



# Monthly Report on Short-term Transactions of Electricity in India

April, 2020



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## Abbreviations

Abbreviation	Expanded Version
ABSP_ANTP	Acme Bhiwadi Solar Power Private Limited, Anantpur
ACBIL	ACB ( India) Limited
ACP	Area Clearing Price
ACV	Area Clearing Volume
ACME_SLR	ACME Solar Power Project
ACME_RUMS	Acme Rewa Ultra Mega Solar Project
ADY1_PVGD	Adyah Solar Energy Pvt Ltd., Block 1 Pavagada Solar Park
ADY13_PVGD	Adyah Solar Energy Pvt Ltd., Block 13 Pavagada Solar Park
ADY2_PVGD	Adyah Solar Energy Pvt Ltd., Block 2 Pavagada Solar Park
AGEMPL BHUJ	Adani Green Energy (MP) Ltd., Bhuj
AHSP_ANTP	Acme Hisar Solar Power Private Limited, Anantpur
AKS_PVGD	ACME Kurukshetra Solar Energy Pvt. Ltd
AKSP_ANTP	Acme Karnal Solar Power Private Limited, Anantpur
AMPS Hazira	Arcelor Mittal Nippon Steel, Hazira
ARERJL_SLR	Adani Renewable Energy Park Rajasthan Ltd.
ARINSUM_RUMS	Solenergi Rewa Ultra Mega Solar Project
ARS_PVGD	ACME REWARI Solar Power Pvt Ltd.
AVAADA_PVGD	Avaada Solar Energy Private Ltd., Pavagada
AZURE_ANTP	Azure Power, Anantpur
AZURE_SLR	Azure Power Solar Power Project
AZURE34_SLR	Azure Power 34 Pvt. Ltd. Solar Power Project
BALCO	Bharat Aluminum Company Limited
BARC	Bhabha Atomic Research Centre
BBMB	Bhakra Beas Management Board
BETAM_TCN	Betam Wind Energy Private Limited, Tuticorin
BHADRAVATHI HVDC	Bhadravathi High Voltage Direct Current Link
BRBCL	Bhartiya Rail Bijlee Company Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGPL	Coastal Gujarat Power Limited
CHUKHA HEP	Chhukha Hydroelectric Project, Bhutan
CHUZACHEN HEP	Chuzachen Hydro Electric Power Project
CLEAN_SLR	Clean Solar Power Pvt. Ltd
COASTGEN	Coastal Energen Private Limited
DAGACHU	Dagachhu Hydro Power Corporation
DB POWER	Diligent Power Pvt. Ltd.
DCPP	Donga Mahua Captive Power Plant
DGEN MEGA POWER	DGEN Mega Power Project
DHARIWAL POWER	Dhariwal Power Station
DIKCHU HEP	Dikchu Hydro-electric Project, Sikkim
DOYANG HEP	Doyang Hydro Electric Project
DSM	Deviation Settlement Mechanism
DVC	Damodar Valley Corporation
EMCO	EMCO Energy Limited
ESSAR POWER	Essar Power Limited
ESSAR STEEL	Essar Steel Ltd
FORTUM_PVGD	Fortum Finnsurya Energy Private Ltd, Pavagada
FRV_ANTP	Fotowatio Renewable Ventures, Anantapur

FRV_NPK	Fotowatio Renewable Ventures,N P Kunta
GIWEL_BHUJ	Green infra wind energy Limited, Bhuj
GIWEL_TCN	Green Infra Wind Energy Limited,Tuticorin
GMR CHHATTISGARH	GMR Chhattisgarh Energy Limited
GMR KAMALANGA	GMR Kamalanga Energy Ltd.
HVDC ALPD	Alipurduar High Voltage Direct Current Link
HVDC CHAMPA	Champa-Kurukshetra High Voltage Direct Current Link
HVDC PUS	Pasauli High Voltage Direct Current Link
HVDC RAIGARH	Raigarh-Pugalur High Voltage Direct Current Link
IEX	Indian Energy Exchange Limited
IGSTPS	Indira Gandhi Super Thermal Power Station Jhajjar
IL&FS	Infrastructure Leasing & Financial Services Limited
INOX_BHUJ	INOX Wind Limited, Bhuj, Gujarat
J&K	Jammu & Kashmir
JAYPEE NIGRIE	Jaypee Nigrie Super Thermal Power Project
JHABUA POWER MP	Jhabua Thermal Power Project
JINDAL POWER	Jindal Power Limited
JINDAL STAGE-II	Jindal Power Ltd Stage II
JITPL	Jindal India Thermal Power Ltd.
JORETHANG	Jorethang Loop Hydroelectric Power Project
KAPP 3&4	Kakrapar Atomic Power Station Unit 3 & 4
KARCHAM WANGTOO	Karcham Wangtoo H.E. Project
KORBA WEST POWER	Korba West Power Company Limited
KOTESHWAR	Koteshwar Hydro Power project
KSK MAHANADI	KSK Mahanadi Power Ltd
KSMPL_SLR	Kilaj Solar (Maharashtra) Private Limited
KURICHU HEP	Kurichhu Hydro-electric Power Station, Bhutan
LANKO_AMK	Lanco Amarkantak Power Private Limited
LANKO BUDHIL	Lanco Budhil Hydro Power Private Limited
LANKO KONDAPALLY	Lanco Kondapally Power Private Limited
LOKTAK	Loktak Power Project
MAHINDRA_RUMS	Mahindra Rewa Ultra Mega Solar Project
MAHOBASL	Mahoba Solar Power Project
MALANA	Malana Hydroelectric Plant
MANGDECHU HEP	Mangdechhu Hydroelectric Project, Mangdechhu River, Bhutan
Maruti Coal	Maruti Clean Coal and Power Limited
MB POWER	MB Power Ltd
MEENAKSHI	Meenakshi Energy Private Limited
MP	Madhya Pradesh
MTPS II	Muzaffarpur Thermal Power Station – Stage II
MYTRAH_TCN	Mytrah Energy (India) Private Limited, Tuticorin
Mus	Million Units
NAPP	Narora Atomic Power Plant
NEEPCO	North Eastern Electric Power Corporation Limited
NEP	Nepal
NFL	National Fertilisers Limited
NHPC STATIONS	National Hydro Electric Power Corporation Ltd. Stations
NJPC	Nathpa Jhakri Hydroelectric Power Station
NLC	Neyveli Lignite Corporation Limited
NLDC	National Load Dispatch Centre

