

Monthly Report on Short-term Transactions of Electricity in India

June, 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
GIWEL_BHUI	Green infra wind energy Limited, Bhuj
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
LANKO_AMK	LancoAmarkantak Power Private Limited
LANKO BUDHIL	LancoBudhil Hydro Power Private Limited
LANKO KONDAPALLY	LancoKondapally Power Private Limited
LOKTAK	Loktak Power Project
MAHINDRA_RUMS	Mahindra Rewa Ultra Mega Solar 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
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
RENEW_BHACHAU	ReNew Power Limited, Bhachau
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 **June, 2019** are as under:

I: Volume of Short-term Transactions of Electricity

During June 2019, total electricity generation excluding generation from renewable and captive power plants in India was 112833.17 MUs (Table-1).

Of the total electricity generation, 12056.66 MUs (10.69%) was transacted through short-term, comprising of 5880.98 MUs (5.21%) through bilateral (through traders and term-ahead contracts on power exchanges and directly between distribution companies), followed by 4207.10 MUs (3.73%) through day ahead collective transactions on power exchanges and 1968.58 MUs (1.74%) through DSM (Table-1 & Figure-2).

Of the total short-term transactions, bilateral constitutes 48.78% (28.87% through traders and term-ahead contracts on power exchanges and 19.91% directly between distribution companies) followed by 34.89% through day ahead collective transactions on power exchanges and 16.33% 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 June, 2019. In June 2019, 23 trading licensees were engaged in short term trading. Top 5 trading licensees had a share of 72.59% in the total volume traded by all the licensees. These are PTC India Ltd., Kreate Energy (I) Pvt. Ltd., Manikaran Power Ltd., Arunachal Pradesh Power Corporation Pvt. Ltd. and NTPC Vidyut Vyapar Nigam 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 0.1959 for the month of June 2019, which indicates moderate concentration of market power (Table-2).

The volume of electricity transacted through IEX and PXIL in the day ahead market was 4206.68 MUs and 0.42 MUs respectively. The volume of total buy bids and sell bids was 5257.81 MUs and 7982.65 MUs respectively in IEX while the same was 0.42 MUs and 7.65 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 359.32 MUs and 139.22 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, ₹6.97/kWh and ₹4.86/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 ₹4.32/kWh, ₹6.92/kWh and ₹5.61/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 ₹1.00/kWh, ₹9.00/kWh and ₹3.53/kWh respectively in IEX and it were ₹3.41/kWh, ₹3.50/kWh and ₹3.48/kWh respectively in PXIL (Table-5).

The price of electricity transacted through IEX and PXIL in the term-ahead market was ₹4.11/kWh and ₹4.44/kWh respectively (Table-6 and Table-7).

(iii) Price of electricity transacted through DSM: The average deviation settlement price was ₹3.31/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 ₹0.034/kWh.

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

Of the total bilateral transactions, top 5 regional entities sold 39.19% of the volume, and these were Himachal Pradesh, Jammu & Kashmir, Rajasthan, Madhya Pradesh and

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.

Andhra Pradesh. Top 5 regional entities purchased 60.48% of the volume, and these were Punjab, Haryana, Delhi, Uttar Pradesh and West Bengal (Table-9 & 10).

Of the total power exchange transactions, top 5 regional entities sold 40.36% of the volume, and these were Teesta Stage 3 Hydro Power Project, Himachal Pradesh, SembCorp Gayatri Power Ltd., Jindal Power Ltd. Stage II and Telangana. Top 5 regional entities purchased 52.37% of the volume, and these were Bihar, West Bengal, Maharashtra, Tamil Nadu and Andhra Pradesh (Table-11 & 12).

Of the total DSM transactions, top 5 regional entities under drew 21.33% of the volume, and these were NTPC Station (Western Region), Maharashtra, Gujarat, Madhya Pradesh and Tamil Nadu (Table-13). Top 5 regional entities overdrew 23.57% of the volume, and these were NTPC Station (Western Region), Rajasthan, Uttar Pradesh, Tamil Nadu and NTPC Station (Northern 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 Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Jammu & Kashmir, Madhya Pradesh and Thermal Powertech Corporation India Ltd. Top 5 electricity purchasing regional entities were Punjab, Haryana, West Bengal, Bihar and Delhi.

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 June 2019, congestion did not occur 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.

VI: Bilateral Contracts executed by Traders

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

(i) Duration of bilateral contracts: During July 2019, a total of 150 bilateral contracts (excluding banking/swap contracts) have been executed by traders for the volume of 1252.43 MUs. Figure-7 shows the percentage of contracts categorized according to the period of power supply. It can be observed from the figure that 82.67% of the bilateral contracts were executed for duration of up to one week, 16% of the contracts were executed for duration of more than a week and up to one month, 0.67% of contracts were executed for duration of more than one month and up to three months, while 0.67% of contracts were executed for duration of more than three months and up to twelve months.

During the month, 150 banking/swapping bilateral contracts were also executed for the volume of 449.32 MUs.

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.

(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 July, 2019 to 31st October, 2019 based on the bilateral contracts⁴ executed till July, 2019. Forward curves have been drawn for the contracts executed in June, 2019 and July, 2019 for the purpose of comparison. It is observed that the forward contract prices are lower for the contracts executed in July 2019 compared to the contracts executed in June 2019, during the period from 2nd July 2019 to 31st July 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 June, 2019 are shown in Table-20. The market clearing volume of solar RECs transacted on IEX and PXIL were 92093 and 31675 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 327688 and 121679 respectively and the weighted

⁴Excluding Banking/Swapping contracts

average market clearing price of these RECs was ₹1600/MWh in IEX and ₹1555/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 4.17 and 4.00 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids was 3.41 and 2.45 in IEX and PXIL respectively.

VIII: Inferences:

- The percentage of short-term transactions of electricity to total electricity generation was 10.69%.
- Of the total short-term transactions, bilateral constitutes 48.78% (28.87% through traders and term-ahead contracts on power exchanges and 19.91% directly between distribution companies) followed by 34.89% through day ahead collective transactions on power exchanges and 16.33% through DSM.
- Top 5 trading licensees had a share of 72.59% 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 0.1959, indicating moderate concentration of market power.
- The weighted average price of electricity transacted through trading licensees was ₹4.86/kWh. The weighted average price of electricity transacted through IEX and PXIL were ₹3.53/kWh and ₹3.48/kWh respectively.
- The average price of electricity transacted through DSM was ₹3.31/kWh.
- The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.034/kWh. The trading margin charged during the month was in line with the Trading Margin regulations.
- Top 5 electricity selling regional entities were Himachal Pradesh, Teesta Stage 3 Hydro Power Project, Jammu & Kashmir, Madhya Pradesh and Thermal Powertech Corporation India Ltd. Top 5 electricity purchasing regional entities were Punjab, Haryana, West Bengal, Bihar and Delhi
- During the month of June 2019, both IEX and PXIL did not witness any congestion.
- In July 2019, 82.67% of the bilateral contracts were executed for duration of up to one week, 16.00% of the contracts were executed for duration of more than a week and up to one month, 0.67% of contracts were executed for duration of more than one month

and up to three months, while 0.67% of contracts were executed for duration of more than three months and up to twelve months.

- Comparison of the forward curve of electricity sale prices, for the period from 1st July 2019 to 31st October 2019, based on the bilateral contracts⁵ executed till July 2019 with forward curve for contracts executed in June 2019 shows that forward contract prices are lower for the contracts executed in July 2019 compared to the contracts executed in June 2019, during the period from 2nd July 2019 – 31st July 2019.
- The market clearing volume of solar RECs transacted on IEX and PXIL were 92093 and 31675 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 327688 and 121679 respectively and the weighted average market clearing price of these RECs was ₹1600/MWh in IEX and ₹1555/MWh in PXIL.

