transactions on power exchanges and 15.94% through DSM
- Top 5 trading licensees had a share of 75.74% 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 0.2559, indicating high concentration of market power.
- The weighted average price of electricity transacted through trading licensees was ₹4.54/kWh. The weighted average price of electricity transacted through IEX and PXIL were ₹3.51/kWh and ₹3.55/kWh respectively.
- The average price of electricity transacted through DSM was ₹3.23/kWh.
- The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.036/kWh. The trading margin charged during the month was in line with the Trading Margin regulations.
- Top 5 electricity selling regional entities were Thermal Powertech Corporation India Ltd., Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Madhya Pradesh and Essar Power Ltd. Top 5 electricity purchasing regional entities were Tamil Nadu, Uttar Pradesh, West Bengal, Bihar and Haryana.
- During the month, the volume of electricity that could not be cleared in IEX and PXIL due to congestion was 0.10% and 9.29% of the unconstrained cleared volume respectively. In terms of time, congestion occurred was 2.55% and 1.61% respectively in IEX and PXIL

- In June 2019, 82.91% of the bilateral contracts were executed for duration of up to one week, 17.09% of the contracts were executed for duration of more than a week and up to one month, and no contracts were executed for duration of more than one month and up to twelve months.
- The forward curve of electricity sale prices for the period from 1st June, 2019 to 30th September, 2019 based on the bilateral contracts⁵ executed till June, 2019 shows no significant variation in forward contract prices for the contracts executed in June 2019 compared to the contracts executed in May 2019.
- The market clearing volume of solar RECs transacted on IEX and PXIL were 134688 and 52491 respectively and the weighted average market clearing price of these RECs was ₹2000/MWh in IEX and ₹2000/MWh in PXIL. Market clearing volume of non-solar RECs transacted on IEX and PXIL were 416264 and 147349 respectively and the weighted average market clearing price of these RECs was ₹1500/MWh in IEX and ₹1450/MWh in PXIL.

⁵*Excluding Banking/Swapping contracts*

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), MAY 2019				
Sr.No	Short-term transactions	Volume (MUs)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	5798.74	50.92	4.97
	(i) Through Traders and PXs	2908.24	25.54	2.49
	(ii) Direct	2890.50	25.38	2.48
2	Through Power Exchanges	3773.65	33.14	3.23
	(i) IEX	3772.47	33.13	3.23
	(ii) PXIL	1.17	0.010	0.0010
3	Through DSM	1815.08	15.94	1.55
	Total	11387.47	-	9.75
	Total Generation	116748.08	-	-

Source: NLDC

Figure-1: Volume of Short-term Transactions of Electricity, May 2019

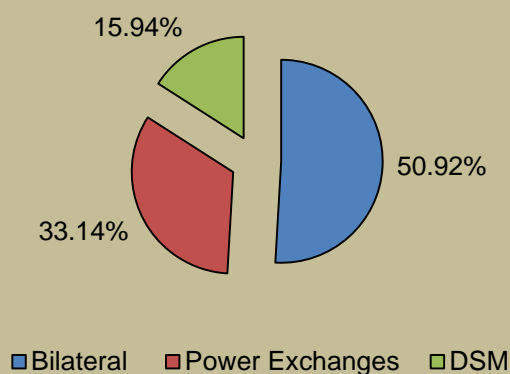
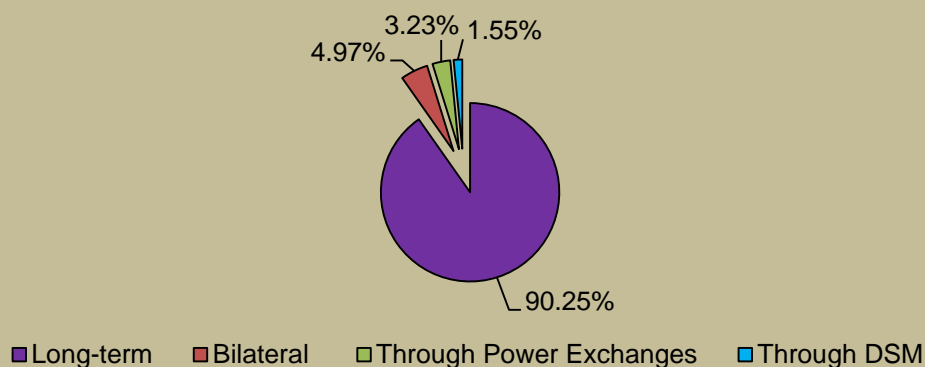


Figure-2: Volume of Various Kinds of Electricity Transactions in Total Electricity Generation, May 2019



**Figure-3: Volume of Short-term Transactions of Electricity,
May 2019 (Day-wise)**

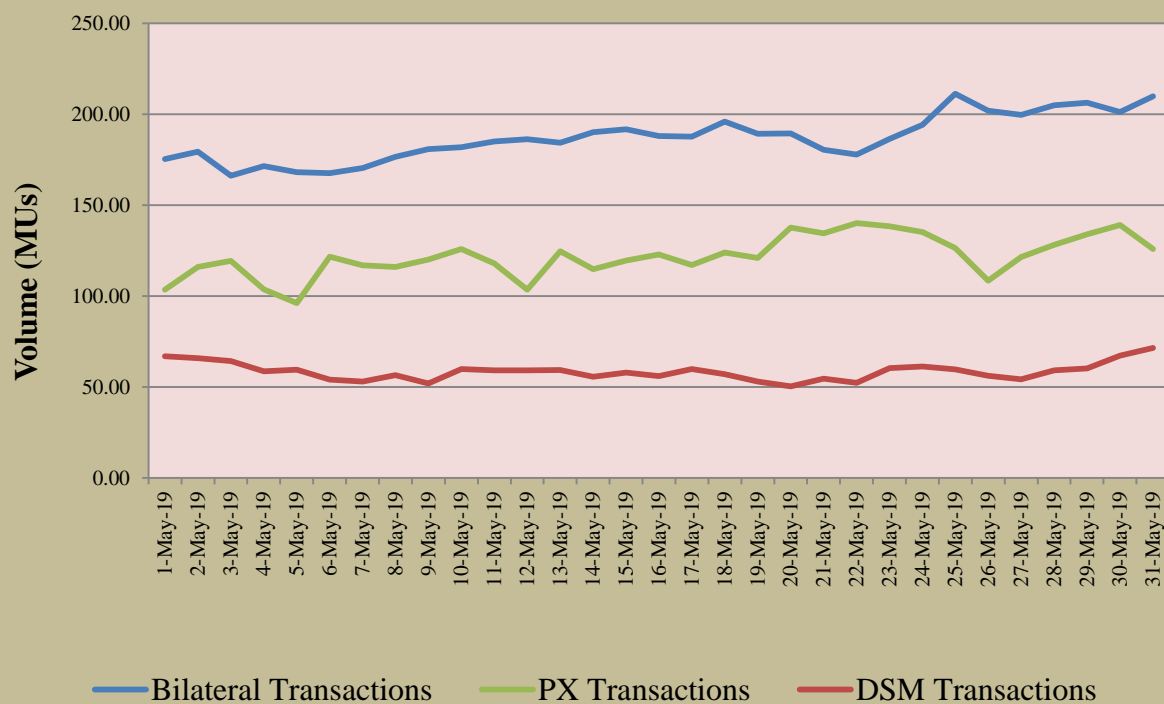


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, MAY 2019			
Sr.No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	47.92	0.2296
2	Kreate Energy (I) Pvt Ltd	8.90	0.0079
3	Tata Power Trading Company (P) Ltd.	7.08	0.0050
4	Manikaran Power Ltd.	6.13	0.0038
5	Arunachal Pradesh Power Corporation (P) Ltd	5.72	0.0033
6	NTPC Vidyut Vyapar Nigam Ltd.	4.72	0.0022
7	Essar Electric Power Development Corp. Ltd.	3.36	0.0011
8	Jaiprakash Associates Ltd.	2.83	0.0008
9	GMR Energy Trading Ltd.	2.81	0.0008
10	JSW Power Trading Company Ltd	2.12	0.0004
11	Adani Enterprises Ltd.	1.85	0.0003
12	Knowledge Infrastructure Systems (P) Ltd	1.34	0.0002
13	Statkraft Markets Pvt. Ltd.	1.18	0.0001
14	National Energy Trading & Services Ltd.	1.13	0.0001
15	Refex Energy Limited	0.94	0.0001
16	RPG Power Trading Company Ltd.	0.70	0.0000
17	Instinct Infra & Power Ltd.	0.66	0.0000
18	IPCL Power Trading Pvt. Ltd.	0.32	0.0000
19	Shree Cement Ltd.	0.18	0.0000
20	Gita Power & Infrastructure Private Limited	0.06	0.0000
21	Customized Energy Solutions India (P) Ltd.	0.03	0.0000
22	NHPC Limited	0.03	0.0000
23	Phillip Commodities India (P) Ltd.	0.03	0.0000
TOTAL		100.00%	0.2559
Top 5 trading licensees		75.74%	
<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>			