NPGC	Nabinagar Power Generating Company (Pvt.) Limited
NSPCL	NTPC - SAIL Power Company Private Limited
NTECL Vallur	NTPC Tamil Nadu Energy Company Limited Vallur
NTPC_ANTP	NTPC Anantapur
NTPC STATIONS	National Thermal Power Corporation Ltd. Stations
NTPL	NLC Tamil Nadu Power Limited
NVVN	NTPC Vidyut Vyapar Nigam Limited
ONGC Platana	ONGC Tripura Power Company
OPGC	Odisha Power Generation Corporation
ORANGE_TCN	Orange Renewable Power Pvt. Ltd, Tuticorin
OSTRO	Ostro Energy Private Limited
OTC	Over The Counter
PARAM_PVGD	Parampujya Solar Energy Private Ltd
PARE HEP	Pare hydroelectric project, Arunachal Pradesh
PX	Power Exchange
PXIL	Power Exchange India Limited
RAIL	Indian Railways
RAMPUR HEP	Rampur Hydro Electric Power Project
RANGIT HEP	Rangit Hydroelectric power project
RANGANADI HEP	Ranganadi Hydro Electric Power Project, Arunachal Pradesh
RAP-B	Rajasthan Atomic Power Plant-B
RAP-C	Rajasthan Atomic Power Plant-C
REC	Renewable Energy Certificate
REGL	Raigarh Energy Generation Limited
RENEW_BHACHAU	ReNew Power Limited, Bhachau
RENEW_PVGD	ReNew Wind Energy (TN2) Private Limited
RENEW_SLR	Renew Solar
RENEW_SLR_BKN	Renew Solar Bikaner
RGPPL	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Dispatch Centre
RPREL	Raipur Energen Limited
RTC	Round The Clock
Sasan UMPP	Sasan Ultra Mega Power Project
SB_SLR	Soft Bank Solar
SBG CLEANTECH_SLR	SBG Cleantech Ltd
SBG_NPK	SB Energy Solar Private Limited, NP Kunta
SBG_PVGD	SB Energy Solar Private Limited, Pavagada
SEMBCORP	Sembcorp Gayatri Power Ltd
SHREE CEMENT	Shree Cement Limited
SIMHAPURI	Simhapuri Energy Private Limited
SKS Power	SKS Power Generation Chhattisgarh Limited
SPECTRUM	Spectrum Power Generation Ltd
TALA HEP	Tala Hydroelectric Project, Bhutan
TASHIDENG HEP	Tashiding Hydro Electric Project, Sikkim
TATA_ANTP	TATA Power Anantapur
TATA_PVGD	Tata Power Renewable Energy Ltd
TATA_SLR	Tata Solar
TEESTA STG3	Teesta Stage 3 Hydro Power Project
TEHRI	Tehri Hydro Electric Power Project
THERMAL POWERTECH	Thermal Powertech Corporation India Limited

URI-II  
VINDHYACHAL HVDC  
YARROW\_PVGD

Uri-II Hydropower Project  
Vindhyachal High Voltage Direct Current Link  
Yarrow Infra Structure Private Ltd

## Introduction

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

### I: Volume of Short-term Transactions of Electricity

During April 2020, total electricity generation excluding generation from renewable and captive power plants in India was 81045.22 MUs (Table-1).

Of the total electricity generation, 8322.27 MUs (10.27%) was transacted through short-term, comprising of 3692.04 MUs (4.56%) through day ahead collective transactions on power exchanges, followed by 3011.75 MUs (3.72%) through bilateral (through traders and term-ahead contracts on power exchanges and directly between distribution companies) and 1618.48 MUs (2.00%) through DSM (Table-1 & Figure-2).

Of the total short-term transactions, day ahead collective transactions on power exchanges constitutes 44.36%, followed by 36.19% through bilateral (23.66% through traders and term-ahead contracts on power exchanges and 12.53% directly between distribution companies) and 19.45% 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 April 2020. In April 2020, 23 trading licensees were engaged in short term trading. Top 5 trading licensees had a share of 78.52% in the total volume traded by all the licensees. These are PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Adani Enterprises Ltd., Tata Power Trading Company (P) Ltd. and Kreate Energy (I) 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 0.1973 for the month of April 2020, which indicates moderate concentration of market power (Table-2).

The volume of electricity transacted through IEX in the day ahead market was 3692.04 MUs, while PXIL did not witness any transaction of electricity. The volume of total buy bids and sell bids was 3916.71 MUs and 9294.24 MUs respectively in IEX while PXIL did not receive any buy or sell bids for day ahead market. 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 359.94 MUs and 191.30 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 ₹2.27/kWh, ₹5.22/kWh and ₹3.99/kWh respectively (Table-3). The weighted average sale prices were also computed for the transactions during

Round the Clock (RTC) and Off-peak periods separately, and the sale prices were ₹3.97/kWh and ₹4.77/kWh respectively. There were no transactions by traders during Peak periods in the month of April 2020 (Table-4).

**(ii) Price of electricity transacted through Power Exchanges:** The minimum, maximum and weighted average prices have been computed for the electricity transacted through IEX and PXIL. The minimum, maximum and weighted average prices were ₹0.70/kWh, ₹3.87/kWh and ₹2.47/kWh respectively in IEX, while no transactions were recorded on PXIL (Table-5).

The price of electricity transacted through IEX and PXIL in the term-ahead market was ₹3.08/kWh and ₹2.61/kWh respectively (Table-6 and Table-7).

**(iii) Price of electricity transacted through DSM:** The average deviation settlement price was ₹2.42/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 (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations 2020, the trading licensees are allowed to charge trading margin of not less than 0 paise/kWh and upto 7 paise/kWh. The weighted average trading margin charged by the trading licensees for bilateral transactions during the month was ₹0.036/kWh.

#### **IV: Volume of Short-term Transactions of Electricity (Regional Entity<sup>1</sup>-Wise)**

Of the total bilateral transactions, top 5 regional entities sold 48.45% of the volume, and these were Gujarat, Sembcorp Gayatri Power Ltd., Raipur Energen Ltd., Punjab and Madhya Pradesh. Top 5 regional entities purchased 73.22% of the volume, and these were Tamil Nadu, Andhra Pradesh, Chhattisgarh, Maharashtra and Kerala (Table-9 & 10).

Of the total power exchange transactions, top 5 regional entities sold 46.98% of the volume, and these were Odisha, Uttar Pradesh, Himachal Pradesh, DGEN Mega Power Project and Teesta Stage 3 Hydro Power Project. Top 5 regional entities purchased 85.93% of the volume, and these were Maharashtra, Andhra Pradesh, Gujarat, Telangana and Punjab (Table-11 & 12).

Of the total DSM transactions, top 5 regional entities under drew 21.43% of the volume, and these were Rajasthan, NTPC Station (Western Region), Gujarat, Chhukha Hydroelectric Project-Bhutan and Madhya Pradesh (Table-13). Top 5 regional entities overdrew 24.10% of the volume, and these were Uttar Pradesh, Tala Hydroelectric Project-Bhutan, Rajasthan, Maharashtra and NTPC Station (Western 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, Odisha, Sembcorp Gayatri Power Ltd., Raipur Energen Ltd. and DGEN Mega Power Project. Top 5 electricity purchasing regional entities were Maharashtra, Andhra Pradesh, Tamil Nadu, Telangana and Bihar.

#### **V: Congestion<sup>2</sup> 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

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<sup>1</sup> 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.

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

assumes that there is no congestion in the inter-State transmission system between different regions. However, in reality, the system operator (NLDC) in coordination with RLDCs limits the flow (due to congestion) in the inter-State transmission system. In such a situation, power exchanges adopt a mechanism called “Market Splitting”<sup>3</sup>.

In the month of April 2020, 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 & other reasons and could not be transacted through power exchanges is the difference between unconstrained cleared volume and actual cleared volume.

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

The concept of Renewable Energy Certificates (RECs) seeks to address mismatch between availability of renewable energy and the requirement of the obligated entities to meet their renewable purchase obligation by purchasing green attributes of renewable energy remotely located in the form of RECs. The REC mechanism is a market based instrument, to promote renewable sources of energy and development of electricity market.

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

The details of REC transactions for the month of April, 2020 are shown in Table-20. The market clearing volume of solar RECs transacted on IEX and PXIL were 15991 and 4851 respectively and the weighted average market clearing price of these RECs was ₹2400/MWh in IEX and ₹2000/MWh in PXIL. Market clearing volume of non-solar

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<sup>3</sup>“ 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.