⁵*Excluding Banking/Swapping contracts*

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), JUNE 2019				
Sr.No	Short-term transactions	Volume (MUs)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	5880.98	48.78	5.21
	(i) Through Traders and PXs	3480.27	28.87	3.08
	(ii) Direct	2400.70	19.91	2.13
2	Through Power Exchanges	4207.10	34.89	3.73
	(i) IEX	4206.68	34.89	3.73
	(ii) PXIL	0.42	0.004	0.0004
3	Through DSM	1968.58	16.33	1.74
	Total	12056.66	-	10.69
	Total Generation	112833.17	-	-

Source: NLDC

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

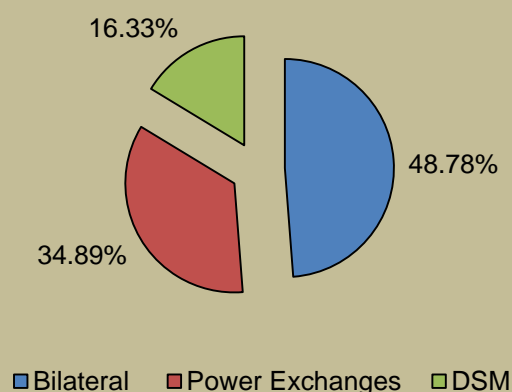
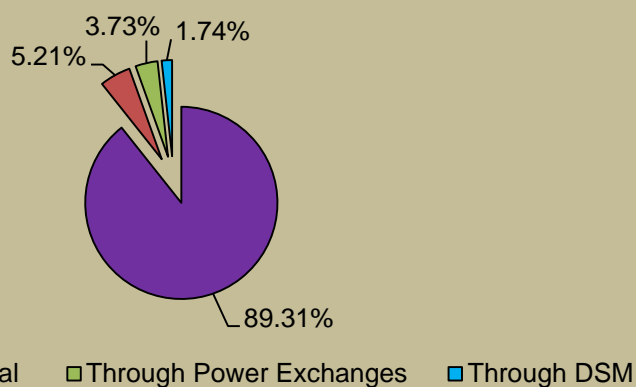


Figure-2: Volume of Various Kinds of Electricity Transactions in Total Electricity Generation, June 2019



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

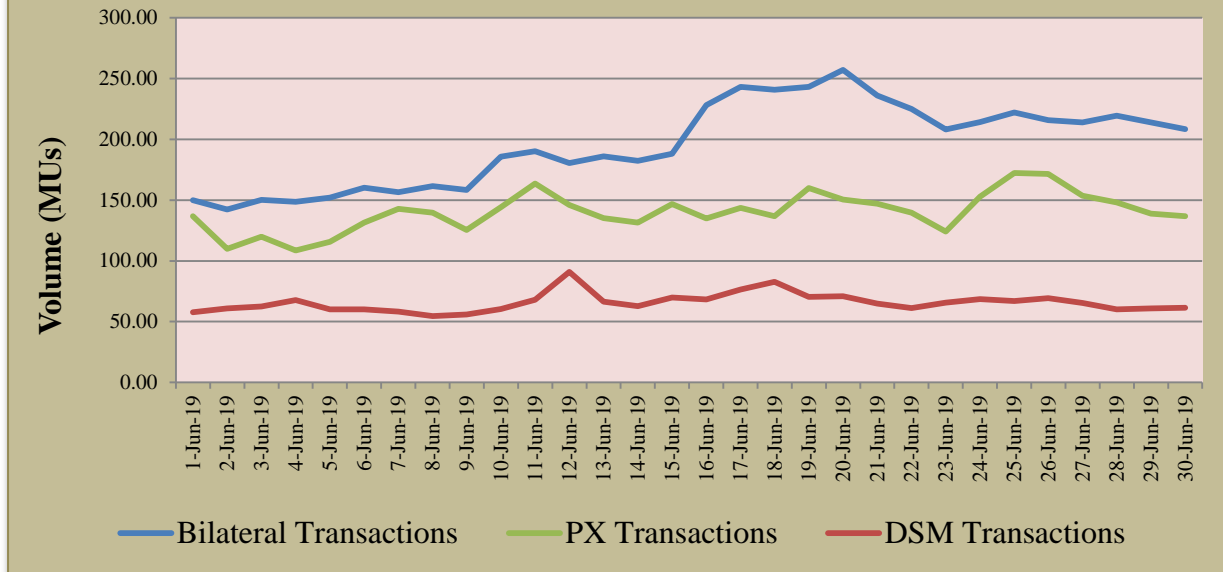


Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, JUNE 2019			
Sr.No	Name of the Trading Licensee	% Share in total Volume transacted by Trading Licensees	Herfindahl-Hirschman Index
1	PTC India Ltd.	39.70	0.1576
2	Kreate Energy (I) Pvt Ltd	9.91	0.0098
3	Manikaran Power Ltd.	9.09	0.0083
4	Arunachal Pradesh Power Corporation (P) ltd	7.58	0.0057
5	NTPC Vidyut Vyapar Nigam Ltd.	6.31	0.0040
6	Tata Power Trading Company (P) Ltd.	6.25	0.0039
7	GMR Energy Trading Ltd.	5.69	0.0032
8	Adani Enterprises Ltd.	4.20	0.0018
9	Jaiprakash Associates Ltd.	2.39	0.0006
10	Knowledge Infrastructure Systems (P) Ltd	1.61	0.0003
11	Statkraft Markets Pvt. Ltd.	1.40	0.0002
12	Essar Electric Power Development Corp. Ltd.	1.30	0.0002
13	JSW Power Trading Company Ltd	1.15	0.0001
14	National Energy Trading & Services Ltd.	0.97	0.0001
15	Refex Energy Limited	0.80	0.0001
16	RPG Power Trading Company Ltd.	0.66	0.0000
17	Instinct Infra & Power Ltd.	0.57	0.0000
18	Shree Cement Ltd.	0.17	0.0000
19	IPCL Power Trading Pvt. Ltd.	0.09	0.0000
20	Customized Energy Solutions India (P) Ltd.	0.08	0.0000
21	Gita Power & Infrastructure Private Limited	0.04	0.0000
22	Phillip Commodities India (P) Ltd.	0.02	0.0000
23	NHPC Limited	0.01	0.0000
TOTAL		100.00%	0.1959
Top 5 trading licensees		72.59%	
<i>Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges.</i>			
<i>Note 2: Volume of electricity transacted by Global Energy Ltd is not included.</i>			
<i>Source: Information submitted by trading licensees</i>			

Figure 4: Percentage Share of Electricity Transacted by Trading Licensees, June 2019

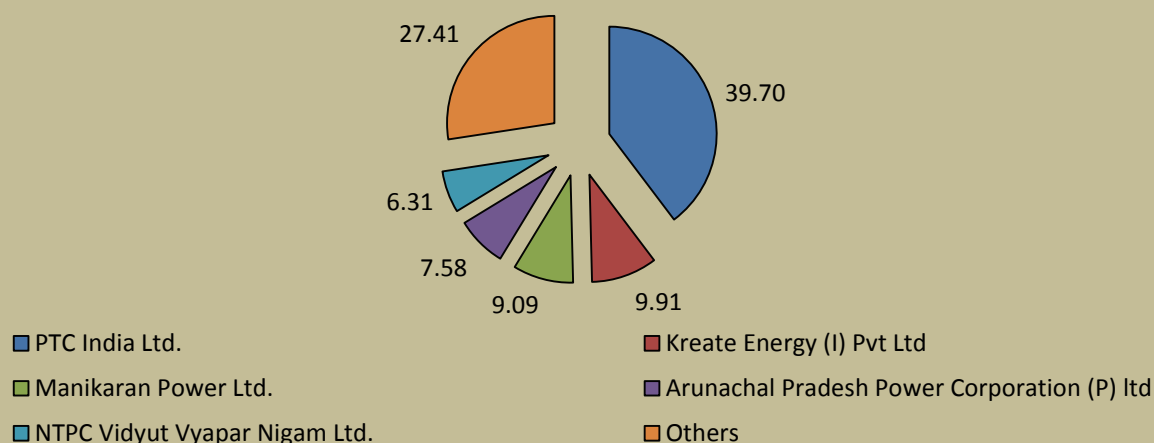


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, JUNE 2019		
Sr.No	Item	Sale Price of Traders (₹/kWh)
1	Minimum	3.01
2	Maximum	6.97
3	Weighted Average	4.86

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), JUNE 2019		
Sr.No	Period of Trade	Sale Price of Traders (₹/kWh)
1	RTC	4.32
2	PEAK	6.92
3	OFF PEAK	5.61

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED THROUGH POWER EXCHANGES, JUNE 2019			
Sr.No	ACP	Price in IEX (₹/kWh)	Price in PXIL (₹/kWh)
1	Minimum	1.00	3.41
2	Maximum	9.00	3.50
3	Weighted Average	3.53	3.48

Source: Information submitted by IEX and PXIL

Table-6: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, JUNE 2019			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	72.24	4.70
2	Day Ahead Contingency Contracts	199.36	4.01
3	Daily Contracts	87.72	3.85
	Total	359.32	4.11

Source: IEX

Table-7: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, JUNE 2019			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (₹/kWh)
1	Intra-Day Contracts	116.70	4.31
2	Any Day(s) Contracts	22.52	5.10
	Total	139.22	4.44

Source: PXIL

Table-8: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, JUNE 2019		
Sr.No	Item	Price in All India Grid (₹/kWh)
1	Minimum	0.00
2	Maximum	8.00
3	Average	3.31