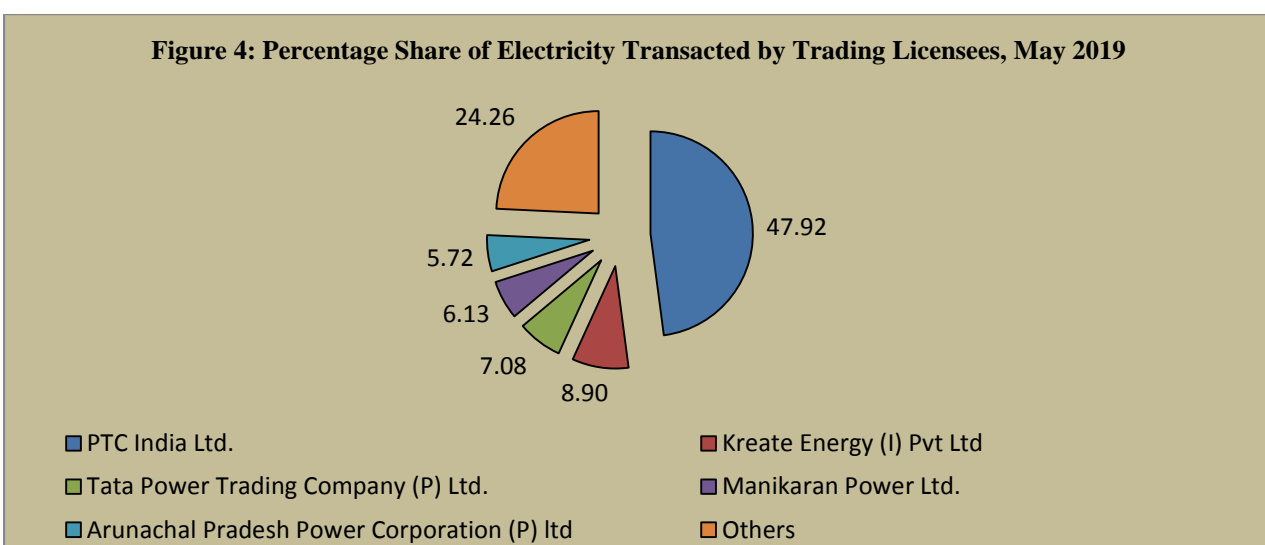


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, MAY 2019		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	3.01
2	Maximum	7.23
3	Weighted Average	4.54

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), MAY 2019		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	4.18
2	PEAK	6.93
3	OFF PEAK	5.76

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED THROUGH POWER EXCHANGES, MAY 2019			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	1.25	1.90
2	Maximum	7.50	4.19
3	Weighted Average	3.51	3.55

Source: Information submitted by IEX and PXIL

Table-6: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, MAY 2019			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	60.90	4.62
2	Day Ahead Contingency Contracts	256.34	3.92
	Total	317.24	4.05

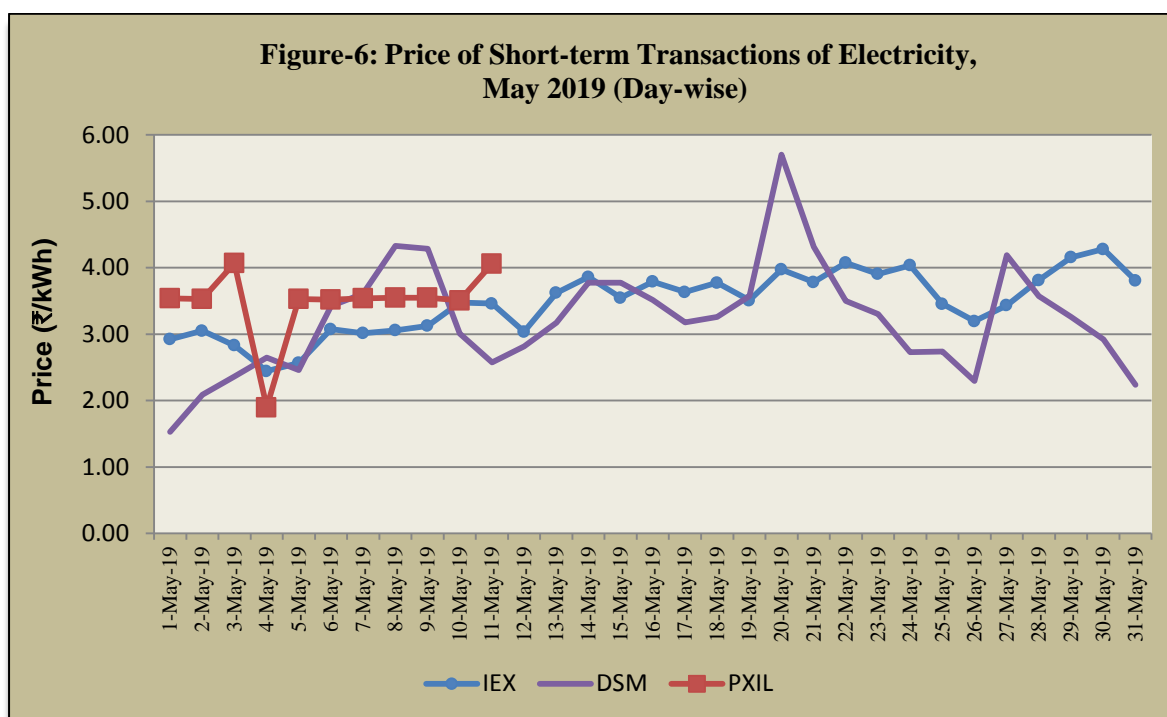
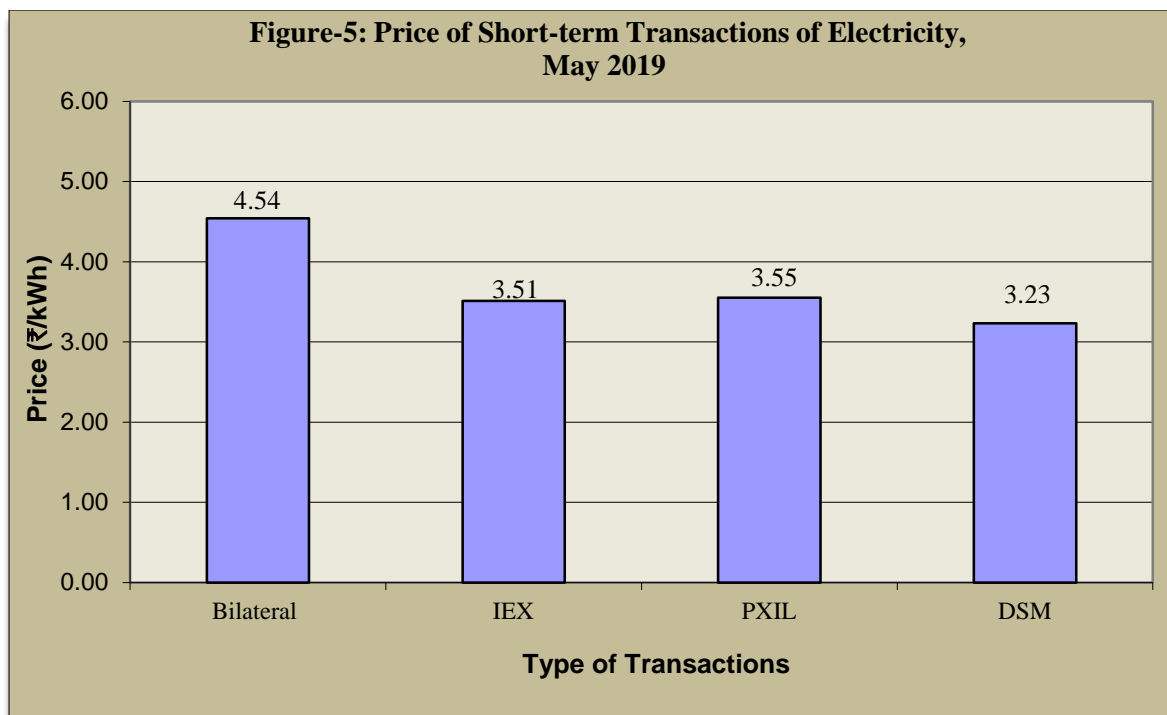
Source: IEX