RECs transacted on IEX and PXIL were 172488 and 44605 respectively and the weighted average market clearing price of these RECs was ₹ 1000/MWh in IEX and ₹ 1000/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 2.39 and 0.48 in IEX and PXIL respectively. For non-solar RECs, the ratio of buy bids to sell bids was 0.39 and 0.42 in IEX and PXIL respectively.

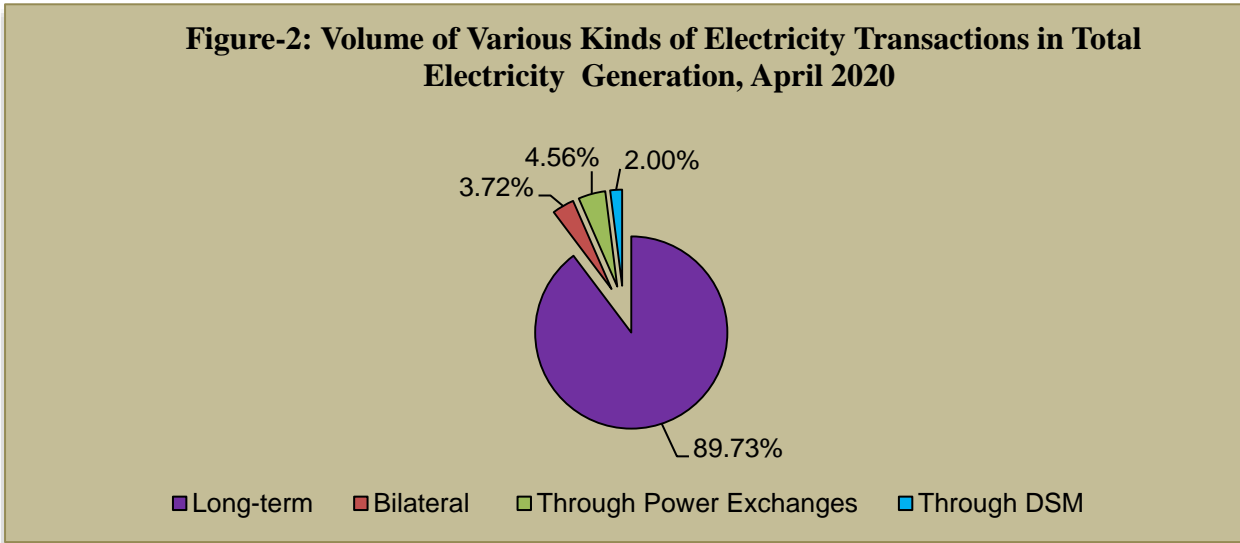
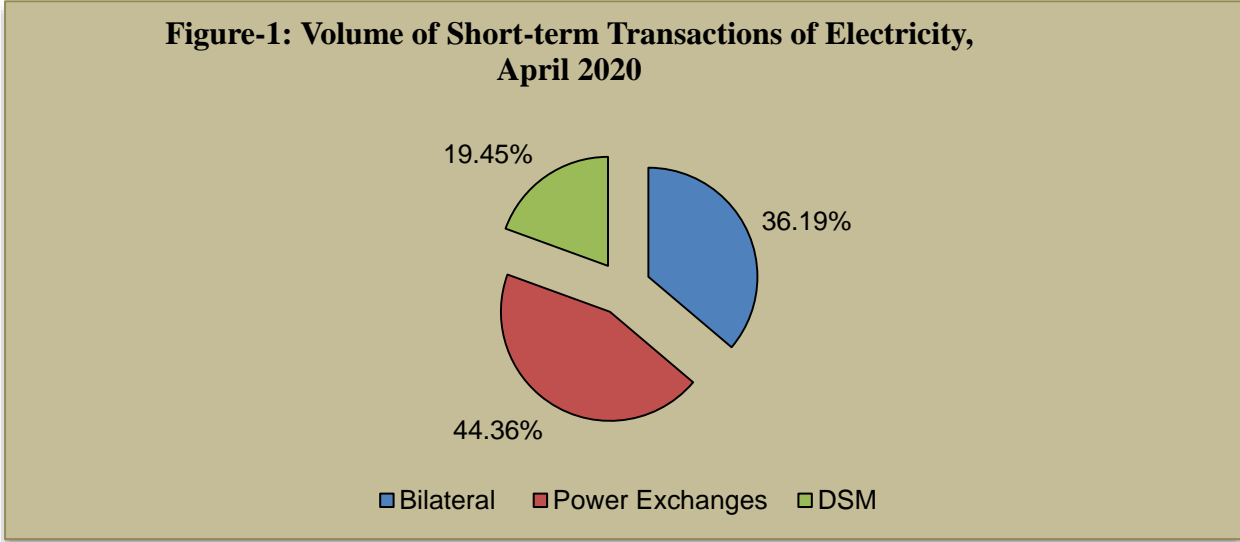
## VII: Inferences:

- The percentage of short-term transactions of electricity to total electricity generation was 10.27%.
- Of the total short-term transactions, day ahead collective transactions on power exchanges constitutes 44.36%, followed by 36.19% through bilateral (23.66% through traders and term-ahead contracts on power exchanges and 12.53% directly between distribution companies) and 19.45% through DSM
- Top 5 trading licensees had a share of 78.52% 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 0.1973, indicating non-concentration of market power.
- The weighted average price of electricity transacted through trading licensees was ₹3.99/kWh. The weighted average price of electricity transacted through IEX was ₹2.47/kWh. No electricity transacted through PXIL.
- The average price of electricity transacted through DSM was ₹2.42/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 Himachal Pradesh, Odisha, Sembcorp Gayatri Power Ltd., Raipur Energen Ltd. and DGEN Mega Power Project. Top 5 electricity purchasing regional entities were Maharashtra, Andhra Pradesh, Tamil Nadu, Telangana and Bihar.
- During the month of April 2020, both IEX and PXIL did not witness any congestion.
- The market clearing volume of solar RECs transacted on IEX and PXIL were 15991 and 4851 respectively and the weighted average market clearing price of these RECs was ₹2400/MWh in IEX and ₹2000/MWh in PXIL. Market clearing volume of non-

solar RECs transacted on IEX and PXIL were 172488 and 44605 respectively and the weighted average market clearing price of these RECs was ₹ 1000/MWh in IEX and ₹ 1000/MWh in PXIL.