Source: NLDC

Figure-5: Price of Short-term Transactions of Electricity, June 2019

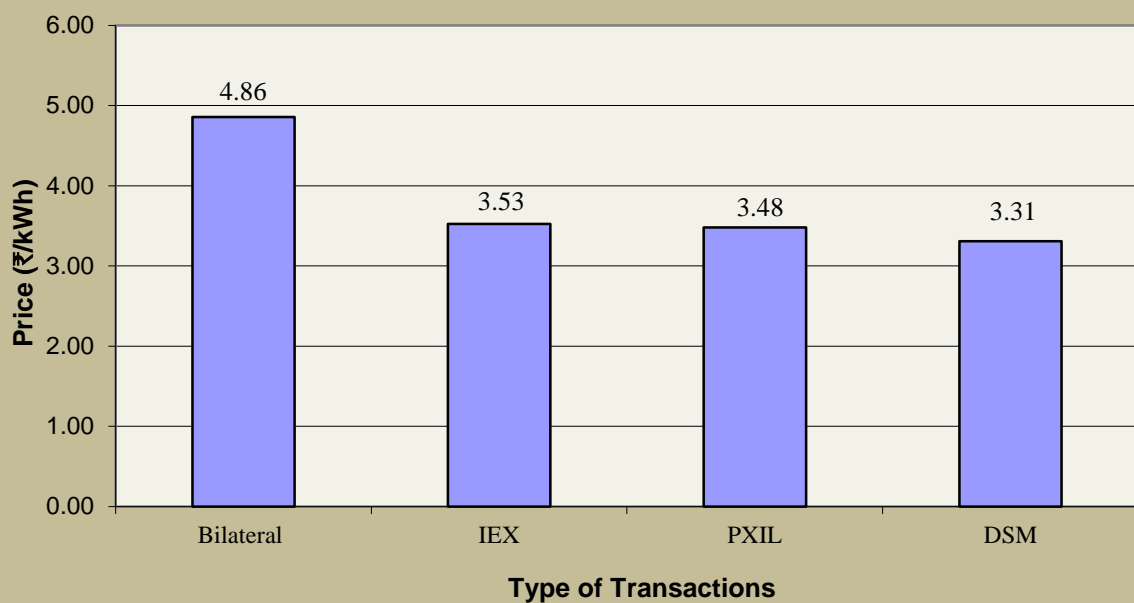
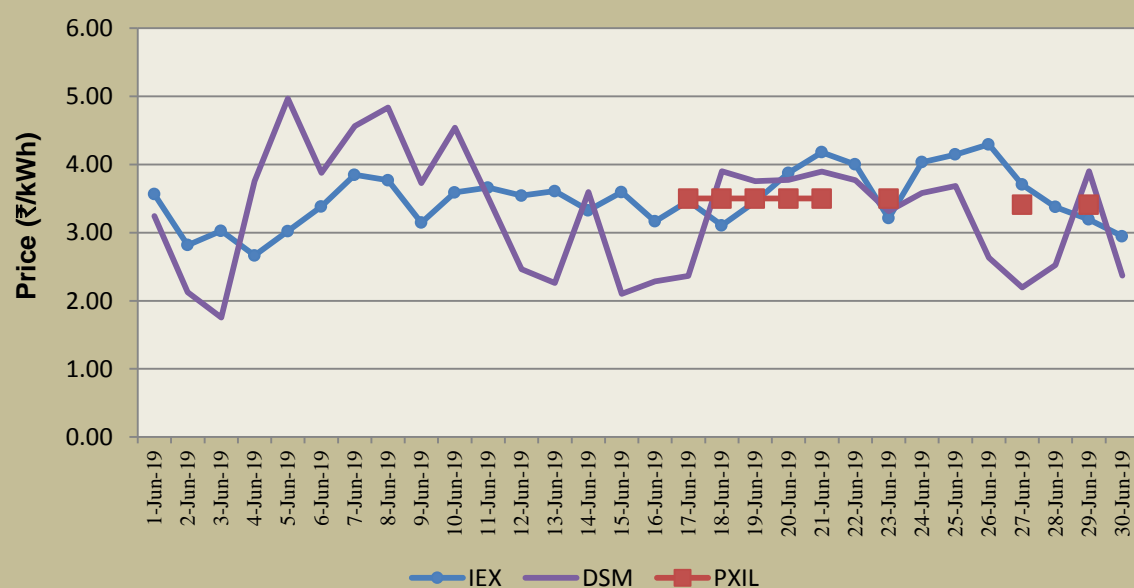


Figure-6: Price of Short-term Transactions of Electricity, June 2019 (Day-wise)



Note: In PXIL, transactions were recorded only on 17th – 21st, 23rd, 27th and 29th June 2019

Table-9: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, JUNE 2019		
Name of the Entity	Volume of Sale (MUs)	% of Volume
HIMACHAL PRADESH	640.17	10.91
J & K	458.23	7.81
RAJASTHAN	413.42	7.04
MP	399.53	6.81
ANDHRA PRADESH	388.52	6.62
GMR CHATTISGARH	341.40	5.82
THERMAL POWERTECH	329.12	5.61
ESSAR POWER	254.27	4.33
COASTGEN	246.18	4.19
UTTARAKHAND	214.55	3.66
TAMIL NADU	187.08	3.19
DVC	167.65	2.86
DB POWER	159.54	2.72
SKS POWER	155.42	2.65
JAYPEE NIGRIE	150.97	2.57
ADHUNIK POWER LTD	134.84	2.30
MARUTI COAL	117.94	2.01
WEST BENGAL	111.59	1.90
GUJARAT	103.93	1.77
CHHATTISGARH	94.54	1.61
TELANGANA	90.54	1.54
MEGHALAYA	70.44	1.20
JHABUA POWER_MP	49.36	0.84
ONGC PALATANA	46.69	0.80
KSK MAHANADI	46.69	0.80
CHUZACHEN HEP	45.86	0.78
JINDAL STAGE-II	40.54	0.69
KERALA	39.36	0.67
MANIPUR	38.32	0.65
JORETHANG	36.66	0.62
SHREE CEMENT	36.22	0.62
DAGACHU	34.66	0.59
TASHIDENG HEP	32.57	0.56
KARNATAKA	24.46	0.42
AD HYDRO	21.67	0.37
GMR KAMALANGA	21.60	0.37
TRIPURA	14.40	0.25
UTTAR PRADESH	13.40	0.23
MAHARASHTRA	12.74	0.22
BRBCL,NABINAGAR	11.21	0.19
LANKO_AMK	9.54	0.16
ODISHA	9.22	0.16
PUNJAB	7.45	0.13
MIZORAM	7.37	0.13
IL&FS	7.22	0.12
DELHI	6.34	0.11
BALCO	5.24	0.09
NAGALAND	4.20	0.07
HARYANA	4.08	0.07

TEESTA STG3	2.52	0.04
NTPC STATIONS-NER	2.45	0.04
MB POWER	2.05	0.03
JHARKHAND	1.37	0.02
NTPC STATIONS-NR	1.15	0.02
BIHAR	1.00	0.02
ACBIL	0.74	0.01
JITPL	0.30	0.01
KARCHAM WANGTOO	0.11	0.00
DGEN MEGA POWER	0.10	0.002
DADRA & NAGAR HAVELI	0.07	0.001
Total	5868.78	100.00
Volume Sold by top 5 Regional Entities	2299.88	39.19

Table-10: VOLUME OF ELECTRICITY PURCHASED THROUGH BILATERAL, JUNE 2019		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
PUNJAB	880.09	14.97
HARYANA	850.21	14.46
DELHI	830.09	14.11
UTTAR PRADESH	608.18	10.34
WEST BENGAL	388.18	6.60
GUJARAT	383.32	6.52
BANGLADESH	287.73	4.89
ODISHA	200.33	3.41
UTTARAKHAND	200.05	3.40
BIHAR	197.46	3.36
CHHATTISGARH	164.25	2.79
ESSAR STEEL	160.88	2.74
NEPAL(NVVN)	157.17	2.67
JHARKHAND	141.79	2.41
TAMIL NADU	118.81	2.02
ANDHRA PRADESH	115.43	1.96
MP	58.49	0.99
ASSAM	50.19	0.85
MAHARASHTRA	26.63	0.45
TELANGANA	20.64	0.35
KERALA	14.38	0.24
DVC	11.39	0.19
MEGHALAYA	10.80	0.18
KARNATAKA	2.05	0.03
RAJASTHAN	1.42	0.02
GOA	0.86	0.01
DADRA & NAGAR HAVELI	0.15	0.003
TOTAL	5880.98	100.00
Volume Purchased by top 5 Regional Entities	3556.75	60.48

Table-11: VOLUME OF ELECTRICITY SOLD THROUGH POWER EXCHANGES, JUNE 2019		
Name of the Entity	Volume of Sale (MUs)	% of Volume
TEESTA STG3	657.03	15.62
HIMACHAL PRADESH	356.21	8.47
SEMBCORP	348.88	8.29
JINDAL STAGE-II	169.64	4.03
TELANGANA	166.27	3.95
MAHARASHTRA	145.63	3.46
DELHI	130.93	3.11
JAYPEE NIGRIE	119.46	2.84
JITPL	115.51	2.75
GUJARAT	110.41	2.62
THERMAL POWERTECH	110.21	2.62
MP	104.82	2.49
AD HYDRO	95.48	2.27
DB POWER	94.42	2.24
KARCHAM WANGTOO	93.19	2.21
COASTGEN	78.62	1.87
MB POWER	73.20	1.74
DIKCHU HEP	62.55	1.49
UTTAR PRADESH	59.58	1.42
ASSAM	58.19	1.38
NLC	57.87	1.38
KARNATAKA	57.73	1.37
RAJASTHAN	57.04	1.36
SPECTRUM	52.63	1.25
ODISHA	51.91	1.23
MARUTI COAL	43.87	1.04
ACBIL	41.42	0.98
SKS POWER	40.94	0.97
SIKKIM	36.14	0.86
GMR CHATTISGARH	36.10	0.86
ADHUNIK POWER LTD	35.35	0.84
SHREE CEMENT	35.13	0.83
JINDAL POWER	34.77	0.83
UTTARAKHAND	34.59	0.82
ANDHRA PRADESH	33.98	0.81
CHHATTISGARH	33.51	0.80
HARYANA	31.73	0.75
NTPC STATIONS-SR	26.19	0.62
SAINJ HEP	22.67	0.54
JHARKHAND	22.66	0.54
TRIPURA	22.41	0.53
DVC	19.51	0.46
NTPC STATIONS-NER	17.12	0.41
ESSAR POWER	15.43	0.37
PUNJAB	15.00	0.36
MEGHALAYA	14.30	0.34
MIZORAM	13.21	0.31
ONGC PALATANA	11.93	0.28