Table-7: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, MAY 2019			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	52.01	4.58
2	Any Day(s) Contracts	70.09	5.04
	Total	122.10	4.85

Source: PXIL

Table-8: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, MAY 2019		
Sr.No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	3.23

Source: NLDC



Note: In PXIL, no transactions were recorded from 12th May 2019 up to 31st May 2019

Table-9: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, MAY 2019		
Name of the Entity	Volume of Sale (MUs)	% of Volume
THERMAL POWERTECH	601.86	10.31
MP	478.52	8.20
HIMACHAL PRADESH	474.88	8.14
ESSAR POWER	407.06	6.98
IL&FS	378.52	6.49
J & K	361.57	6.20
GMR CHATTISGARH	332.64	5.70
RAJASTHAN	204.87	3.51
JAYPEE NIGRIE	193.24	3.31
DB POWER	190.00	3.26
SHREE CEMENT	182.22	3.12
GUJARAT	180.14	3.09
JINDAL STAGE-II	177.26	3.04
MB POWER	151.72	2.60
DVC	150.64	2.58
SKS POWER	142.08	2.43
TELANGANA	137.46	2.36
UTTARAKHAND	135.65	2.32
WEST BENGAL	134.81	2.31
ADHUNIK POWER LTD	120.78	2.07
KARNATAKA	87.42	1.50
ANDHRA PRADESH	73.10	1.25
PUNJAB	66.78	1.14
JHABUA POWER_MP	54.78	0.94
ONGC PALATANA	53.76	0.92
MANIPUR	44.55	0.76
CHUZACHEN HEP	37.47	0.64
KARCHAM WANGTOO	34.03	0.58
TASHIDENG HEP	23.90	0.41
GMR KAMALANGA	22.57	0.39
JORETHANG	22.33	0.38
TRIPURA	22.32	0.38
DAGACHU	22.17	0.38
ACBIL	19.14	0.33
SIKKIM	18.60	0.32
ODISHA	12.58	0.22
MAHARASHTRA	12.13	0.21
MEGHALAYA	10.38	0.18
LANKO_AMK	9.85	0.17
MIZORAM	7.62	0.13
TEESTA STG3	6.07	0.10
UTTAR PRADESH	5.30	0.09
HARYANA	5.29	0.09
JITPL	4.95	0.08
BIHAR	3.77	0.06
BALCO	3.73	0.06
DIKCHU HEP	3.48	0.06
NTPC STATIONS-NER	3.00	0.05
TAMIL NADU	2.59	0.04

DELHI	2.01	0.03
NAGALAND	1.92	0.03
BRBCL,NABINAGAR	0.96	0.02
COASTGEN	0.60	0.01
JHARKHAND	0.41	0.01
AD HYDRO	0.12	0.002
NTPC STATIONS-NR	0.04	0.001
Total	5835.61	100.00
Volume Sold by top 5 Regional Entities	2340.84	40.11

Table-10: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, MAY 2019		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
UTTAR PRADESH	907.35	15.65
TAMIL NADU	856.88	14.78
WEST BENGAL	555.23	9.57
DELHI	506.17	8.73
HARYANA	492.82	8.50
GUJARAT	386.73	6.67
CHHATTISGARH	360.51	6.22
BANGLADESH	312.85	5.40
UTTARAKHAND	207.75	3.58
BIHAR	194.50	3.35
ESSAR STEEL	176.57	3.04
NEPAL(NVVN)	162.43	2.80
JHARKHAND	132.03	2.28
ODISHA	127.57	2.20
ANDHRA PRADESH	123.62	2.13
MAHARASHTRA	119.60	2.06
ASSAM	59.38	1.02
MP	56.17	0.97
KERALA	23.29	0.40
GOA	17.21	0.30
TELANGANA	13.14	0.23
DADRA & NAGAR HAVELI	2.34	0.04
KARNATAKA	2.17	0.04
MEGHALAYA	0.95	0.02
DVC	0.85	0.01
HIMACHAL PRADESH	0.38	0.01
MANIPUR	0.26	0.004
TOTAL	5798.74	100.00
Volume Purchased by top 5 Regional Entities	3318.45	57.23

**Table-11: VOLUME OF ELECTRICITY SOLD THROUGH POWER EXCHANGES,
MAY 2019**

Name of the Entity	Volume of Sale (MUs)	% of Volume
TEESTA STG3	545.63	14.46
SEMBCORP	258.79	6.86
HIMACHAL PRADESH	246.06	6.52
MAHARASHTRA	208.96	5.54
ASSAM	195.29	5.18
TELANGANA	146.74	3.89
DELHI	124.17	3.29
RAJASTHAN	122.61	3.25
MP	120.14	3.18
UTTAR PRADESH	112.57	2.98
DVC	108.95	2.89
JAYPEE NIGRIE	106.62	2.83
ODISHA	96.28	2.55
GUJARAT	91.02	2.41
DB POWER	67.72	1.79
MB POWER	65.88	1.75
AD HYDRO	65.31	1.73
PUNJAB	65.03	1.72
THERMAL POWERTECH	58.75	1.56
KARNATAKA	58.26	1.54
DIKCHU HEP	58.03	1.54
SPECTRUM	53.21	1.41
JHARKHAND	51.39	1.36
NLC	48.16	1.28
HARYANA	45.10	1.20
NEEPCO STATIONS	45.00	1.19
MARUTI COAL	41.48	1.10
SKS POWER	39.67	1.05
ANDHRA PRADESH	39.55	1.05
GMR CHATTISGARH	39.50	1.05
JINDAL STAGE-II	32.92	0.87
TRN ENERGY	29.64	0.79
UTTARAKHAND	28.41	0.75
ACBIL	26.38	0.70
SIKKIM	25.45	0.67
TRIPURA	22.15	0.59
NTPC STATIONS-NER	21.68	0.57
ONGC PALATANA	18.52	0.49
WEST BENGAL	16.61	0.44
KARCHAM WANGTOO	15.76	0.42
ESSAR POWER	15.33	0.41
RANGANADI HEP	15.18	0.40
CHANDIGARH	14.88	0.39
MIZORAM	14.46	0.38
ARUNACHAL PRADESH	13.62	0.36
BIHAR	11.78	0.31
COASTGEN	11.40	0.30
ADHUNIK POWER LTD	10.31	0.27

JINDAL POWER	9.33	0.25
NTPC STATIONS-SR	8.99	0.24
BALCO	8.77	0.23
CHUZACHEN HEP	7.97	0.21
SHREE CEMENT	6.42	0.17
J & K	6.11	0.16
TAMIL NADU	6.00	0.16
CHHATTISGARH	5.45	0.14
PARE HEP	5.34	0.14
NTPC STATIONS-WR	4.77	0.13
BRBCL,NABINAGAR	4.67	0.12
MALANA	3.92	0.10
LANCO BUDHIL	3.60	0.10
TASHIDENG HEP	3.40	0.09
KERALA	3.10	0.08
NAGALAND	2.80	0.07
JORETHANG	2.76	0.07
DADRA & NAGAR HAVELI	2.66	0.07
EMCO	2.36	0.06
GOA	1.62	0.04
IL&FS	0.85	0.02
GMR KAMALANGA	0.64	0.02
MANIPUR	0.54	0.01
MEGHALAYA	0.49	0.01
DHARIWAL POWER	0.37	0.01
DOYANG HEP	0.31	0.01
DGEN MEGA POWER	0.11	0.003
Total	3773.65	100.00
Volume sold by top 5 Regional Entities	1454.73	38.55