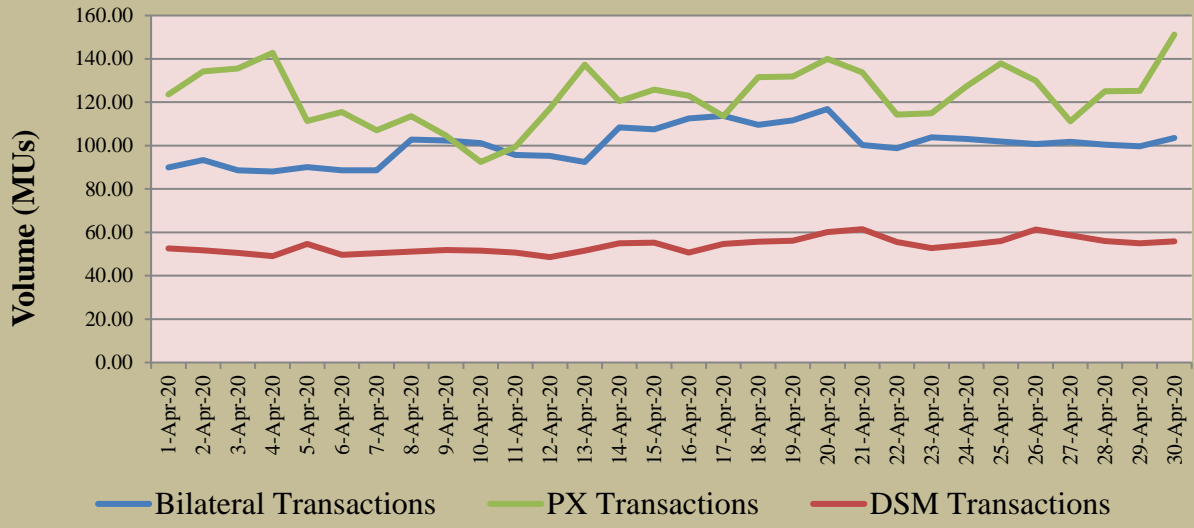
<b>Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), APRIL 2020</b>				
<b>Sr. No</b>	<b>Short-term transactions</b>	<b>Volume (MUs)</b>	<b>% to Volume of short-term transactions</b>	<b>% to Total Generation</b>
1	Bilateral	3011.75	36.19	3.72
	(i) Through Traders and PXs	1968.92	23.66	2.43
	(ii) Direct	1042.83	12.53	1.29
2	Through Power Exchanges	3692.04	44.36	4.56
	(i) IEX	3692.04	44.36	4.56
	(ii) PXIL	0.00	0.00	0.00
3	Through DSM	1618.48	19.45	2.00
	<b>Total</b>	<b>8322.27</b>	-	<b>10.27</b>
	<b>Total Generation</b>	<b>81045.22</b>	-	-

Source: NLDC & CEA Monthly Actual Generation Report- All India Summary, April 2020



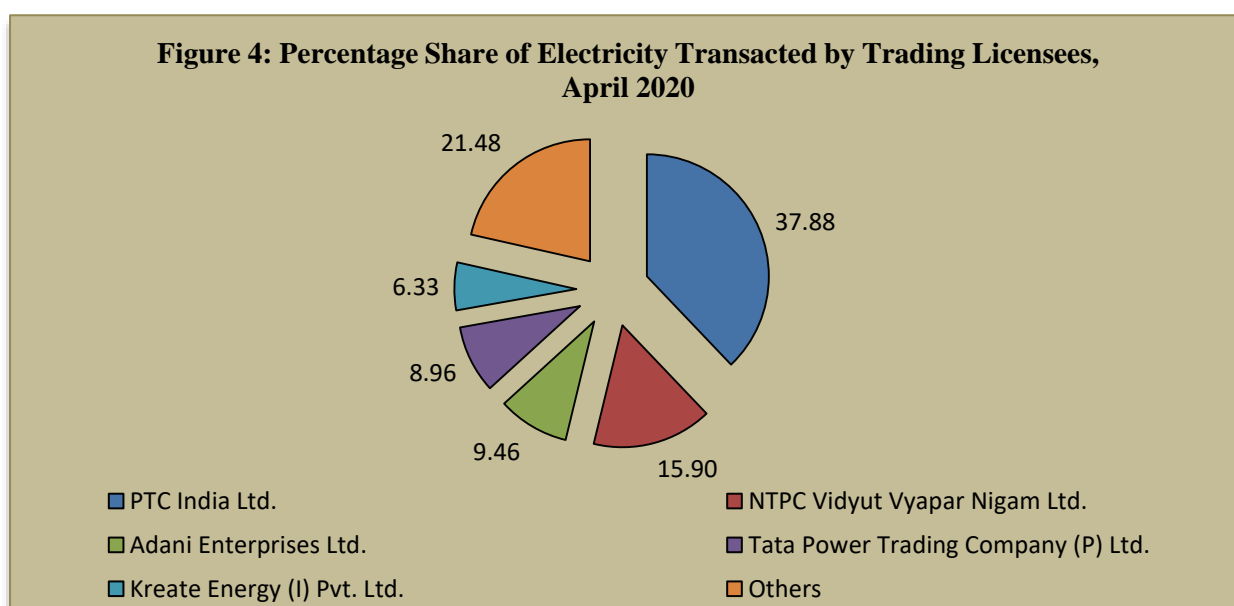


**Figure-3: Volume of Short-term Transactions of Electricity, April 2020 (Day-wise)**



<b>Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, APRIL 2020</b>			
<b>Sr.No</b>	<b>Name of the Trading Licensee</b>	<b>% Share in total Volume transacted by Trading Licensees</b>	<b>Herfindahl-Hirschman Index</b>
1	PTC India Ltd.	37.88	0.1435
2	NTPC Vidyut Vyapar Nigam Ltd.	15.90	0.0253
3	Adani Enterprises Ltd.	9.46	0.0089
4	Tata Power Trading Company (P) Ltd.	8.96	0.0080
5	Kreate Energy (I) Pvt. Ltd.	6.33	0.0040
6	Manikaran Power Ltd.	5.81	0.0034
7	NHPC Limited	4.01	0.0016
8	Arunachal Pradesh Power Corporation (P) Ltd.	3.70	0.0014
9	Knowledge Infrastructure Systems (P) Ltd	2.46	0.0006
10	GMR Energy Trading Ltd.	2.01	0.0004
11	National Energy Trading & Services Ltd.	0.72	0.0001
12	RPG Power Trading Company Ltd.	0.68	0.0000
13	Essar Electric Power Development Corp. Ltd.	0.52	0.0000
14	Instinct Infra & Power Ltd.	0.40	0.0000
15	JSW Power Trading Company Ltd	0.32	0.0000
16	Statkraft Markets Pvt. Ltd.	0.28	0.0000
17	IPCL Power Trading Pvt. Ltd.	0.19	0.0000
18	Customized Energy Solutions India (P) Ltd.	0.18	0.0000
19	Jaiprakash Associates Ltd.	0.09	0.0000
20	Gita Power & Infrastructure Private Limited	0.04	0.0000
21	Abja Power Private Limited	0.02	0.0000
22	NLC India Ltd.	0.02	0.0000
23	Phillip Commodities India (P) Ltd.	0.01	0.0000
<b>TOTAL</b>		<b>100.00%</b>	<b>0.1973</b>
<b>Top 5 trading licensees</b>		<b>78.52%</b>	
<i>Note 1: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state &amp; 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, April 2020**



<b>Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, APRIL 2020</b>		
<b>Sr.No</b>	<b>Item</b>	<b>Sale Price of Traders (₹/kWh)</b>
1	Minimum	2.27
2	Maximum	5.22
3	Weighted Average	3.99

Source: Information submitted by trading licensees

<b>Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), APRIL 2020</b>		
<b>Sr.No</b>	<b>Period of Trade</b>	<b>Sale Price of Traders (₹/kWh)</b>
1	RTC	3.97
2	PEAK	-
3	OFF PEAK	4.77

Source: Information submitted by trading licensees

<b>Table-5: PRICE OF ELECTRICITY TRANSACTED THROUGH POWER EXCHANGES, APRIL 2020</b>			
<b>Sr.No</b>	<b>ACP</b>	<b>Price in IEX (₹/kWh)</b>	<b>Price in PXIL (₹/kWh)</b>
1	Minimum	0.70	-
2	Maximum	3.87	-
3	Weighted Average	2.47	-