IL&FS	11.31	0.27
BALCO	10.99	0.26
TAMIL NADU	10.89	0.26
ARUNACHAL PRADESH	10.29	0.24
WEST BENGAL	8.51	0.20
DGEN MEGA POWER	8.09	0.19
TRN ENERGY	7.81	0.19
GOA	7.16	0.17
GMR KAMALANGA	7.15	0.17
CHANDIGARH	7.04	0.17
BRBCL,NABINAGAR	6.67	0.16
CHUZACHEN HEP	6.50	0.15
MALANA	5.35	0.13
J & K	5.31	0.13
TASHIDENG HEP	4.48	0.11
JORETHANG	4.36	0.10
LANCO BUDHIL	3.96	0.09
EMCO	3.15	0.07
RGPPL (DABHOL)	2.75	0.07
KERALA	2.58	0.06
DADRA & NAGAR HAVELI	2.43	0.06
NEEPCO STATIONS	1.36	0.03
NTPC STATIONS-NR	1.19	0.03
NTPC STATIONS-WR	0.61	0.01
NAGALAND	0.45	0.01
RANGANADI HEP	0.35	0.01
DHARIWAL POWER	0.33	0.01
JHABUA POWER_MP	0.28	0.01
MANIPUR	0.21	0.01
PARE HEP	0.19	0.00
DOYANG HEP	0.01	0.000
Total	4207.10	100.00
Volume sold by top 5 Regional Entities	1698.03	40.36

Table-12: VOLUME OF ELECTRICITY PURCHASED THROUGH POWER EXCHANGES, JUNE 2019		
Name of the Entity	Volume of Purchase (MUs)	% of Volume
BIHAR	626.34	14.89
WEST BENGAL	580.56	13.80
MAHARASHTRA	364.56	8.67
TAMIL NADU	357.26	8.49
ANDHRA PRADESH	274.72	6.53
KERALA	224.64	5.34
GUJARAT	223.76	5.32
ODISHA	220.42	5.24
TELANGANA	199.85	4.75
RAJASTHAN	185.33	4.41
CHHATTISGARH	121.92	2.90
HARYANA	115.27	2.74
UTTAR PRADESH	108.92	2.59
PUNJAB	85.50	2.03
DELHI	80.64	1.92
ASSAM	75.53	1.80
KARNATAKA	64.50	1.53
JHARKHAND	53.16	1.26
UTTARAKHAND	46.41	1.10
DADRA & NAGAR HAVELI	37.65	0.89
GOA	34.96	0.83
DAMAN AND DIU	29.40	0.70
MEGHALAYA	27.55	0.65
HIMACHAL PRADESH	17.43	0.41
ESSAR STEEL	17.38	0.41
MP	14.80	0.35
CHANDIGARH	11.41	0.27
MANIPUR	5.24	0.12
NAGALAND	1.09	0.03
J & K	0.57	0.01
DVC	0.22	0.01
TRIPURA	0.12	0.003
TOTAL	4207.10	100.00
Volume purchased by top 5 Regional Entities	2203.45	52.37

Table-13: VOLUME OF ELECTRICITY UNDER DRAWAL (EXPORTED) THROUGH DSM, JUNE 2019		
Name of the Entity	Volume of Under drawal (MUs)	% of Volume
NTPC STATIONS-WR	92.46	4.80
MAHARASHTRA	88.08	4.57
GUJARAT	79.09	4.10
MP	76.39	3.96
TAMIL NADU	75.10	3.90
RAJASTHAN	69.05	3.58
HARYANA	68.71	3.56
ANDHRA PRADESH	68.40	3.55
KARNATAKA	68.05	3.53
PUNJAB	65.98	3.42
NPGC	62.38	3.24
TELANGANA	61.32	3.18
OPGC	61.30	3.18
NTPC STATIONS-NR	60.87	3.16
J & K	60.30	3.13
UTTAR PRADESH	59.98	3.11
SASAN UMPP	54.93	2.85
BIHAR	46.44	2.41
NHPC STATIONS	44.14	2.29
CHHATTISGARH	37.50	1.95
CHUKHA HEP	31.01	1.61
ODISHA	28.37	1.47
DELHI	25.61	1.33
ESSAR STEEL	23.45	1.22
WEST BENGAL	23.25	1.21
BBMB	22.20	1.15
NLC	21.59	1.12
DVC	21.06	1.09
UTTARAKHAND	20.52	1.06
KURICHU HEP	19.95	1.03
NTPC STATIONS-SR	19.78	1.03
NTPC STATIONS-ER	19.26	1.00
JHARKHAND	17.87	0.93
HIMACHAL PRADESH	15.49	0.80
TRIPURA	13.40	0.70
GOA	12.23	0.63
KARCHAM WANGTOO	10.84	0.56
ARUNACHAL PRADESH	10.81	0.56
OSTRO	10.55	0.55
TEESTA HEP	9.44	0.49
TEESTA STG3	8.92	0.46
NEEPCO STATIONS	8.43	0.44
NAPP	8.12	0.42
ASSAM	8.00	0.41
DADRA & NAGAR HAVELI	7.52	0.39

DIKCHU HEP	7.25	0.38
MEGHALAYA	6.33	0.33
CHANDIGARH	6.27	0.33
NJPC	6.00	0.31
CGPL	5.94	0.31
PONDICHERRY	5.77	0.30
JAYPEE NIGRIE	5.74	0.30
MIZORAM	5.56	0.29
RENEW_BHACHAU	5.33	0.28
MANGDECHU HEP	5.23	0.27
MAITHON POWER LTD	4.93	0.26
BRBCL,NABINAGAR	4.73	0.25
ACBIL	4.64	0.24
NEPAL(NVVN)	4.36	0.23
KERALA	4.35	0.23
ARINSUM_RUMS	4.24	0.22
ACME_RUMS	3.93	0.20
TALA HEP	3.89	0.20
RAIL	3.82	0.20
NAGALAND	3.79	0.20
AD HYDRO	3.73	0.19
RGPPL (DABHOL)	3.45	0.18
BANGLADESH	3.42	0.18
NTPC STATIONS-NER	3.25	0.17
CHUZACHEN HEP	3.24	0.17
MAHINDRA_RUMS	3.17	0.16
EMCO	3.00	0.16
KOTESHWAR	2.93	0.15
DAMAN AND DIU	2.92	0.15
DB POWER	2.88	0.15
SIKKIM	2.83	0.15
MB POWER	2.78	0.14
LANKO_AMK	2.70	0.14
BALCO	2.65	0.14
RANGANADI HEP	2.62	0.14
TASHIDENG HEP	2.53	0.13
THERMAL POWERTECH	2.50	0.13
MANIPUR	2.49	0.13
ESSAR POWER	2.42	0.13
JINDAL POWER	2.42	0.13
BARC	2.42	0.13
TRN ENERGY	2.36	0.12
JHABUA POWER_MP	2.36	0.12
NSPCL	2.33	0.12
RAMPUR HEP	2.27	0.12
IGSTPS	2.21	0.11
JINDAL STAGE-II	2.17	0.11
NETCL VALLUR	2.06	0.11
JITPL	2.00	0.10

TEHRI	1.95	0.10
SEMBCORP	1.86	0.10
COASTGEN	1.79	0.09
NEP	1.73	0.09
RKM POWER	1.70	0.09
MTPS II	1.55	0.08
KSK MAHANADI	1.54	0.08
PARE HEP	1.43	0.07
SKS POWER	1.38	0.07
DHARIWAL POWER	1.35	0.07
RAP B	1.34	0.07
ONGC PALATANA	1.31	0.07
NTPL	1.12	0.06
RAP C	1.11	0.06
ADHUNIK POWER LTD	1.10	0.06
JORETHANG	1.01	0.05
GMR KAMALANGA	0.87	0.05
GMR CHATTISGARH	0.72	0.04
LOKTAK	0.70	0.04
RANGIT HEP	0.69	0.04
SHREE CEMENT	0.63	0.03
IL&FS	0.50	0.03
DOYANG HEP	0.37	0.02
GIWEL_BHUJ	0.28	0.01
DAGACHU	0.23	0.01
DGEN MEGA POWER	0.19	0.01
MALANA	0.14	0.01
HVDC CHAMPA	0.12	0.01
LANCO BUDHIL	0.11	0.01
DCPP	0.09	0.00
NFF	0.06	0.00
Total	1927.37	100.00
Volume Exported by top 5 Regional Entities	411.12	21.33