Table-12: VOLUME OF ELECTRICITY PURCHASED THROUGH POWER EXCHANGES, MAY 2019

Name of the Entity	Volume of Purchase (MUs)	% of Volume
MAHARASHTRA	515.92	13.67
BIHAR	502.04	13.30
WEST BENGAL	418.49	11.09
TAMIL NADU	291.98	7.74
ANDHRA PRADESH	288.15	7.64
TELANGANA	285.57	7.57
GUJARAT	185.31	4.91
KERALA	167.30	4.43
ODISHA	118.67	3.14
CHHATTISGARH	118.43	3.14
HARYANA	105.08	2.78
DELHI	89.84	2.38
RAJASTHAN	87.36	2.31
KARNATAKA	79.45	2.11
UTTAR PRADESH	75.86	2.01
HIMACHAL PRADESH	74.05	1.96
GOA	69.00	1.83
UTTARAKHAND	52.91	1.40
DADRA & NAGAR HAVELI	47.41	1.26
JHARKHAND	44.47	1.18
DAMAN AND DIU	35.18	0.93
ASSAM	33.70	0.89
MEGHALAYA	30.78	0.82
PUNJAB	28.55	0.76
ESSAR STEEL	9.76	0.26
MP	6.88	0.18
CHANDIGARH	6.20	0.16
MANIPUR	2.74	0.07
J & K	1.78	0.05
TRIPURA	0.64	0.02
NAGALAND	0.14	0.004
TOTAL	3773.65	100.00
Volume purchased by top 5 Regional Entities	2016.59	53.44

Table-13: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, MAY 2019		
Name of the Entity	Volume of Under Drawal (MUs)	% of Volume
NTPC STATIONS-WR	138.29	7.76
UTTAR PRADESH	86.63	4.86
GUJARAT	83.89	4.71
TAMIL NADU	75.90	4.26
RAJASTHAN	70.09	3.94
TELANGANA	64.10	3.60
HARYANA	58.09	3.26
MAHARASHTRA	57.12	3.21
KARNATAKA	56.98	3.20
ANDHRA PRADESH	53.32	2.99
MP	52.92	2.97
NTPC STATIONS-NR	52.11	2.93
PUNJAB	52.04	2.92
SASAN UMPP	51.34	2.88
CHHATTISGARH	50.32	2.83
J & K	44.02	2.47
WEST BENGAL	40.71	2.29
BIHAR	40.63	2.28
NHPC STATIONS	31.61	1.77
UTTARAKHAND	28.23	1.58
OPGC	27.41	1.54
ESSAR STEEL	27.22	1.53
NLC	25.83	1.45
ODISHA	25.51	1.43
DELHI	24.27	1.36
NTPC STATIONS-SR	23.74	1.33
DVC	22.13	1.24
BBMB	19.70	1.11
NTPC STATIONS-ER	18.64	1.05
ARUNACHAL PRADESH	18.46	1.04
HIMACHAL PRADESH	16.28	0.91
JHARKHAND	16.26	0.91
TRIPURA	14.67	0.82
NPGC	14.39	0.81
NEEPCO STATIONS	13.53	0.76
NJPC	13.46	0.76
OSTRO	11.10	0.62
ASSAM	10.36	0.58
GOA	8.52	0.48
TEESTA HEP	8.07	0.45
RAMPUR HEP	7.95	0.45
TEESTA STG3	7.76	0.44
KARCHAM WANGTOO	7.42	0.42
CGPL	6.50	0.36
MEGHALAYA	6.40	0.36

DIKCHU HEP	6.36	0.36
KERALA	6.15	0.35
PONDICHERRY	6.00	0.34
SIKKIM	5.97	0.34
MIZORAM	5.73	0.32
EMCO	5.72	0.32
JAYPEE NIGRIE	5.50	0.31
CHANDIGARH	5.32	0.30
DADRA & NAGAR HAVELI	5.30	0.30
RANGANADI HEP	5.08	0.29
BANGLADESH	4.60	0.26
ACBIL	4.54	0.25
MB POWER	4.45	0.25
NETCL VALLUR	4.24	0.24
AD HYDRO	4.10	0.23
RAIL	3.97	0.22
ESSAR POWER	3.93	0.22
MAITHON POWER LTD	3.64	0.20
LANKO_AMK	3.63	0.20
CHUKHA HEP	3.54	0.20
RGPPPL (DABHOL)	3.41	0.19
NAGALAND	3.40	0.19
BARC	3.25	0.18
MANIPUR	3.23	0.18
CHUZACHEN HEP	3.17	0.18
JINDAL POWER	3.15	0.18
BRBCL,NABINAGAR	3.11	0.17
NEPAL(NVVN)	3.03	0.17
TASHIDENG HEP	3.02	0.17
BALCO	2.98	0.17
KURICHU HEP	2.92	0.16
ACME_RUMS	2.86	0.16
NSPCL	2.85	0.16
DAMAN AND DIU	2.74	0.15
KOTESHWAR	2.69	0.15
RAP B	2.66	0.15
NAPP	2.62	0.15
KSK MAHANADI	2.52	0.14
THERMAL POWERTECH	2.49	0.14
TEHRI	2.48	0.14
TRN ENERGY	2.41	0.14
JHABUA POWER_MP	2.40	0.13
IGSTPS	2.38	0.13
JINDAL STAGE-II	2.29	0.13
MAHINDRA_RUMS	2.26	0.13
DB POWER	1.98	0.11
ARINSUM_RUMS	1.92	0.11
GMR KAMALANGA	1.92	0.11
SEMBCORP	1.92	0.11

RKM POWER	1.87	0.10
SKS POWER	1.45	0.08
JORETHANG	1.36	0.08
JITPL	1.35	0.08
ADHUNIK POWER LTD	1.34	0.08
MTPS II	1.28	0.07
NTPL	1.28	0.07
TALA HEP	1.22	0.07
IL&FS	1.18	0.07
COASTGEN	1.17	0.07
RAP C	1.16	0.07
RANGIT HEP	0.97	0.05
GMR CHATTISGARH	0.95	0.05
DHARIWAL POWER	0.94	0.05
LOKTAK	0.93	0.05
NEP	0.77	0.04
SHREE CEMENT	0.71	0.04
DAGACHU	0.54	0.03
LANCO BUDHIL	0.41	0.02
DOYANG HEP	0.21	0.01
MALANA	0.15	0.01
HVDC CHAMPA	0.12	0.01
NFF	0.05	0.00
Total	1781.16	100.00
Volume Exported by top 5 Regional Entities	454.80	25.53

Table-14: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, MAY 2019		
Name of the Entity	Volume of Over Drawal (MUs)	% of Volume
NTPC STATIONS-WR	109.76	5.96
RAJASTHAN	101.95	5.54
UTTAR PRADESH	71.36	3.88
NTPC STATIONS-NR	65.93	3.58
NTPC STATIONS-ER	65.16	3.54
TAMIL NADU	63.32	3.44
KURICHU HEP	62.59	3.40
KARNATAKA	61.12	3.32
MP	53.99	2.93
MAHARASHTRA	51.23	2.78
ODISHA	49.90	2.71
HARYANA	48.97	2.66
ANDHRA PRADESH	47.80	2.60
TELANGANA	42.38	2.30
NTPC STATIONS-SR	42.31	2.30
KERALA	41.39	2.25
BIHAR	40.41	2.20
WEST BENGAL	39.67	2.16
DVC	36.94	2.01
GUJARAT	36.75	2.00
HIMACHAL PRADESH	35.41	1.92
J & K	33.98	1.85
RGPPPL (DABHOL)	27.18	1.48
PUNJAB	25.59	1.39
DELHI	25.31	1.38
CHHATTISGARH	25.29	1.37
UTTARAKHAND	21.33	1.16
ASSAM	21.05	1.14
JHARKHAND	20.83	1.13
GMR CHATTISGARH	20.67	1.12
CGPL	18.50	1.01
ESSAR STEEL	17.35	0.94
NHPC STATIONS	17.00	0.92
MTPS II	13.76	0.75
GMR KAMALANGA	12.78	0.69
EMCO	12.35	0.67
NLC	11.65	0.63
GOA	11.43	0.62
DAMAN AND DIU	11.41	0.62
DB POWER	11.23	0.61
TEESTA STG3	10.88	0.59