Source: Information submitted by IEX and PXIL

<b>Table-6: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, APRIL 2020</b>			
<b>Sr.No</b>	<b>Term ahead contracts</b>	<b>Actual Scheduled Volume (MUs)</b>	<b>Weighted Average Price (₹/kWh)</b>
1	Intra-Day Contracts	21.89	2.93
2	Day Ahead Contingency Contracts	2.77	2.84
3	Daily Contracts	173.28	3.50
4	Weekly Contracts	162.00	2.65
	<b>Total</b>	<b>359.94</b>	<b>3.08</b>

Source: IEX

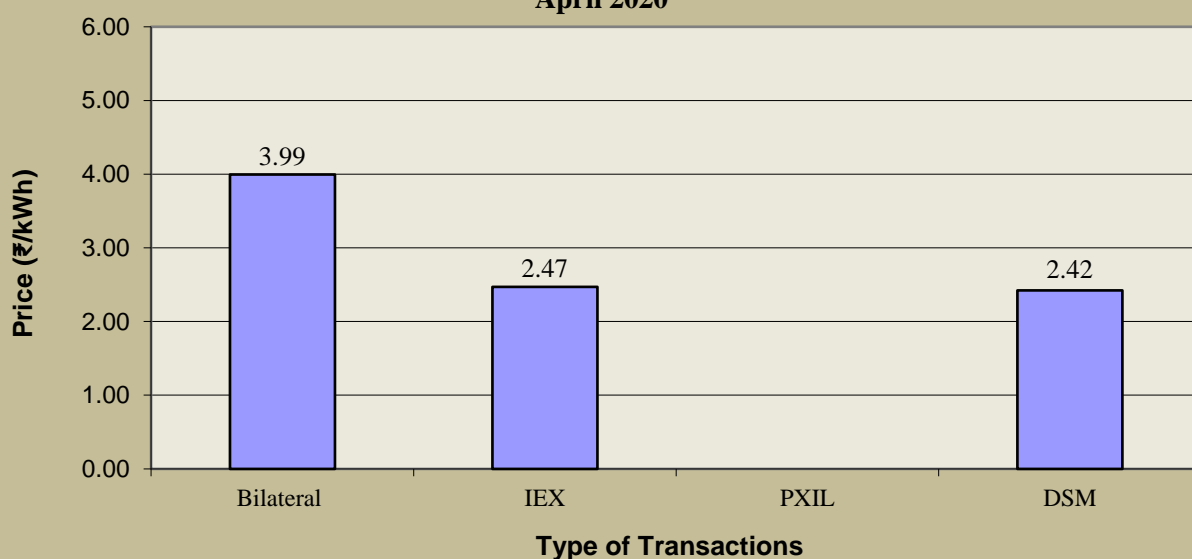
<b>Table-7: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, APRIL 2020</b>			
<b>Sr.No</b>	<b>Term ahead contracts</b>	<b>Actual Scheduled Volume (MUs)</b>	<b>Weighted Average Price (₹/kWh)</b>
1	Intra-Day Contracts	8.95	2.88
2	Any Day(s) Contracts	182.35	2.60
	<b>Total</b>	<b>191.30</b>	<b>2.61</b>

Source: PXIL

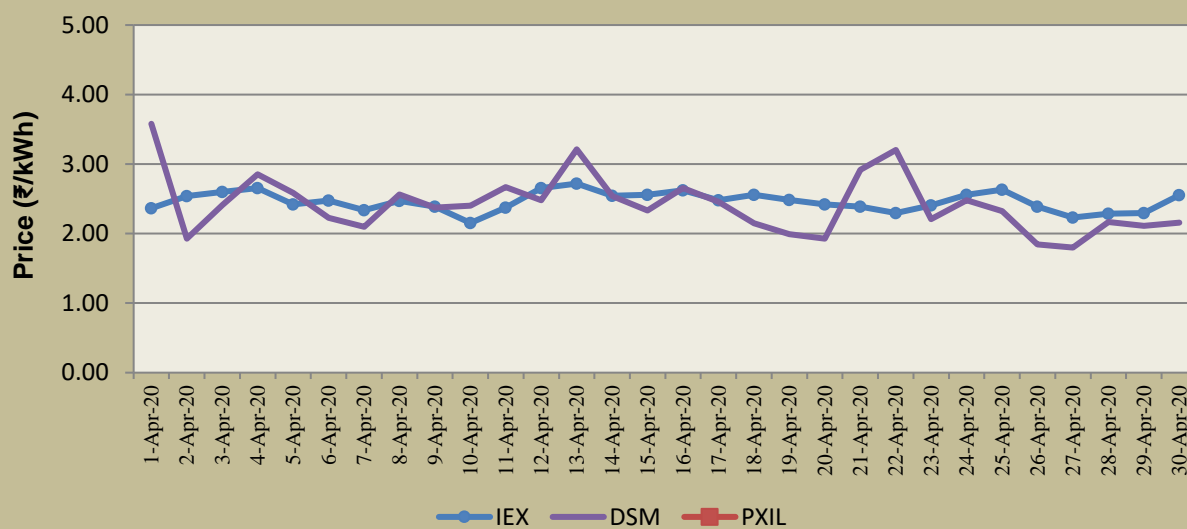
<b>Table-8: PRICE OF ELECTRICITY TRANSACTED THROUGH DSM, APRIL 2020</b>		
<b>Sr.No</b>	<b>Item</b>	<b>Price in All India Grid (₹/kWh)</b>
1	Minimum	0.00
2	Maximum	8.00
3	Average	2.42

Source: NLDC

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



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



*Note: In PXIL, No transactions were recorded during the month of April 2020.*

<b>Table-9: VOLUME OF ELECTRICITY SOLD THROUGH BILATERAL, APRIL 2020</b>		
<b>Name of the Entity</b>	<b>Volume of Sale (MUs)</b>	<b>% of Volume</b>
GUJARAT	383.34	12.65
SEMBCORP	353.89	11.68
RPREL	258.36	8.53
PUNJAB	256.12	8.45
MP	216.47	7.14
DB POWER	127.95	4.22
ESSAR POWER	124.25	4.10
RAJASTHAN	115.34	3.81
JITPL	112.20	3.70
THERMAL POWERTECH	109.20	3.60
ADHUNIK POWER LTD	91.78	3.03
HIMACHAL PRADESH	88.58	2.92
DVC	85.44	2.82
JINDAL POWER	77.88	2.57
KSK MAHANADI	71.41	2.36
JAYPEE NIGRIE	71.27	2.35
MAHARASHTRA	70.64	2.33
DELHI	57.75	1.91
LOKTAK	53.12	1.75
REGL	52.21	1.72
IL&FS	42.24	1.39
J & K	38.38	1.27
HARYANA	32.76	1.08
WEST BENGAL	20.34	0.67
DAGACHU	18.00	0.59
CHUZACHEN HEP	15.91	0.52
ODISHA	13.02	0.43
AD HYDRO	12.06	0.40
MEGHALAYA	10.08	0.33
BALCO	9.98	0.33
SKS POWER	9.93	0.33
MB POWER	8.56	0.28
LANKO_AMK	8.44	0.28
ANDHRA PRADESH	5.11	0.17
JHABUA POWER_MP	2.32	0.08
MIZORAM	1.80	0.06
DGEN MEGA POWER	1.22	0.04
ACBIL	1.10	0.04
BIHAR	0.52	0.02
NTPC STATIONS-SR	0.40	0.01
TEESTA STG3	0.30	0.01
NTPC STATIONS-ER	0.25	0.01
NEEPCO STATIONS	0.14	0.004
JHARKHAND	0.10	0.003
<b>Total</b>	<b>3030.15</b>	<b>100.00</b>
<b>Volume Sold by top 5 Regional Entities</b>	<b>1468.18</b>	<b>48.45</b>