Table-14: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, JUNE 2019		
Name of the Entity	Volume of Over Drawal (MUs)	% of Volume
NTPC STATIONS-WR	114.25	5.69
RAJASTHAN	104.05	5.18
UTTAR PRADESH	93.59	4.66
TAMIL NADU	81.20	4.04
NTPC STATIONS-NR	80.50	4.01
KARNATAKA	73.58	3.66
ODISHA	73.57	3.66
MAHARASHTRA	70.17	3.49
WEST BENGAL	66.73	3.32
NTPC STATIONS-ER	61.49	3.06
BIHAR	52.50	2.61
NTPC STATIONS-SR	52.47	2.61
MP	51.17	2.55
GUJARAT	46.99	2.34
KERALA	44.84	2.23
PUNJAB	42.90	2.13
ANDHRA PRADESH	42.20	2.10
DVC	40.81	2.03
TELANGANA	40.48	2.01
HARYANA	39.69	1.98
CHHATTISGARH	32.39	1.61
TEESTA STG3	30.20	1.50
HIMACHAL PRADESH	29.33	1.46
DELHI	29.01	1.44
UTTARAKHAND	27.34	1.36
RGPPL (DABHOL)	26.77	1.33
ASSAM	24.63	1.23
ESSAR STEEL	21.73	1.08
JHARKHAND	21.35	1.06
GMR CHATTISGARH	21.11	1.05
J & K	20.71	1.03
CGPL	18.77	0.93
CHUKHA HEP	17.44	0.87
NLC	16.15	0.80
DAGACHU	15.51	0.77
EMCO	14.36	0.71
GMR KAMALANGA	13.22	0.66
MB POWER	12.34	0.61
NHPC STATIONS	10.90	0.54
OPGC	9.92	0.49
SEMBCORP	9.28	0.46
NTPC STATIONS-NER	8.65	0.43
BALCO	8.11	0.40
JINDAL STAGE-II	7.82	0.39
DAMAN AND DIU	7.79	0.39
NETCL VALLUR	7.70	0.38
CHANDIGARH	7.67	0.38
GOA	7.25	0.36
OSTRO	7.22	0.36
IGSTPS	6.98	0.35
KURICHU HEP	6.88	0.34
JHABUA POWER_MP	6.77	0.34
ADHUNIK POWER LTD	6.68	0.33
TASHIDENG HEP	6.63	0.33

NPGC	6.62	0.33
PONDICHERRY	6.42	0.32
JORETHANG	6.37	0.32
BBMB	5.85	0.29
IL&FS	5.81	0.29
KARCHAM WANGTOO	5.73	0.29
NEPAL(NVVN)	5.60	0.28
BANGLADESH	5.58	0.28
MTPS II	5.56	0.28
RAP C	5.52	0.27
TALA HEP	5.45	0.27
TRIPURA	5.30	0.26
NAPP	5.26	0.26
DADRA & NAGAR HAVELI	5.15	0.26
AD HYDRO	5.01	0.25
SIKKIM	4.94	0.25
DIKCHU HEP	4.79	0.24
SHREE CEMENT	4.76	0.24
BRBCL,NABINAGAR	4.71	0.23
DB POWER	4.57	0.23
MEGHALAYA	4.35	0.22
ONGC PALATANA	4.32	0.21
ESSAR POWER	4.15	0.21
THERMAL POWERTECH	3.93	0.20
ARINSUM_RUMS	3.92	0.20
NJPC	3.92	0.19
JITPL	3.88	0.19
ARUNACHAL PRADESH	3.70	0.18
RENEW_BHACHAU	3.69	0.18
ACME_RUMS	3.59	0.18
CHUZACHEN HEP	3.57	0.18
RAIL	3.52	0.18
COASTGEN	3.43	0.17
MANIPUR	3.37	0.17
SASAN UMPP	3.29	0.16
MAITHON POWER LTD	3.19	0.16
KSK MAHANADI	3.16	0.16
DGEN MEGA POWER	3.04	0.15
NSPCL	2.81	0.14
TEHRI	2.64	0.13
KOTESHWAR	2.52	0.13
KAPP 3&4	2.47	0.12
RAP B	2.41	0.12
JINDAL POWER	2.05	0.10
NEEPCO STATIONS	2.03	0.10
NTPL	1.93	0.10
NAGALAND	1.83	0.09
MAHINDRA_RUMS	1.70	0.08
RAMPUR HEP	1.65	0.08
ACBIL	1.58	0.08
GIWEL_BHUJ	1.53	0.08
JAYPEE NIGRIE	1.51	0.08
RANGANADI HEP	1.43	0.07
NEP	1.34	0.07
SKS POWER	1.32	0.07
LANKO_AMK	1.22	0.06
MIZORAM	1.14	0.06
RKM POWER	1.05	0.05

TRN ENERGY	0.76	0.04
DHARIWAL POWER	0.68	0.03
LANKO KONDAPALLI	0.59	0.03
SIMHAPURI	0.53	0.03
LOKTAK	0.50	0.03
LANCO BUDHIL	0.50	0.02
KORBA WEST POWER	0.43	0.02
RANGIT HEP	0.40	0.02
MEENAKSHI	0.33	0.02
HVDC CHAMPA	0.32	0.02
PARE HEP	0.29	0.01
TEESTA HEP	0.28	0.01
MALANA	0.18	0.01
NFF	0.17	0.01
DOYANG HEP	0.13	0.01
DCPP	0.08	0.00
BARC	0.06	0.00
MANGDECHU HEP	0.00	0.00
MALANA	0.12	0.01
TOTAL	2009.36	100.00
Volume Imported by top 5 Regional Entities	473.59	23.57

Table-15: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), JUNE 2019		
S. No.	Name of the Entity	Total volume of net short-term transactions of electricity*
1	PUNJAB	920.05
2	HARYANA	900.66
3	WEST BENGAL	892.12
4	BIHAR	828.86
5	DELHI	776.87
6	UTTAR PRADESH	677.74
7	ODISHA	404.82
8	GUJARAT	360.64
9	BANGLADESH	289.89
10	TAMIL NADU	284.20
11	KERALA	237.57
12	MAHARASHTRA	214.91
13	ESSAR STEEL	176.55
14	JHARKHAND	174.40
15	NEPAL(NVVN)	158.42
16	CHHATTISGARH	153.01
17	ASSAM	84.15
18	NTPC STATIONS-ER	42.23
19	DAMAN AND DIU	34.27
20	DADRA & NAGAR HAVELI	32.92
21	GOA	23.68
22	NTPC STATIONS-WR	21.18
23	RGPPL (DABHOL)	20.58
24	NTPC STATIONS-NR	17.29
25	CGPL	12.83
26	EMCO	8.22
27	NTPC STATIONS-SR	6.50
28	CHANDIGARH	5.78
29	NETCL VALLUR	5.64
30	IGSTPS	4.77
31	RAP C	4.41
32	UTTARAKHAND	4.14
33	MTPS II	4.01
34	KAPP 3&4	2.47
35	TALA HEP	1.55
36	GIWEL_BHUJ	1.24
37	RAP B	1.08
38	NTPL	0.81
39	TEHRI	0.69
40	PONDICHERRY	0.65
41	LANKO KONDAPALLI	0.59
42	SIMHAPURI	0.53
43	NSPCL	0.48
44	KORBA WEST POWER	0.43
45	MEENAKSHI	0.33
46	HVDC CHAMPA	0.20
47	NFF	0.12
48	DCPP	-0.01
49	LOKTAK	-0.20
50	DOYANG HEP	-0.26
51	RANGIT HEP	-0.29
52	RAIL	-0.31
53	ARINSUM_RUMS	-0.32

54	ACME_RUMS	-0.34
55	NEP	-0.39
56	KOTESHWAR	-0.42
57	RAMPUR HEP	-0.63
58	RKM POWER	-0.65
59	DHARIWAL POWER	-0.99
60	PARE HEP	-1.33
61	MAHINDRA_RUMS	-1.48
62	RANGANADI HEP	-1.54
63	RENEW_BHACHAU	-1.63
64	MAITHON POWER LTD	-1.73
65	NJPC	-2.08
66	BARC	-2.36
67	NAPP	-2.86
68	OSTRO	-3.33
69	LANCO BUDHIL	-3.58
70	MANGDECHU HEP	-5.23
71	MALANA	-5.31
72	DGEN MEGA POWER	-5.34
73	NAGALAND	-5.53
74	NEEPCO STATIONS	-7.75
75	TEESTA HEP	-9.16
76	TRN ENERGY	-9.41
77	KARNATAKA	-10.11
78	BALCO	-10.77
79	LANKO_AMK	-11.02
80	KURICHU HEP	-13.07
81	IL&FS	-13.23
82	CHUKHA HEP	-13.58
83	NTPC STATIONS-NER	-14.18
84	BBMB	-16.35
85	GMR KAMALANGA	-16.40
86	ARUNACHAL PRADESH	-17.40
87	BRBCL,NABINAGAR	-17.90
88	DAGACHU	-19.38
89	SAINJ HEP	-22.67
90	MIZORAM	-25.00
91	MANIPUR	-32.40
92	TASHIDENG HEP	-32.96
93	NHPC STATIONS	-33.24
94	SIKKIM	-34.04
95	JINDAL POWER	-35.13
96	JORETHANG	-35.66
97	TRIPURA	-44.79
98	KSK MAHANADI	-45.07
99	JHABUA POWER_MP	-45.22
100	ACBIL	-45.22
101	MEGHALAYA	-48.36
102	OPGC	-51.38
103	SASAN UMPP	-51.64
104	CHUZACHEN HEP	-52.01
105	SPECTRUM	-52.63
106	ONGC PALATANA	-55.60
107	NPGC	-55.76
108	TELANGANA	-57.16
109	ANDHRA PRADESH	-58.55
110	NLC	-63.30
111	DIKCHU HEP	-65.00