MB POWER	9.77	0.53
DADRA & NAGAR HAVELI	9.45	0.51
KARCHAM WANGTOO	8.78	0.48
OPGC	8.26	0.45
NPGC	8.09	0.44
OSTRO	7.93	0.43
PONDICHERRY	7.64	0.42
BBMB	7.55	0.41
BALCO	7.28	0.40
NJPC	7.16	0.39
ESSAR POWER	7.14	0.39
TASHIDENG HEP	7.13	0.39
NETCL VALLUR	6.88	0.37
DAGACHU	6.82	0.37
ADHUNIK POWER LTD	6.44	0.35
JINDAL STAGE-II	6.29	0.34
SEMBCORP	6.07	0.33
TRIPURA	6.03	0.33
BANGLADESH	6.00	0.33
CHANDIGARH	5.90	0.32
MEGHALAYA	5.72	0.31
IGSTPS	5.55	0.30
JORETHANG	5.52	0.30
CHUKHA HEP	5.38	0.29
TALA HEP	5.33	0.29
BRBCL,NABINAGAR	5.01	0.27
JHABUA POWER_MP	4.98	0.27
NAPP	4.74	0.26
MANIPUR	4.65	0.25
NEPAL(NVVN)	4.56	0.25
RAP C	4.48	0.24
MAITHON POWER LTD	4.36	0.24
DIKCHU HEP	4.15	0.23
COASTGEN	4.12	0.22
THERMAL POWERTECH	3.97	0.22
KSK MAHANADI	3.84	0.21
SHREE CEMENT	3.71	0.20
AD HYDRO	3.67	0.20
RAIL	3.53	0.19
ARINSUM_RUMS	3.48	0.19
SASAN UMPP	3.44	0.19
JITPL	3.37	0.18
TEHRI	3.30	0.18
NTPL	3.18	0.17

SIKKIM	3.13	0.17
NSPCL	3.10	0.17
CHUZACHEN HEP	2.62	0.14
NAGALAND	2.49	0.14
NEEPCO STATIONS	2.39	0.13
MIZORAM	2.36	0.13
KAPP 3&4	2.34	0.13
ACME_RUMS	2.24	0.12
KOTESHWAR	2.23	0.12
MAHINDRA_RUMS	1.86	0.10
ARUNACHAL PRADESH	1.79	0.10
RKM POWER	1.77	0.10
TEESTA HEP	1.77	0.10
RAMPUR HEP	1.73	0.09
JAYPEE NIGRIE	1.62	0.09
RAP B	1.62	0.09
JINDAL POWER	1.60	0.09
SKS POWER	1.53	0.08
LANKO_AMK	1.50	0.08
ACBIL	1.45	0.08
LANCO BUDHIL	1.42	0.08
TRN ENERGY	1.34	0.07
IL&FS	1.33	0.07
RANGANADI HEP	1.28	0.07
RANGIT HEP	0.72	0.04
NEP	0.70	0.04
LANKO KONDAPALLI	0.67	0.04
SIMHAPURI	0.65	0.04
MEENAKSHI	0.55	0.03
LOKTAK	0.49	0.03
KORBA WEST POWER	0.44	0.02
DHARIWAL POWER	0.37	0.02
HVDC CHAMPA	0.37	0.02
NFF	0.20	0.01
DOYANG HEP	0.19	0.01
MALANA	0.12	0.01
TOTAL	1840.54	100.00
Volume Imported by top 5 Regional Entities	414.17	22.50

Table-15: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), MAY 2019		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	TAMIL NADU	1127.70
2	UTTAR PRADESH	850.07
3	WEST BENGAL	821.25
4	BIHAR	680.78
5	HARYANA	538.40
6	DELHI	470.87
7	CHHATTISGARH	448.45
8	MAHARASHTRA	408.55
9	BANGLADESH	314.25
10	ANDHRA PRADESH	293.60
11	GUJARAT	253.74
12	KERALA	222.73
13	ESSAR STEEL	176.46
14	NEPAL(NVVN)	163.96
15	ODISHA	161.77
16	JHARKHAND	129.28
17	UTTARAKHAND	89.68
18	GOA	87.49
19	KURICHU HEP	59.66
20	DADRA & NAGAR HAVELI	51.24
21	NTPC STATIONS-ER	46.53
22	DAMAN AND DIU	43.85
23	RGPPL (DABHOL)	23.77
24	MEGHALAYA	20.18
25	NTPC STATIONS-NR	13.78
26	MTPS II	12.48
27	CGPL	12.00
28	NTPC STATIONS-SR	9.58
29	EMCO	4.28
30	TALA HEP	4.11
31	RAP C	3.32
32	IGSTPS	3.17
33	NETCL VALLUR	2.64
34	KAPP 3&4	2.34
35	NAPP	2.12
36	NTPL	1.90
37	CHUKHA HEP	1.83
38	PONDICHERRY	1.65
39	ARINSUM_RUMS	1.56
40	KSK MAHANADI	1.31
41	TEHRI	0.82
42	MAITHON POWER LTD	0.72
43	LANCO KONDAPALLI	0.67
44	SIMHAPURI	0.65
45	MEENAKSHI	0.55
46	KORBA WEST POWER	0.44
47	NSPCL	0.25
48	HVDC CHAMPA	0.25

49	NFF	0.15
50	NEP	-0.07
51	RKM POWER	-0.10
52	DGEN MEGA POWER	-0.11
53	RANGIT HEP	-0.25
54	DOYANG HEP	-0.33
55	MAHINDRA_RUMS	-0.40
56	RAIL	-0.45
57	LOKTAK	-0.45
58	KOTESHWAR	-0.46
59	ACME_RUMS	-0.62
60	DHARIWAL POWER	-0.94
61	RAP B	-1.04
62	LANCO BUDHIL	-2.59
63	JITPL	-2.94
64	OSTRO	-3.17
65	BARC	-3.25
66	BRBCL,NABINAGAR	-3.73
67	MALANA	-3.95
68	PARE HEP	-5.34
69	NAGALAND	-5.49
70	RAMPUR HEP	-6.22
71	NJPC	-6.29
72	TEESTA HEP	-6.30
73	NPGC	-6.31
74	TELANGANA	-7.21
75	CHANDIGARH	-8.11
76	BALCO	-8.20
77	COASTGEN	-9.05
78	JINDAL POWER	-10.87
79	LANKO_AMK	-11.97
80	BBMB	-12.15
81	GMR KAMALANGA	-12.35
82	NHPC STATIONS	-14.61
83	DAGACHU	-15.89
84	RANGANADI HEP	-18.98
85	OPGC	-19.15
86	JORETHANG	-20.93
87	TASHIDENG HEP	-23.20
88	NTPC STATIONS-NER	-24.68
89	MIZORAM	-25.45
90	ARUNACHAL PRADESH	-30.30
91	TRN ENERGY	-30.71
92	NTPC STATIONS-WR	-33.30
93	MANIPUR	-40.66
94	MARUTI COAL	-41.48
95	CHUZACHEN HEP	-45.99
96	SIKKIM	-46.89
97	SASAN UMPP	-47.90
98	KARCHAM WANGTOO	-48.42
99	ACBIL	-48.60
100	JHABUA POWER_MP	-52.20