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

<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
TAMIL NADU	1121.38	37.23
ANDHRA PRADESH	562.68	18.68
CHHATTISGARH	264.96	8.80
MAHARASHTRA	130.70	4.34
KERALA	125.55	4.17
BIHAR	119.30	3.96
WEST BENGAL	112.90	3.75
JHARKHAND	91.78	3.05
DELHI	72.13	2.40
MP	67.63	2.25
HARYANA	56.26	1.87
ASSAM	54.46	1.81
NEPAL(NVVN)	46.59	1.55
UTTAR PRADESH	39.92	1.33
BANGLADESH	27.83	0.92
MEGHALAYA	27.00	0.90
GOA	26.03	0.86
RAJASTHAN	19.08	0.63
NAGALAND	12.30	0.41
TELANGANA	8.47	0.28
MANIPUR	7.20	0.24
SIKKIM	6.56	0.22
ODISHA	4.65	0.15
UTTARAKHAND	3.94	0.13
BALCO	1.64	0.05
KARNATAKA	0.50	0.02
GUJARAT	0.21	0.01
PUNJAB	0.10	0.003
<b>TOTAL</b>	<b>3011.75</b>	<b>100.00</b>
<b>Volume Purchased by top 5 Regional Entities</b>	<b>2205.27</b>	<b>73.22</b>

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

Name of the Entity	Volume of Sale (MUs)	% of Volume
ODISHA	448.52	12.15
UTTAR PRADESH	431.14	11.68
HIMACHAL PRADESH	362.85	9.83
DGEN MEGA POWER	262.58	7.11
TEESTA STG3	229.47	6.22
ASSAM	213.99	5.80
UTTARAKHAND	161.61	4.38
JITPL	145.26	3.93
DELHI	127.04	3.44
CHHATTISGARH	115.44	3.13
GUJARAT	115.16	3.12
HARYANA	89.15	2.41
RAJASTHAN	56.28	1.52
SPECTRUM	54.87	1.49
DADRA & NAGAR HAVELI	51.68	1.40
GOA	47.58	1.29
JHABUA POWER_MP	47.02	1.27
ACBIL	46.13	1.25
RPREL	43.75	1.18
CHANDIGARH	43.24	1.17
NLC	43.15	1.17
JHARKHAND	42.47	1.15
BIHAR	37.79	1.02
J & K	36.95	1.00
SKS POWER	34.10	0.92
MARUTI COAL	29.92	0.81
SIKKIM	29.88	0.81
WEST BENGAL	29.68	0.80
TRIPURA	28.20	0.76
SEMBCORP	25.91	0.70
MB POWER	22.13	0.60
DIKCHU HEP	20.44	0.55
KARCHAM WANGTOO	19.12	0.52
NTPC STATIONS-WR	16.29	0.44
KARNATAKA	16.27	0.44
SAINJ HEP	16.17	0.44
ARUNACHAL PRADESH	14.03	0.38
JORETHANG	13.48	0.37
TASHIDENG HEP	12.20	0.33
REGL	11.63	0.32
MIZORAM	10.17	0.28
DB POWER	9.82	0.27
AD HYDRO	9.76	0.26
MP	8.44	0.23
THERMAL POWERTECH	7.07	0.19
NTPC STATIONS-SR	6.31	0.17
MANIPUR	5.51	0.15
ESSAR POWER	5.27	0.14
ANDHRA PRADESH	5.18	0.14

JINDAL POWER	4.51	0.12
MEGHALAYA	4.29	0.12
ONGC PALATANA	3.65	0.10
JAYPEE NIGRIE	3.21	0.09
DVC	3.08	0.08
CHUZACHEN HEP	2.52	0.07
KSMPL_SLR	2.39	0.06
NTPC STATIONS-ER	2.16	0.06
KERALA	1.94	0.05
TAMIL NADU	1.67	0.05
LANCO BUDHIL	1.65	0.04
IL&FS	0.52	0.01
NAGALAND	0.24	0.01
TELANGANA	0.08	0.00
MAHARASHTRA	0.02	0.001
NTPC STATIONS-NER	0.02	0.001
NTPL	0.02	0.0004
<b>Total</b>	<b>3692.04</b>	<b>100.00</b>
<b>Volume sold by top 5 Regional Entities</b>	<b>1734.56</b>	<b>46.98</b>



<b>Table-12: VOLUME OF ELECTRICITY PURCHASED THROUGH POWER EXCHANGES, APRIL 2020</b>		
<b>Name of the Entity</b>	<b>Volume of Purchase (MUs)</b>	<b>% of Volume</b>
MAHARASHTRA	1335.01	36.16
ANDHRA PRADESH	755.28	20.46
GUJARAT	552.40	14.96
TELANGANA	343.11	9.29
PUNJAB	186.93	5.06
BIHAR	107.32	2.91
UTTAR PRADESH	89.42	2.42
TAMIL NADU	72.34	1.96
HARYANA	56.16	1.52
RAJASTHAN	52.76	1.43
KARNATAKA	26.90	0.73
AMPS Hazira	26.13	0.71
ODISHA	18.17	0.49
KERALA	13.97	0.38
DELHI	12.17	0.33
WEST BENGAL	11.41	0.31
UTTARAKHAND	7.44	0.20
MP	5.65	0.15
J & K	5.42	0.15
ASSAM	3.73	0.10
MEGHALAYA	3.19	0.09
CHHATTISGARH	3.04	0.08
MANIPUR	2.64	0.07
GOA	0.76	0.02
HIMACHAL PRADESH	0.54	0.01
TRIPURA	0.15	0.004
<b>TOTAL</b>	<b>3692.04</b>	<b>100.00</b>
<b>Volume purchased by top 5 Regional Entities</b>	<b>3172.73</b>	<b>85.93</b>

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

Name of the Entity	Volume of Under drawal (MUs)	% of Volume
RAJASTHAN	84.94	5.25
NTPC STATIONS-WR	77.09	4.76
GUJARAT	65.18	4.03
CHUKHA HEP	60.44	3.73
MP	59.26	3.66
NHPC STATIONS	59.22	3.66
PUNJAB	58.07	3.59
TELANGANA	53.85	3.33
NLC	49.49	3.06
UTTAR PRADESH	49.24	3.04
BIHAR	48.43	2.99
ANDHRA PRADESH	46.32	2.86
SASAN UMPP	44.12	2.73
CHHATTISGARH	41.88	2.59
MAHARASHTRA	41.36	2.55
KARNATAKA	39.57	2.44
TAMIL NADU	37.16	2.30
ODISHA	33.82	2.09
HIMACHAL PRADESH	32.84	2.03
J & K	32.35	2.00
NTPC STATIONS-NR	28.98	1.79
WEST BENGAL	28.52	1.76
DELHI	28.37	1.75
NTPC STATIONS-ER	24.47	1.51
UTTARAKHAND	22.20	1.37
HARYANA	21.71	1.34
NTPC STATIONS-SR	19.72	1.22
GIWEL_BHUI	19.47	1.20
DVC	18.22	1.13
TRIPURA	17.73	1.10
JHARKHAND	14.97	0.92
BBMB	11.57	0.71
OSTRO	10.93	0.67
RENEW_BHACHAU	10.90	0.67
NEEPCO STATIONS	10.57	0.65
PONDICHERY	9.66	0.60
BANGLADESH	9.42	0.58
MEGHALAYA	9.13	0.56
NEPAL(NVFN)	7.74	0.48
CLEAN_SLR	7.54	0.47
ASSAM	7.42	0.46
MB POWER	7.14	0.44
MANGDECHU HEP	7.11	0.44
NJPC	6.99	0.43
TEESTA HEP	6.61	0.41
KERALA	6.60	0.41
MAITHON POWER LTD	6.19	0.38
CGPL	5.99	0.37
BRBCL,NABINAGAR	5.77	0.36
AGEMPL BHUI	5.38	0.33
CHANDIGARH	5.34	0.33
ESSAR STEEL	5.29	0.33
GIWEL_TCN	5.07	0.31