112	MB POWER	-65.69
113	SHREE CEMENT	-67.21
114	KARCHAM WANGTOO	-98.41
115	JITPL	-113.94
116	AD HYDRO	-115.87
117	DVC	-155.79
118	MARUTI COAL	-161.81
119	ADHUNIK POWER LTD	-164.61
120	SKS POWER	-196.41
121	JINDAL STAGE-II	-204.53
122	RAJASTHAN	-248.71
123	DB POWER	-252.28
124	ESSAR POWER	-267.97
125	JAYPEE NIGRIE	-274.66
126	COASTGEN	-323.16
127	SEMBCORP	-341.46
128	GMR CHATTISGARH	-357.09
129	THERMAL POWERTECH	-437.90
130	MP	-456.29
131	J & K	-502.56
132	TEESTA STG3	-638.29
133	HIMACHAL PRADESH	-965.10
* 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, JUNE 2019			
	Details of Congestion	IEX	PXIL
A	Unconstrained Cleared Volume (MUs)	4213.54	0.42
B	Actual Cleared Volume and hence scheduled (MUs)	4206.68	0.42
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs)	0.00	0.00
D	Volume of electricity that could not be cleared and hence not scheduled because of reasons other than congestion (MUs) *	6.86	0.00
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	0.16%	0.00%
F	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/Total number of hours in the month)	0.00%	0.00%
G	Congestion occurrence (%) time block wise		
	0.00 - 6.00 hours	0.00%	0.00%
	6.00 - 12.00 hours	0.00%	0.00%
	12.00 - 18.00 hours	0.00%	0.00%
	18.00 - 24.00 hours	0.00%	0.00%
* This power could not be cleared due to real time curtailment of 4.9 MU on 04 th June 2019 and rejection of buy bids of 1.95 MU in Punjab bid area on 17 th June 2019			
Source: IEX & PXIL & NLDC			

Table-17: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), JUNE 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-Jun-19	80.51	69.38	136.62	0.00	57.77	3942.55
2-Jun-19	74.74	67.45	110.01	0.00	60.99	3751.39
3-Jun-19	79.68	70.57	119.77	0.00	62.59	3669.86
4-Jun-19	79.15	69.37	108.50	0.00	67.81	3795.30
5-Jun-19	81.77	70.33	115.63	0.00	60.10	3945.41
6-Jun-19	82.31	77.86	131.48	0.00	60.03	3890.18
7-Jun-19	81.56	75.03	142.79	0.00	58.21	3847.63
8-Jun-19	82.79	78.66	139.71	0.00	54.64	3906.89
9-Jun-19	81.02	77.23	125.33	0.00	55.80	3832.93
10-Jun-19	106.85	78.97	143.99	0.00	60.43	3912.36
11-Jun-19	110.93	79.17	163.48	0.00	67.94	3918.40
12-Jun-19	100.41	80.01	145.92	0.00	90.82	3747.92
13-Jun-19	104.97	80.98	135.04	0.00	66.36	3642.21
14-Jun-19	104.45	77.80	131.47	0.00	62.80	3835.71
15-Jun-19	103.21	84.90	146.64	0.00	69.76	3710.32
16-Jun-19	136.87	91.12	134.88	0.00	68.15	3516.00
17-Jun-19	149.49	93.75	143.58	0.03	76.44	3563.72
18-Jun-19	149.66	90.99	136.76	0.06	82.71	3559.68
19-Jun-19	149.75	93.27	159.93	0.06	70.31	3656.64
20-Jun-19	161.69	95.40	150.46	0.06	70.87	3723.62
21-Jun-19	145.11	90.95	146.96	0.06	64.82	3823.64
22-Jun-19	137.67	87.39	139.65	0.00	61.17	3787.96
23-Jun-19	125.11	82.86	124.03	0.06	65.56	3668.06
24-Jun-19	137.54	76.74	152.85	0.00	68.51	3805.53
25-Jun-19	148.69	73.46	172.35	0.00	66.86	3873.95
26-Jun-19	139.84	75.97	171.60	0.00	69.36	3847.37
27-Jun-19	138.05	75.92	153.53	0.05	65.35	3744.00
28-Jun-19	139.14	80.33	148.14	0.00	60.22	3681.01
29-Jun-19	135.35	78.52	138.92	0.05	60.88	3689.21
30-Jun-19	131.96	76.33	136.66	0.00	61.33	3543.72
Total	3480.27	2400.70	4206.68	0.42	1968.58	112833.17
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), JUNE 2019									
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-Jun-19	1.25	5.73	3.56	-	-	-	0.00	8.00	3.24
2-Jun-19	1.17	4.18	2.82	-	-	-	0.00	8.00	2.12
3-Jun-19	1.10	4.89	3.02	-	-	-	0.00	6.69	1.76
4-Jun-19	1.00	3.83	2.66	-	-	-	0.00	8.00	3.75
5-Jun-19	1.62	4.20	3.02	-	-	-	0.00	8.00	4.97
6-Jun-19	2.00	5.42	3.38	-	-	-	0.00	8.00	3.88
7-Jun-19	1.79	6.49	3.85	-	-	-	0.00	8.00	4.56
8-Jun-19	1.56	7.27	3.77	-	-	-	0.00	8.00	4.84
9-Jun-19	1.76	4.50	3.15	-	-	-	0.00	8.00	3.73
10-Jun-19	2.00	5.42	3.59	-	-	-	0.00	8.00	4.54
11-Jun-19	2.00	7.50	3.66	-	-	-	0.00	8.00	3.51
12-Jun-19	1.81	7.00	3.54	-	-	-	0.00	8.00	2.47
13-Jun-19	1.70	7.51	3.61	-	-	-	0.00	8.00	2.26
14-Jun-19	2.07	4.87	3.33	-	-	-	0.00	8.00	3.60
15-Jun-19	1.50	5.48	3.60	-	-	-	0.00	8.00	2.10
16-Jun-19	1.50	4.32	3.16	-	-	-	0.00	6.13	2.28
17-Jun-19	1.10	5.46	3.46	3.50	3.50	3.50	0.00	8.00	2.36
18-Jun-19	1.00	4.36	3.11	3.50	3.50	3.50	0.00	8.00	3.90
19-Jun-19	1.50	5.75	3.45	3.50	3.50	3.50	0.00	7.12	3.75
20-Jun-19	1.14	6.60	3.88	3.50	3.50	3.50	0.00	8.00	3.77
21-Jun-19	2.25	7.60	4.18	3.50	3.50	3.50	0.00	6.75	3.89
22-Jun-19	1.65	8.37	4.00	-	-	-	0.00	8.00	3.77
23-Jun-19	1.30	4.51	3.21	3.50	3.50	3.50	0.00	8.00	3.31
24-Jun-19	1.73	8.85	4.03	-	-	-	0.00	8.00	3.58
25-Jun-19	2.20	8.85	4.15	-	-	-	0.00	8.00	3.69
26-Jun-19	2.25	9.00	4.29	-	-	-	0.00	6.34	2.63
27-Jun-19	1.80	6.01	3.70	3.41	3.41	3.41	0.00	6.90	2.19
28-Jun-19	1.10	5.75	3.38	-	-	-	0.00	5.00	2.52
29-Jun-19	1.00	4.67	3.19	3.41	3.41	3.41	0.00	8.00	3.90
30-Jun-19	1.43	4.15	2.95	-	-	-	0.00	7.67	2.37
	1.00[#]	9.00[#]	3.53	3.41[#]	3.50[#]	3.48	0.00[#]	8.00[#]	3.31
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), JUNE 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	7.45	880.09	872.64	15.00	85.50	70.50	42.90	65.98	-23.09	920.05
HARYANA	4.08	850.21	846.13	31.73	115.27	83.54	39.69	68.71	-29.02	900.66
RAJASTHAN	413.42	1.42	-412.00	57.04	185.33	128.29	104.05	69.05	35.00	-248.71
DELHI	6.34	830.09	823.76	130.93	80.64	-50.29	29.01	25.61	3.40	776.87
UTTAR PRADESH	13.40	608.18	594.79	59.58	108.92	49.34	93.59	59.98	33.61	677.74
UTTARAKHAND	214.55	200.05	-14.50	34.59	46.41	11.82	27.34	20.52	6.83	4.14
HIMACHAL P	640.17	0.00	-640.17	356.21	17.43	-338.77	29.33	15.49	13.84	-965.10
J & K	458.23	0.00	-458.23	5.31	0.57	-4.74	20.71	60.30	-39.59	-502.56
CHANDIGARH	0.00	0.00	0.00	7.04	11.41	4.38	7.67	6.27	1.40	5.78
MP	399.53	58.49	-341.04	104.82	14.80	-90.03	51.17	76.39	-25.22	-456.29
MAHARASHTRA	12.74	26.63	13.88	145.63	364.56	218.93	70.17	88.08	-17.91	214.91
GUJARAT	103.93	383.32	279.39	110.41	223.76	113.36	46.99	79.09	-32.11	360.64
CHHATTISGARH	94.54	164.25	69.71	33.51	121.92	88.41	32.39	37.50	-5.11	153.01
GOA	0.00	0.86	0.86	7.16	34.96	27.80	7.25	12.23	-4.98	23.68
DAMAN AND DIU	0.00	0.00	0.00	0.00	29.40	29.40	7.79	2.92	4.87	34.27
DADRA & NAGAR	0.07	0.15	0.08	2.43	37.65	35.21	5.15	7.52	-2.37	32.92
ANDHRA P	388.52	115.43	-273.09	33.98	274.72	240.74	42.20	68.40	-26.20	-58.55
KARNATAKA	24.46	2.05	-22.41	57.73	64.50	6.77	73.58	68.05	5.53	-10.11
KERALA	39.36	14.38	-24.98	2.58	224.64	222.06	44.84	4.35	40.49	237.57
TAMIL NADU	187.08	118.81	-68.27	10.89	357.26	346.37	81.20	75.10	6.10	284.20
PONDICHERRY	0.00	0.00	0.00	0.00	0.00	0.00	6.42	5.77	0.65	0.65
TELANGANA	90.54	20.64	-69.90	166.27	199.85	33.58	40.48	61.32	-20.84	-57.16
WEST BENGAL	111.59	388.18	276.59	8.51	580.56	572.05	66.73	23.25	43.48	892.12
ODISHA	9.22	200.33	191.12	51.91	220.42	168.51	73.57	28.37	45.20	404.82
BIHAR	1.00	197.46	196.46	0.00	626.34	626.34	52.50	46.44	6.06	828.86
JHARKHAND	1.37	141.79	140.43	22.66	53.16	30.50	21.35	17.87	3.48	174.40
SIKKIM	0.00	0.00	0.00	36.14	0.00	-36.14	4.94	2.83	2.10	-34.04
DVC	167.65	11.39	-156.26	19.51	0.22	-19.29	40.81	21.06	19.75	-155.79
ARUNACHAL P	0.00	0.00	0.00	10.29	0.00	-10.29	3.70	10.81	-7.11	-17.40
ASSAM	0.00	50.19	50.19	58.19	75.53	17.33	24.63	8.00	16.64	84.15
MANIPUR	38.32	0.00	-38.32	0.21	5.24	5.03	3.37	2.49	0.89	-32.40
MEGHALAYA	70.44	10.80	-59.64	14.30	27.55	13.26	4.35	6.33	-1.98	-48.36
MIZORAM	7.37	0.00	-7.37	13.21	0.00	-13.21	1.14	5.56	-4.42	-25.00
NAGALAND	4.20	0.00	-4.20	0.45	1.09	0.64	1.83	3.79	-1.96	-5.53
TRIPURA	14.40	0.00	-14.40	22.41	0.12	-22.29	5.30	13.40	-8.10	-44.79
NTPC STN NR	1.15	0.00	-1.15	1.19	0.00	-1.19	80.50	60.87	19.63	17.29
NHPC STN	0.00	0.00	0.00	0.00	0.00	0.00	10.90	44.14	-33.24	-33.24
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.06	0.12	0.12
RAIL	0.00	0.00	0.00	0.00	0.00	0.00	3.52	3.82	-0.31	-0.31
NEP	0.00	0.00	0.00	0.00	0.00	0.00	1.34	1.73	-0.39	-0.39
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	5.26	8.12	-2.86	-2.86
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	2.41	1.34	1.08	1.08
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	3.92	6.00	-2.08	-2.08
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	2.64	1.95	0.69	0.69