101	TRIPURA	-52.46
102	SPECTRUM	-53.21
103	NEEPCO STATIONS	-56.14
104	KARNATAKA	-59.91
105	NLC	-62.34
106	DIKCHU HEP	-63.72
107	AD HYDRO	-65.86
108	ONGC PALATANA	-72.28
109	ASSAM	-91.53
110	ADHUNIK POWER LTD	-125.99
111	PUNJAB	-129.70
112	SKS POWER	-181.66
113	SHREE CEMENT	-185.64
114	JINDAL STAGE-II	-206.18
115	RAJASTHAN	-208.27
116	MB POWER	-212.28
117	DVC	-243.93
118	DB POWER	-248.47
119	SEMBCORP	-254.63
120	JAYPEE NIGRIE	-303.73
121	GMR CHATTISGARH	-352.42
122	J & K	-375.94
123	IL&FS	-379.22
124	ESSAR POWER	-419.18
125	MP	-534.53
126	TEESTA STG3	-548.58
127	HIMACHAL PRADESH	-627.39
128	THERMAL POWERTECH	-659.13
* 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, MAY 2019			
	Details of Congestion	IEX	PXIL
A	Unconstrained Cleared Volume* (MUs)	3776.23	1.29
B	Actual Cleared Volume and hence scheduled (MUs)	3772.47	1.17
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) (A-B)	3.76	0.12
D	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.10%	9.29%
E	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/Total number of hours in the month)	2.55%	1.61%
F	Congestion occurrence (%) time block wise		
	0.00 - 6.00 hours	0.00%	0.00%
	6.00 - 12.00 hours	10.53%	16.67%
	12.00 - 18.00 hours	30.26%	50.00%
	18.00 - 24.00 hours	59.21%	33.33%
<i>* This power would have been scheduled had there been no congestion.</i>			
<i>Source: IEX & PXIL & NLDC</i>			

Table-17: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), MAY 2019						
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-May-19	81.15	94.17	103.44	0.06	66.87	3515.22
2-May-19	84.18	95.16	115.89	0.15	65.88	3547.47
3-May-19	76.15	90.04	119.30	0.04	64.19	3441.75
4-May-19	77.83	93.55	103.68	0.02	58.64	3498.89
5-May-19	77.09	91.00	95.95	0.10	59.54	3558.32
6-May-19	73.89	93.70	121.50	0.13	54.13	3721.93
7-May-19	76.65	93.79	116.67	0.16	52.99	3686.13
8-May-19	85.23	91.37	115.77	0.16	56.51	3687.82
9-May-19	89.81	91.01	119.84	0.16	52.00	3776.56
10-May-19	89.90	91.89	125.73	0.13	59.89	3866.95
11-May-19	91.57	93.47	117.92	0.06	59.11	3840.26
12-May-19	94.60	91.66	103.50	0.00	59.09	3720.34
13-May-19	89.64	94.73	124.59	0.00	59.39	3712.43
14-May-19	94.16	96.00	114.85	0.00	55.71	3653.04
15-May-19	95.83	95.86	119.58	0.00	57.94	3731.37
16-May-19	93.79	94.12	122.93	0.00	56.07	3780.92
17-May-19	95.49	92.14	117.13	0.00	59.88	3742.61
18-May-19	100.71	95.12	123.97	0.00	57.07	3694.80
19-May-19	98.10	91.14	120.91	0.00	52.99	3687.80
20-May-19	96.71	92.73	137.74	0.00	50.32	3919.14
21-May-19	91.47	88.87	134.44	0.00	54.61	3969.60
22-May-19	89.95	87.87	140.21	0.00	52.34	3978.10
23-May-19	100.45	85.96	138.29	0.00	60.35	3962.70
24-May-19	102.78	91.29	135.20	0.00	61.31	3810.43
25-May-19	112.64	98.52	126.39	0.00	59.73	3783.81
26-May-19	110.56	91.42	108.49	0.00	56.09	3658.38
27-May-19	104.94	94.75	121.43	0.00	54.23	3883.12
28-May-19	107.45	97.49	128.08	0.00	59.15	3960.81
29-May-19	106.78	99.56	133.96	0.00	60.27	3971.58
30-May-19	104.98	96.14	139.14	0.00	67.33	4003.25
31-May-19	113.75	96.00	125.95	0.00	71.46	3982.55
Total	2908.24	2890.50	3772.47	1.17	1815.08	116748.08
<i>Source: NLDC</i>						
<i>* Gross Electricity Generation excluding electricity generation from renewable and captive power plants.</i>						
<i>** The volume of bilateral through PXs represents the volume through term-ahead contracts.</i>						
<i># Area Clearing Volume represents the scheduled volume of all the bid areas.</i>						

Table-18: PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE) (₹/kWh), MAY 2019									
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Under Drawl/Over Drawl from the Grid (DSM)		
Date	Mini- mum ACP	Maxi- mum ACP	Weighted Average Price*	Mini- mum ACP	Maxi- mum ACP	Weighted Average Price*	All India Grid		
							Mini- mum Price	Maxi- mum Price	Average Price**
1-May-19	1.90	4.12	2.92	2.96	4.17	3.54	0.00	7.02	1.53
2-May-19	2.39	3.98	3.05	3.01	4.14	3.53	0.00	7.37	2.09
3-May-19	1.88	5.09	2.83	4.07	4.07	4.07	0.00	8.00	2.36
4-May-19	1.50	3.24	2.44	1.90	1.90	1.90	0.00	8.00	2.65
5-May-19	1.25	3.58	2.57	2.97	4.15	3.53	0.00	7.31	2.46
6-May-19	1.90	4.40	3.07	2.96	4.17	3.52	0.00	8.00	3.42
7-May-19	1.80	3.79	3.02	2.99	4.19	3.54	0.00	8.00	3.61
8-May-19	2.05	4.00	3.06	3.01	4.18	3.55	0.00	8.00	4.33
9-May-19	2.11	4.00	3.13	3.01	4.19	3.55	0.00	8.00	4.29
10-May-19	2.21	4.50	3.48	2.94	4.17	3.51	0.00	8.00	3.01
11-May-19	2.25	5.00	3.46	3.97	4.15	4.06	0.00	8.00	2.58
12-May-19	1.50	5.00	3.04	-	-	-	0.00	8.00	2.81
13-May-19	1.76	5.50	3.62	-	-	-	0.00	8.00	3.17
14-May-19	2.75	6.00	3.86	-	-	-	0.00	8.00	3.78
15-May-19	2.30	5.05	3.55	-	-	-	0.00	8.00	3.77
16-May-19	2.25	5.55	3.79	-	-	-	0.00	6.92	3.52
17-May-19	2.21	4.88	3.63	-	-	-	0.00	8.00	3.18
18-May-19	2.60	5.11	3.77	-	-	-	0.00	8.00	3.26
19-May-19	2.30	5.00	3.51	-	-	-	0.00	8.00	3.57
20-May-19	2.25	5.55	3.97	-	-	-	0.00	8.00	5.70
21-May-19	2.36	5.14	3.78	-	-	-	0.00	8.00	4.31
22-May-19	2.81	6.31	4.07	-	-	-	0.00	7.51	3.50
23-May-19	2.67	6.41	3.91	-	-	-	0.00	8.00	3.30
24-May-19	2.82	6.50	4.04	-	-	-	0.00	6.46	2.73
25-May-19	1.90	5.16	3.46	-	-	-	0.00	8.00	2.74
26-May-19	2.20	5.00	3.19	-	-	-	0.00	6.15	2.29
27-May-19	1.66	5.32	3.43	-	-	-	0.64	8.00	4.19
28-May-19	2.25	6.50	3.81	-	-	-	0.00	8.00	3.57
29-May-19	2.85	7.00	4.16	-	-	-	0.00	6.99	3.26
30-May-19	2.80	7.50	4.28	-	-	-	0.00	6.55	2.92
31-May-19	1.81	6.84	3.81	-	-	-	0.00	8.00	2.24
	1.25[#]	7.50[#]	3.51	1.90[#]	4.19[#]	3.55	0.00[#]	8.00[#]	3.23
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), MAY 2019										
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	66.78	0.00	-66.78	65.03	28.55	-36.48	25.59	52.04	-26.45	-129.70
HARYANA	5.29	492.82	487.54	45.10	105.08	59.98	48.97	58.09	-9.12	538.40
RAJASTHAN	204.87	0.00	-204.87	122.61	87.36	-35.25	101.95	70.09	31.86	-208.27
DELHI	2.01	506.17	504.16	124.17	89.84	-34.32	25.31	24.27	1.04	470.87
UP	5.30	907.35	902.06	112.57	75.86	-36.72	71.36	86.63	-15.27	850.07
UTTARAKHAND	135.65	207.75	72.09	28.41	52.91	24.50	21.33	28.23	-6.90	89.68
HP	474.88	0.38	-474.51	246.06	74.05	-172.01	35.41	16.28	19.13	-627.39
J & K	361.57	0.00	-361.57	6.11	1.78	-4.33	33.98	44.02	-10.04	-375.94
CHANDIGARH	0.00	0.00	0.00	14.88	6.20	-8.68	5.90	5.32	0.57	-8.11
MP	478.52	56.17	-422.35	120.14	6.88	-113.26	53.99	52.92	1.07	-534.53
MAHARASHTRA	12.13	119.60	107.48	208.96	515.92	306.96	51.23	57.12	-5.89	408.55
GUJARAT	180.14	386.73	206.60	91.02	185.31	94.29	36.75	83.89	-47.14	253.74
CHHATTISGARH	0.00	360.51	360.51	5.45	118.43	112.97	25.29	50.32	-25.03	448.45
GOA	0.00	17.21	17.21	1.62	69.00	67.38	11.43	8.52	2.90	87.49
DAMAN & DIU	0.00	0.00	0.00	0.00	35.18	35.18	11.41	2.74	8.67	43.85
DADRA & NAGAR	0.00	2.34	2.34	2.66	47.41	44.75	9.45	5.30	4.15	51.24
ANDHRA P	73.10	123.62	50.52	39.55	288.15	248.60	47.80	53.32	-5.52	293.60
KARNATAKA	87.42	2.17	-85.25	58.26	79.45	21.19	61.12	56.98	4.14	-59.91
KERALA	0.00	23.29	23.29	3.10	167.30	164.20	41.39	6.15	35.24	222.73
TAMIL NADU	2.59	856.88	854.29	6.00	291.98	285.99	63.32	75.90	-12.58	1127.70
PONDICHERRY	0.00	0.00	0.00	0.00	0.00	0.00	7.64	6.00	1.65	1.65
TELANGANA	137.46	13.14	-124.32	146.74	285.57	138.83	42.38	64.10	-21.72	-7.21
WEST BENGAL	134.81	555.23	420.41	16.61	418.49	401.88	39.67	40.71	-1.05	821.25
ODISHA	12.58	127.57	114.99	96.28	118.67	22.39	49.90	25.51	24.39	161.77
BIHAR	3.77	194.50	190.73	11.78	502.04	490.26	40.41	40.63	-0.22	680.78
JHARKHAND	0.41	132.03	131.62	51.39	44.47	-6.92	20.83	16.26	4.58	129.28
SIKKIM	18.60	0.00	-18.60	25.45	0.00	-25.45	3.13	5.97	-2.84	-46.89
DVC	150.64	0.85	-149.79	108.95	0.00	-108.95	36.94	22.13	14.81	-243.93
ARUNACHAL P	0.00	0.00	0.00	13.62	0.00	-13.62	1.79	18.46	-16.68	-30.30
ASSAM	0.00	59.38	59.38	195.29	33.70	-161.59	21.05	10.36	10.68	-91.53
MANIPUR	44.55	0.26	-44.29	0.54	2.74	2.20	4.65	3.23	1.42	-40.66
MEGHALAYA	10.38	0.95	-9.44	0.49	30.78	30.30	5.72	6.40	-0.68	20.18
MIZORAM	7.62	0.00	-7.62	14.46	0.00	-14.46	2.36	5.73	-3.37	-25.45
NAGALAND	1.92	0.00	-1.92	2.80	0.14	-2.66	2.49	3.40	-0.91	-5.49
TRIPURA	22.32	0.00	-22.32	22.15	0.64	-21.51	6.03	14.67	-8.64	-52.46
NTPC STN-NR	0.04	0.00	-0.04	0.00	0.00	0.00	65.93	52.11	13.82	13.78
NHPC STATIONS	0.00	0.00	0.00	0.00	0.00	0.00	17.00	31.61	-14.61	-14.61
NFL	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.05	0.15	0.15
RAIL	0.00	0.00	0.00	0.00	0.00	0.00	3.53	3.97	-0.45	-0.45
NEP	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.77	-0.07	-0.07
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	4.74	2.62	2.12	2.12
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	1.62	2.66	-1.04	-1.04
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	7.16	13.46	-6.29	-6.29
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	3.30	2.48	0.82	0.82
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	7.55	19.70	-12.15	-12.15
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	4.48	1.16	3.32	3.32
AD HYDRO	0.12	0.00	-0.12	65.31	0.00	-65.31	3.67	4.10	-0.43	-65.86
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	5.55	2.38	3.17	3.17

KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	2.23	2.69	-0.46	-0.46
KARCHAM WANGT	34.03	0.00	-34.03	15.76	0.00	-15.76	8.78	7.42	1.36	-48.42
SHREE CEMENT	182.22	0.00	-182.22	6.42	0.00	-6.42	3.71	0.71	3.00	-185.64
LANCO BUDHIL	0.00	0.00	0.00	3.60	0.00	-3.60	1.42	0.41	1.01	-2.59
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.73	7.95	-6.22	-6.22
MALANA	0.00	0.00	0.00	3.92	0.00	-3.92	0.12	0.15	-0.03	-3.95
NTPC STN-WR	0.00	0.00	0.00	4.77	0.00	-4.77	109.76	138.29	-28.53	-33.30
JINDAL POWER	0.00	0.00	0.00	9.33	0.00	-9.33	1.60	3.15	-1.54	-10.87
LANCO_AMK	9.85	0.00	-9.85	0.00	0.00	0.00	1.50	3.63	-2.12	-11.97
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	3.10	2.85	0.25	0.25
ACBIL	19.14	0.00	-19.14	26.38	0.00	-26.38	1.45	4.54	-3.08	-48.60
BALCO	3.73	0.00	-3.73	8.77	0.00	-8.77	7.28	2.98	4.30	-8.20
RGPPL (DABHOL)	0.00	0.00	0.00	0.00	0.00	0.00	27.18	3.41	23.77	23.77
CGPL	0.00	0.00	0.00	0.00	0.00	0.00	18.50	6.50	12.00	12.00
EMCO	0.00	0.00	0.00	2.36	0.00	-2.36	12.35	5.72	6.63	4.28
ESSAR STEEL	0.00	176.57	176.57	0.00	9.76	9.76	17.35	27.22	-9.87	176.46
KSK MAHANADI	0.00	0.00	0.00	0.00	0.00	0.00	3.84	2.52	1.31	1.31
ESSAR POWER	407.06	0.00	-407.06	15.33	0.00	-15.33	7.14	3.93	3.21	-419.18
JINDAL STAGE-II	177.26	0.00	-177.26	32.92	0.00	-32.92	6.29	2.29	4.00	-206.18
DB POWER	190.00	0.00	-190.00	67.72	0.00	-67.72	11.23	1.98	9.24	-248.47
DHARIWAL POWER	0.00	0.00	0.00	0.37	0.00	-0.37	0.37	0.94	-0.58	-0.94
JAYPEE NIGRIE	193.24	0.00	-193.24	106.62	0.00	-106.62	1.62	5.50	-3.88	-303.73
DGEN MEGA POW	0.00	0.00	0.00	0.11	0.00	-0.11	0.00	0.00	0.00	-0.11
GMR CHATTISGAR	332.64	0.00	-332.64	39.50	0.00	-39.50	20.67	0.95	19.72	-352.42
KORBA WEST POW	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.44	0.44
MB POWER	151.72	0.00	-151.72	65.88	0.00	-65.88	9.77	4.45	5.32	-212.28
MARUTI COAL	0.00	0.00	0.00	41.48	0.00	-41.48	0.00	0.00	0.00	-41.48
SPECTRUM	0.00	0.00	0.00	53.21	0.00	-53.21	0.00	0.00	0.00	-53.21
JHABUA POW MP	54.78	0.00	-54.78	0.00	0.00	0.00	4.98	2.40	2.58	-52.20
SASAN UMPP	0.00	0.00	0.00	0.00	0.00	0.00	3.44	51.34	-47.90	-47.90
TRN ENERGY	0.00	0.00	0.00	29.64	0.00	-29.64	1.34	2.41	-1.07	-30.71
RKM POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.77	1.87	-0.10	-0.10
SKS POWER	142.08	0.00	-142.08	39.67	0.00	-39.67	1.53	1.45	0.09	-181.66
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.25	-3.25	-3.25
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	2.34	0.00	2.34	2.34
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.12	0.25	0.25
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	1.86	2.26	-0.40	-0.40
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.48	1.92	1.56	1.56
OSTRO	0.00	0.00	0.00	0.00	0.00	0.00	7.93	11.10	-3.17	-3.17
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	2.86	-0.62	-0.62
NTPC STN-SR	0.00	0.00	0.00	8.99	0.00	-8.99	42.31	23.74	18.57	9.58
LANCO KONDAPAL	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.67	0.67
SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.65	0.65
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.55	0.55
COASTGEN	0.60	0.00	-0.60	11.40	0.00	-11.40	4.12	1.17	2.95	-9.05
THERMAL POWER	601.86	0.00	-601.86	58.75	0.00	-58.75	3.97	2.49	1.48	-659.13
IL&FS	378.52	0.00	-378.52	0.85	0.00	-0.85	1.33	1.18	0.15	-379.22
NLC	0.00	0.00	0.00	48.16	0.00	-48.16	11.65	25.83	-14.18	-62.34
SEMBICORP	0.00	0.00	0.00	258.79	0.00	-258.79	6.07	1.92	4.15	-254.63
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	6.88	4.24	2.64	2.64
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	3.18	1.28	1.90	1.90
NTPC STN-ER	0.00	0.00	0.00	0.00	0.00	0.00	65.16	18.64	46.53	46.53
MAITHON POWER	0.00	0.00	0.00	0.00	0.00	0.00	4.36	3.64	0.72	0.72
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	8.09	14.39	-6.31	-6.31