GOA	4.59	0.28
SIKKIM	4.57	0.28
RAIL	4.55	0.28
SEBPCORP	4.42	0.27
KARCHAM WANGTOO	4.24	0.26
ORANGE_TCN	4.18	0.26
RAMPUR HEP	4.16	0.26
BARC	4.15	0.26
RENEW_SLR_BKN	4.03	0.25
TATA_PVGD	3.74	0.23
RAP C	3.73	0.23
MYTRAH_TCN	3.66	0.23
NAGALAND	3.60	0.22
ARUNACHAL PRADESH	3.53	0.22
LANKO_AMK	3.45	0.21
MANIPUR	3.39	0.21
KSK MAHANADI	3.37	0.21
INOX_BHUJ	3.33	0.21
NTPC STATIONS-NER	3.28	0.20
DGEN MEGA POWER	3.09	0.19
ACBIL	3.07	0.19
MIZORAM	3.01	0.19
KURICHU HEP	2.97	0.18
TATA_SLR	2.96	0.18
ARERJL_SLR	2.78	0.17
MAHINDRA_RUMS	2.77	0.17
AZURE_SLR	2.70	0.17
AVAADA_PVGD	2.69	0.17
ACME_RUMS	2.68	0.17
ACME_SLR	2.65	0.16
NTPC_ANTP	2.64	0.16
SB_SLR	2.62	0.16
ARINSUM_RUMS	2.62	0.16
SAINJ HEP	2.59	0.16
NPGC	2.52	0.16
DADRA & NAGAR HAVELI	2.42	0.15
DIKCHU HEP	2.38	0.15
TEHRI	2.31	0.14
JAYPEE NIGRIE	2.29	0.14
AZURE34_SLR	2.27	0.14
TEESTA STG3	2.24	0.14
NTPL	2.15	0.13
SBG_PVGD	1.88	0.12
JINDAL STAGE-II	1.87	0.12
PARAM_PVGD	1.86	0.12
RANGANADI HEP	1.84	0.11
KOTESHWAR	1.83	0.11
THERMAL POWERTECH	1.81	0.11
JINDAL POWER	1.78	0.11
EMCO	1.71	0.11
TATA_ANTP	1.69	0.10
GMR CHATTISGARH	1.55	0.10
DAMAN AND DIU	1.45	0.09
RAP B	1.38	0.09
RKM POWER	1.36	0.08
AD HYDRO	1.27	0.08
MAHOBA_SLR	1.25	0.08
JITPL	1.22	0.08

COASTGEN	1.14	0.07
BETAM_TCN	1.13	0.07
NAPP	1.13	0.07
FORTUM_PVGD	1.11	0.07
ONGC PALATANA	0.98	0.06
LANCO BUDHIL	0.96	0.06
CHUZACHEN HEP	0.95	0.06
HVDC CHAMPA	0.94	0.06
DB POWER	0.91	0.06
ESSAR POWER	0.89	0.06
ADY2_PVGD	0.89	0.05
JORETHANG	0.86	0.05
SBG_NPK	0.85	0.05
ADY13_PVGD	0.85	0.05
RANGIT HEP	0.79	0.05
MTPS II	0.77	0.05
DHARIWAL POWER	0.76	0.05
RENEW_PVGD	0.71	0.04
FRV_NPK	0.70	0.04
ARS_PVGD	0.70	0.04
ABSP_ANTP	0.69	0.04
AZURE_ANTP	0.68	0.04
RENEW_SLR	0.67	0.04
AKSP_ANTP	0.66	0.04
ADY1_PVGD	0.66	0.04
AHSP_ANTP	0.65	0.04
GMR KAMALANGA	0.63	0.04
SKS POWER	0.63	0.04
NSPCL	0.63	0.04
LOKTAK	0.57	0.04
NEP	0.55	0.03
AKS_PVGD	0.54	0.03
BALCO	0.54	0.03
FRV_ANTP	0.53	0.03
TASHIDENG HEP	0.51	0.03
KORBA WEST POWER	0.43	0.03
JHABUA POWER_MP	0.43	0.03
PARE HEP	0.42	0.03
DAGACHU	0.40	0.02
YARROW_PVGD	0.35	0.02
ADHUNIK POWER LTD	0.26	0.02
BHADRAVATHI HVDC	0.25	0.02
KSMPL_SLR	0.23	0.01
VINDHYACHAL HVDC	0.22	0.01
NFF	0.21	0.01
DOYANG HEP	0.19	0.01
HVDC PUS	0.16	0.01
IL&FS	0.15	0.01
HVDC RAIGARH	0.12	0.01
RGPPL (DABHOL)	0.08	0.01
TALA HEP	0.08	0.01
HVDC ALPD	0.05	0.003
NETCL VALLUR	0.04	0.003
DCPP	0.02	0.001
<b>Total</b>	<b>1618.77</b>	<b>100.00</b>
<b>Volume Exported by top 5 Regional Entities</b>	<b>346.91</b>	<b>21.43</b>

<b>Table-14: VOLUME OF ELECTRICITY OVER DRAWAL (IMPORTED) THROUGH DSM, APRIL 2020</b>		
<b>Name of the Entity</b>	<b>Volume of Over drawal(MUs)</b>	<b>% of Volume</b>
UTTAR PRADESH	116.09	7.17
TALA HEP	78.45	4.85
RAJASTHAN	73.55	4.55
MAHARASHTRA	64.55	3.99
NTPC STATIONS-WR	57.36	3.54
TAMIL NADU	57.12	3.53
HARYANA	57.11	3.53
NTPC STATIONS-ER	55.67	3.44
KARNATAKA	53.54	3.31
WEST BENGAL	52.31	3.23
GUJARAT	49.60	3.06
BIHAR	36.48	2.25
NTPC STATIONS-NR	35.64	2.20
NTPC STATIONS-SR	33.18	2.05
MP	32.77	2.02
TELANGANA	32.12	1.99
DVC	30.34	1.88
KERALA	29.39	1.82
ANDHRA PRADESH	29.27	1.81
CGPL	28.42	1.76
JHARKHAND	26.35	1.63
J & K	20.74	1.28
PUNJAB	19.68	1.22
ODISHA	19.31	1.19
BALCO	18.79	1.16
NLC	18.10	1.12
GIWEL_BHUI	15.09	0.93
ASSAM	14.87	0.92
RGPPL (DABHOL)	14.55	0.90
JHABUA POWER_MP	12.75	0.79
NHPC STATIONS	12.75	0.79
UTTARAKHAND	12.17	0.75
GMR CHATTISGARH	11.62	0.72
HIMACHAL PRADESH	10.82	0.67
ADHUNIK POWER LTD	10.75	0.66
JITPL	10.21	0.63
NETCL VALLUR	10.07	0.62
ESSAR STEEL	10.06	0.62
GIWEL_TCN	9.72	0.60
MYTRAH_TCN	9.42	0.58
ORANGE_TCN	8.90	0.55
BANGLADESH	8.77	0.54
RAP C	8.43	0.52
OSTRO	8.19	0.51
NAPP	7.82	0.48
CHHATTISGARH	7.45	0.46
KURICHU HEP	7.21	0.45
DELHI	6.60	0.41
THERMAL POWERTECH	6.26	0.39
MB POWER	6.13	0.38
RENEW_BHACHAU	6.07	0.38
DAGACHU	6.04	0.37
TEESTA STG3	5.95	0.37
SBG_NPK	5.84	0.36
BRBCL,NABINAGAR	5.74	0.35