BBMB	0.00	0.00	0.00	0.00	0.00	0.00	5.85	22.20	-16.35	-16.35
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	5.52	1.11	4.41	4.41
AD HYDRO	21.67	0.00	-21.67	95.48	0.00	-95.48	5.01	3.73	1.28	-115.87
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	2.21	4.77	4.77
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	2.52	2.93	-0.42	-0.42
KARCHAM WANGT	0.11	0.00	-0.11	93.19	0.00	-93.19	5.73	10.84	-5.11	-98.41
SHREE CEMENT	36.22	0.00	-36.22	35.13	0.00	-35.13	4.76	0.63	4.13	-67.21
LANCO BUDHIL	0.00	0.00	0.00	3.96	0.00	-3.96	0.50	0.11	0.39	-3.58
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	1.65	2.27	-0.63	-0.63
MALANA	0.00	0.00	0.00	5.35	0.00	-5.35	0.18	0.14	0.04	-5.31
SAINJ HEP	0.00	0.00	0.00	22.67	0.00	-22.67	0.00	0.00	0.00	-22.67
NTPC STN WR	0.00	0.00	0.00	0.61	0.00	-0.61	114.25	92.46	21.79	21.18
JINDAL POWER	0.00	0.00	0.00	34.77	0.00	-34.77	2.05	2.42	-0.36	-35.13
LANCO_AMK	9.54	0.00	-9.54	0.00	0.00	0.00	1.22	2.70	-1.47	-11.02
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	2.81	2.33	0.48	0.48
ACBIL	0.74	0.00	-0.74	41.42	0.00	-41.42	1.58	4.64	-3.06	-45.22
BALCO	5.24	0.00	-5.24	10.99	0.00	-10.99	8.11	2.65	5.46	-10.77
RGPL (DABHOL)	0.00	0.00	0.00	2.75	0.00	-2.75	26.77	3.45	23.32	20.58
CGPL	0.00	0.00	0.00	0.00	0.00	0.00	18.77	5.94	12.83	12.83
DCPP	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.09	-0.01	-0.01
EMCO	0.00	0.00	0.00	3.15	0.00	-3.15	14.36	3.00	11.36	8.22
ESSAR STEEL	0.00	160.88	160.88	0.00	17.38	17.38	21.73	23.45	-1.72	176.55
KSK MAHANADI	46.69	0.00	-46.69	0.00	0.00	0.00	3.16	1.54	1.62	-45.07
ESSAR POWER	254.27	0.00	-254.27	15.43	0.00	-15.43	4.15	2.42	1.72	-267.97
JINDAL STAGE-II	40.54	0.00	-40.54	169.64	0.00	-169.64	7.82	2.17	5.65	-204.53
DB POWER	159.54	0.00	-159.54	94.42	0.00	-94.42	4.57	2.88	1.68	-252.28
DHARIWAL POWER	0.00	0.00	0.00	0.33	0.00	-0.33	0.68	1.35	-0.66	-0.99
JAYPEE NIGRIE	150.97	0.00	-150.97	119.46	0.00	-119.46	1.51	5.74	-4.23	-274.66
DGEN MEGA POW	0.10	0.00	-0.10	8.09	0.00	-8.09	3.04	0.19	2.85	-5.34
GMR CHATTISGARH	341.40	0.00	-341.40	36.10	0.00	-36.10	21.11	0.72	20.40	-357.09
KORBA WEST POW	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.43	0.43
MB POWER	2.05	0.00	-2.05	73.20	0.00	-73.20	12.34	2.78	9.56	-65.69
MARUTI COAL	117.94	0.00	-117.94	43.87	0.00	-43.87	0.00	0.00	0.00	-161.81
SPECTRUM	0.00	0.00	0.00	52.63	0.00	-52.63	0.00	0.00	0.00	-52.63
JHABUA POWER_M	49.36	0.00	-49.36	0.28	0.00	-0.28	6.77	2.36	4.41	-45.22
SASAN UMPP	0.00	0.00	0.00	0.00	0.00	0.00	3.29	54.93	-51.64	-51.64
TRN ENERGY	0.00	0.00	0.00	7.81	0.00	-7.81	0.76	2.36	-1.60	-9.41
RKM POWER	0.00	0.00	0.00	0.00	0.00	0.00	1.05	1.70	-0.65	-0.65
SKS POWER	155.42	0.00	-155.42	40.94	0.00	-40.94	1.32	1.38	-0.05	-196.41
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.06	2.42	-2.36	-2.36
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	2.47	0.00	2.47	2.47
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.12	0.20	0.20
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	1.70	3.17	-1.48	-1.48
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.92	4.24	-0.32	-0.32
OSTRO	0.00	0.00	0.00	0.00	0.00	0.00	7.22	10.55	-3.33	-3.33
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.59	3.93	-0.34	-0.34
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	3.69	5.33	-1.63	-1.63
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.28	1.24	1.24
NTPC STN SR	0.00	0.00	0.00	26.19	0.00	-26.19	52.47	19.78	32.69	6.50
LANCO KONDAPAL	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.59	0.59

SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.53	0.53
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.33	0.33
COASTGEN	246.18	0.00	-246.18	78.62	0.00	-78.62	3.43	1.79	1.64	-323.16
THERMAL POWER	329.12	0.00	-329.12	110.21	0.00	-110.21	3.93	2.50	1.43	-437.90
IL&FS	7.22	0.00	-7.22	11.31	0.00	-11.31	5.81	0.50	5.30	-13.23
NLC	0.00	0.00	0.00	57.87	0.00	-57.87	16.15	21.59	-5.43	-63.30
SEMBCORP	0.00	0.00	0.00	348.88	0.00	-348.88	9.28	1.86	7.42	-341.46
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	7.70	2.06	5.64	5.64
NTPL	0.00	0.00	0.00	0.00	0.00	0.00	1.93	1.12	0.81	0.81
NTPC STN ER	0.00	0.00	0.00	0.00	0.00	0.00	61.49	19.26	42.23	42.23
MAITHON POWER	0.00	0.00	0.00	0.00	0.00	0.00	3.19	4.93	-1.73	-1.73
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	6.62	62.38	-55.76	-55.76
ADHUNIK POWER	134.84	0.00	-134.84	35.35	0.00	-35.35	6.68	1.10	5.58	-164.61
CHUZACHEN HEP	45.86	0.00	-45.86	6.50	0.00	-6.50	3.57	3.24	0.34	-52.01
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.69	-0.29	-0.29
GMR KAMALANGA	21.60	0.00	-21.60	7.15	0.00	-7.15	13.22	0.87	12.35	-16.40
JITPL	0.30	0.00	-0.30	115.51	0.00	-115.51	3.88	2.00	1.88	-113.94
TEESTA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.28	9.44	-9.16	-9.16
DAGACHU	34.66	0.00	-34.66	0.00	0.00	0.00	15.51	0.23	15.28	-19.38
JORETHANG	36.66	0.00	-36.66	4.36	0.00	-4.36	6.37	1.01	5.36	-35.66
NEPAL(NVVN)	0.00	157.17	157.17	0.00	0.00	0.00	5.60	4.36	1.25	158.42
BANGLADESH	0.00	287.73	287.73	0.00	0.00	0.00	5.58	3.42	2.16	289.89
TEESTA STG3	2.52	0.00	-2.52	657.03	0.00	-657.03	30.20	8.92	21.27	-638.29
DIKCHU HEP	0.00	0.00	0.00	62.55	0.00	-62.55	4.79	7.25	-2.45	-65.00
TASHIDENG HEP	32.57	0.00	-32.57	4.48	0.00	-4.48	6.63	2.53	4.10	-32.96
OPGC	0.00	0.00	0.00	0.00	0.00	0.00	9.92	61.30	-51.38	-51.38
BRBCL,NABINAGAR	11.21	0.00	-11.21	6.67	0.00	-6.67	4.71	4.73	-0.02	-17.90
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	5.56	1.55	4.01	4.01
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	5.45	3.89	1.55	1.55
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	17.44	31.01	-13.58	-13.58
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	6.88	19.95	-13.07	-13.07
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.23	-5.23	-5.23
NTPC STN-NER	2.45	0.00	-2.45	17.12	0.00	-17.12	8.65	3.25	5.39	-14.18
NEEPCO STNS	0.00	0.00	0.00	1.36	0.00	-1.36	2.03	8.43	-6.39	-7.75
RANGANADI HEP	0.00	0.00	0.00	0.35	0.00	-0.35	1.43	2.62	-1.19	-1.54
DOYANG HEP	0.00	0.00	0.00	0.01	0.00	-0.01	0.13	0.37	-0.25	-0.26
ONGC PALATANA	46.69	0.00	-46.69	11.93	0.00	-11.93	4.32	1.31	3.01	-55.60
LOKTAK	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.70	-0.20	-0.20
PARE HEP	0.00	0.00	0.00	0.19	0.00	-0.19	0.29	1.43	-1.14	-1.33
<i>Source: NLDC</i>										
<i>* 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.</i>										
<i>** (-) indicates sale and (+) indicates purchase,</i>										
<i>*** Total net includes net of transactions through bilateral, power exchange and DSM</i>										

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

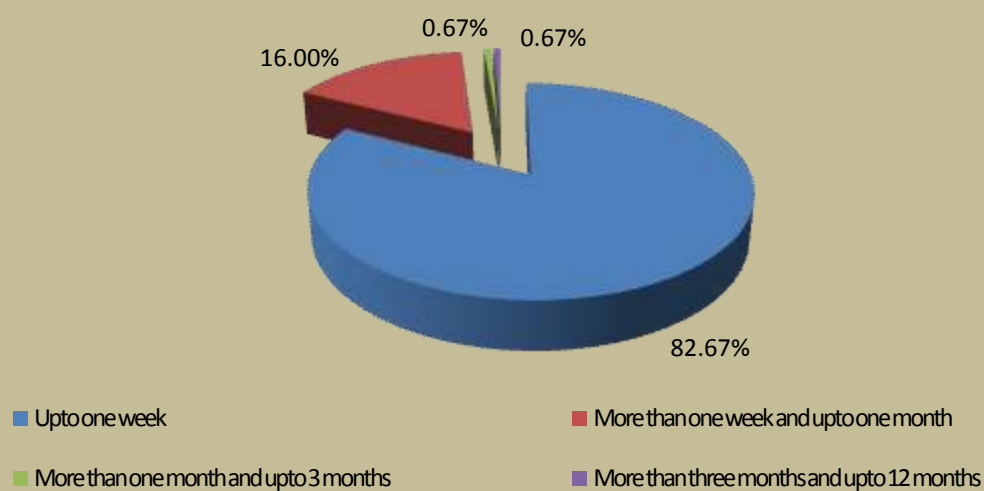


Figure-8: Forward Curve based on Prices of Bilateral Contracts

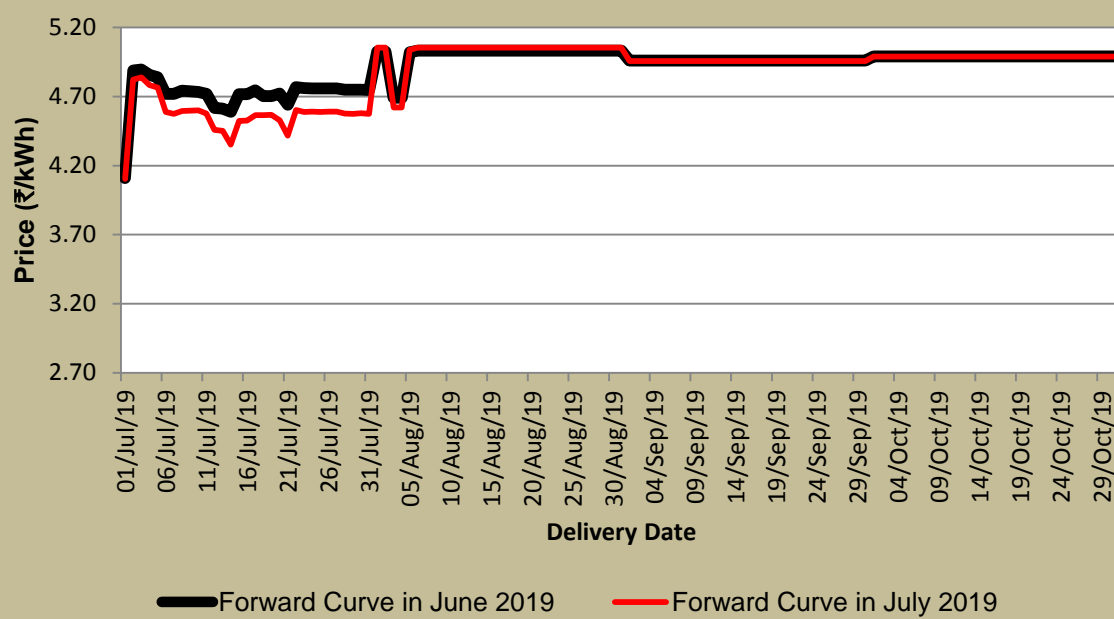


Table-20 : VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, JUNE 2019					
Sr.No.	Details of REC Transactions	IEX		PXIL	
		Solar	Non-Solar	Solar	Non Solar
A	Volume of Buy Bid	500995	1181027	208451	310398
B	Volume of Sell Bid	120044	346226	52120	126519
C	Ratio of Buy Bid to Sell Bid Volume	4.17	3.41	4.00	2.45
D	Market Clearing Volume (MWh)	92093	327688	31675	121679
E	Weighted average Market Clearing Price (₹/MWh)	2000	1600	2000	1555

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