ADHUNIK POWER	120.78	0.00	-120.78	10.31	0.00	-10.31	6.44	1.34	5.09	-125.99
CHUZACHEN HEP	37.47	0.00	-37.47	7.97	0.00	-7.97	2.62	3.17	-0.55	-45.99
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.97	-0.25	-0.25
GMR KAMALANGA	22.57	0.00	-22.57	0.64	0.00	-0.64	12.78	1.92	10.86	-12.35
JITPL	4.95	0.00	-4.95	0.00	0.00	0.00	3.37	1.35	2.01	-2.94
TEESTA HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.77	8.07	-6.30	-6.30
DAGACHU	22.17	0.00	-22.17	0.00	0.00	0.00	6.82	0.54	6.28	-15.89
JORETHANG	22.33	0.00	-22.33	2.76	0.00	-2.76	5.52	1.36	4.16	-20.93
NEPAL(NVVN)	0.00	162.43	162.43	0.00	0.00	0.00	4.56	3.03	1.53	163.96
BANGLADESH	0.00	312.85	312.85	0.00	0.00	0.00	6.00	4.60	1.40	314.25
TEESTA STG3	6.07	0.00	-6.07	545.63	0.00	-545.63	10.88	7.76	3.12	-548.58
DIKCHU HEP	3.48	0.00	-3.48	58.03	0.00	-58.03	4.15	6.36	-2.21	-63.72
TASHIDENG HEP	23.90	0.00	-23.90	3.40	0.00	-3.40	7.13	3.02	4.10	-23.20
OPGC	0.00	0.00	0.00	0.00	0.00	0.00	8.26	27.41	-19.15	-19.15
BRBCL,NABINAGAR	0.96	0.00	-0.96	4.67	0.00	-4.67	5.01	3.11	1.90	-3.73
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	5.33	1.22	4.11	4.11
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	5.38	3.54	1.83	1.83
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	62.59	2.92	59.66	59.66
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	13.76	1.28	12.48	12.48
NTPC STN-NER	3.00	0.00	-3.00	21.68	0.00	-21.68	0.00	0.00	0.00	-24.68
NEEPCO STNS	0.00	0.00	0.00	45.00	0.00	-45.00	2.39	13.53	-11.14	-56.14
RANGANADI HEP	0.00	0.00	0.00	15.18	0.00	-15.18	1.28	5.08	-3.80	-18.98
DOYANG HEP	0.00	0.00	0.00	0.31	0.00	-0.31	0.19	0.21	-0.02	-0.33
ONGC PALATANA	53.76	0.00	-53.76	18.52	0.00	-18.52	0.00	0.00	0.00	-72.28
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.93	-0.45	-0.45
PARE HEP	0.00	0.00	0.00	5.34	0.00	-5.34	0.00	0.00	0.00	-5.34

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

Figure 7: Bilateral Contracts executed by Traders in June, 2019

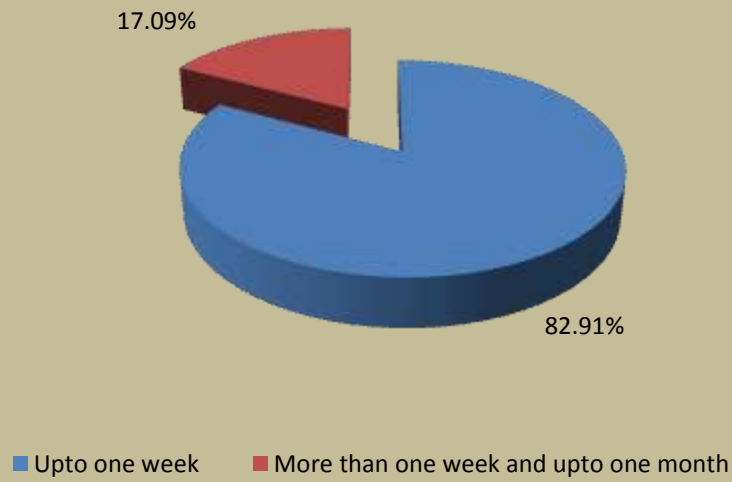


Figure-8: Forward Curve based on Prices of Bilateral Contracts

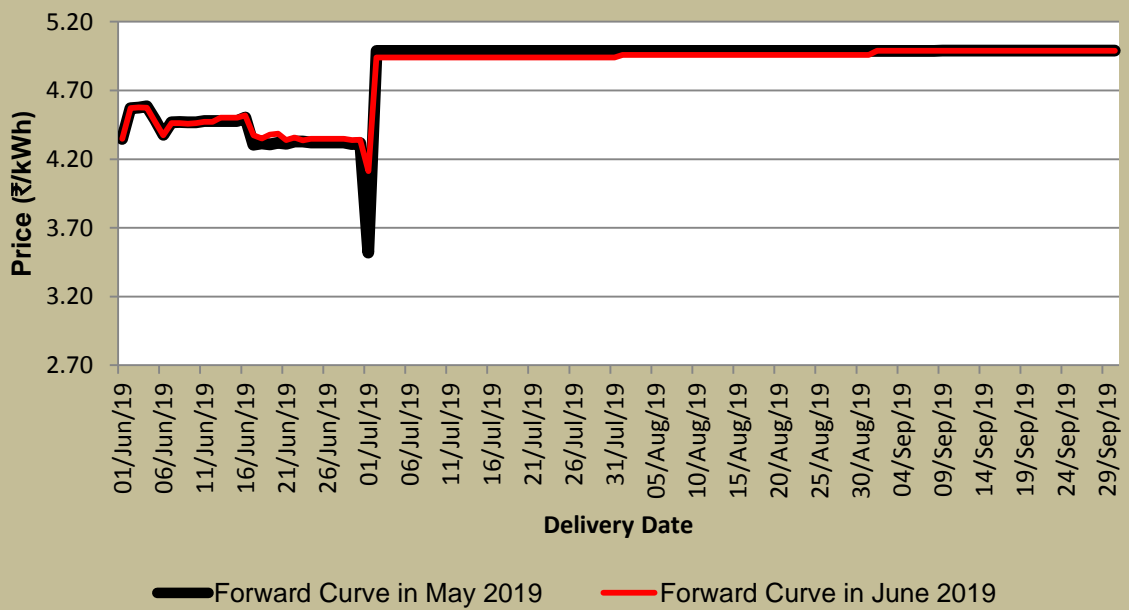


Table-20 : VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, MAY 2019					
Sr.No.	Details of REC Transactions	IEX		PXIL	
		Solar	Non-Solar	Solar	Non Solar
A	Volume of Buy Bid	614170	1148380	163143	220493
B	Volume of Sell Bid	169438	436110	78108	185219
C	Ratio of Buy Bid to Sell Bid Volume	3.62	2.63	2.09	1.19
D	Market Clearing Volume (MWh)	134688	416264	52491	147349
E	Weighted average Market Clearing Price (₹/MWh)	2000	1500	2000	1450

Source: IEX and PXIL

Note 1: 1 REC = 1 MWh

Note 2:

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