DB POWER	5.69	0.35
ACBIL	5.65	0.35
MAHINDRA_RUMS	5.49	0.34
MANGDECHU HEP	5.19	0.32
AGEMPL BHUJ	5.16	0.32
NPGC	5.14	0.32
RAP B	5.11	0.32
CLEAN_SLR	5.07	0.31
NEPAL(NVVN)	4.95	0.31
ARINSUM_RUMS	4.88	0.30
GMR KAMALANGA	4.77	0.30
NJPC	4.74	0.29
IGSTPS	4.58	0.28
IL&FS	4.53	0.28
JINDAL STAGE-II	4.43	0.27
KORBA WEST POWER	4.28	0.26
GOA	4.18	0.26
ARUNACHAL PRADESH	4.16	0.26
BBMB	4.06	0.25
MAITHON POWER LTD	4.01	0.25
SB_SLR	3.95	0.24
NTPL	3.92	0.24
DGEN MEGA POWER	3.90	0.24
CHANDIGARH	3.81	0.24
COASTGEN	3.49	0.22
ESSAR POWER	3.46	0.21
ACME_RUMS	3.46	0.21
KARCHAM WANGTOO	3.18	0.20
INOX_BHUJ	3.10	0.19
DADRA & NAGAR HAVELI	2.82	0.17
EMCO	2.80	0.17
SBG_PVGD	2.80	0.17
KAPP 3&4	2.76	0.17
TATA_PVGD	2.59	0.16
PONDICHERRY	2.56	0.16
RENEW_SLR_BKN	2.53	0.16
BETAM_TCN	2.50	0.15
DIKCHU HEP	2.48	0.15
JINDAL POWER	2.47	0.15
NTPC STATIONS-NER	2.46	0.15
TRIPURA	2.32	0.14
ACME_SLR	2.25	0.14
MANIPUR	2.16	0.13
DAMAN AND DIU	2.15	0.13
SIKKIM	2.15	0.13
AZURE_SLR	2.15	0.13
NSPCL	2.12	0.13
SEMBCORP	2.12	0.13
JORETHANG	2.06	0.13
TEHRI	1.98	0.12
PARAM_PVGD	1.87	0.12
NTPC_ANTP	1.78	0.11
ARERJL_SLR	1.69	0.10
TASHIDENG HEP	1.60	0.10
MTPS II	1.59	0.10
FORTUM_PVGD	1.54	0.10
KSK MAHANADI	1.54	0.10
MIZORAM	1.54	0.10

TATA_SLR	1.43	0.09
SKS POWER	1.26	0.08
AZURE34_SLR	1.24	0.08
KOTESHWAR	1.13	0.07
YARROW_PVGD	1.00	0.06
CHUZACHEN HEP	1.00	0.06
NEP	0.98	0.06
RANGANADI HEP	0.95	0.06
RAMPUR HEP	0.94	0.06
AVAADA_PVGD	0.88	0.05
RKM POWER	0.87	0.05
RENEW_PVGD	0.83	0.05
NEEPCO STATIONS	0.82	0.05
NAGALAND	0.82	0.05
MEGHALAYA	0.79	0.05
RENEW_SLR	0.78	0.05
LANKO KONDAPALLI	0.78	0.05
ONGC PALATANA	0.67	0.04
AKS_PVGD	0.63	0.04
TATA_ANTP	0.60	0.04
FRV_NPK	0.60	0.04
DHARIWAL POWER	0.58	0.04
AD HYDRO	0.57	0.04
FRV_ANTP	0.56	0.03
RAIL	0.56	0.03
ABSP_ANTP	0.55	0.03
AZURE_ANTP	0.53	0.03
AHSP_ANTP	0.51	0.03
MEENAKSHI	0.51	0.03
CHUKHA HEP	0.51	0.03
SASAN UMPP	0.50	0.03
ADY1_PVGD	0.49	0.03
JAYPEE NIGRIE	0.47	0.03
AKSP_ANTP	0.45	0.03
RANGIT HEP	0.41	0.03
SIMHAPURI	0.39	0.02
ADY13_PVGD	0.38	0.02
SAINJ HEP	0.33	0.02
SHREE CEMENT	0.32	0.02
TRN ENERGY	0.29	0.02
ADY2_PVGD	0.28	0.02
MAHOBA_SLR	0.28	0.02
KSMPL_SLR	0.23	0.01
LOKTAK	0.23	0.01
LANCO BUDHIL	0.23	0.01
LANKO_AMK	0.22	0.01
DOYANG HEP	0.22	0.01
PARE HEP	0.17	0.01
ARS_PVGD	0.17	0.01
TEESTA HEP	0.13	0.01
NFF	0.11	0.01
HVDC RAIGARH	0.05	0.003
HVDC ALPD	0.04	0.002
BHADRAVATHI HVDC	0.03	0.002
HVDC PUS	0.01	0.001
DCPP	0.01	0.0003
<b>TOTAL</b>	<b>1618.19</b>	<b>100.00</b>
<b>Volume Imported by top 5 Regional Entities</b>	<b>389.99</b>	<b>24.10</b>

<b>Table-15: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), APRIL 2020</b>		
<b>S. No.</b>	<b>Name of the Entity</b>	<b>Total volume of net short-term transactions of electricity*</b>
1	MAHARASHTRA	1418.25
2	ANDHRA PRADESH	1290.62
3	TAMIL NADU	1212.01
4	TELANGANA	329.77
5	BIHAR	176.36
6	KERALA	160.37
7	CHHATTISGARH	118.14
8	WEST BENGAL	98.08
9	TALA HEP	78.37
10	JHARKHAND	60.59
11	NEPAL(NVVN)	43.80
12	GUJARAT	38.53
13	NTPC STATIONS-ER	28.80
14	BANGLADESH	27.17
15	AMPS Hazira	26.13
16	HARYANA	25.90
17	KARNATAKA	25.11
18	CGPL	22.43
19	RGPP (DABHOL)	14.47
20	GMR CHATTISGARH	10.08
21	NETCL VALLUR	10.02
22	BALCO	9.90
23	NAGALAND	9.28
24	MEGHALAYA	7.47
25	NTPC STATIONS-SR	6.76
26	NAPP	6.69
27	NTPC STATIONS-NR	6.67
28	MYTRAH_TCN	5.76
29	SBG_NPK	4.98
30	ESSAR STEEL	4.77
31	ORANGE_TCN	4.72
32	RAP C	4.71
33	GIWEL_TCN	4.65
34	IGSTPS	4.58
35	KURICHU HEP	4.24
36	GMR KAMALANGA	4.14
37	KORBA WEST POWER	3.85
38	RAP B	3.73
39	MANIPUR	3.10
40	KAPP 3&4	2.76
41	MAHINDRA_RUMS	2.71
42	NPGC	2.61
43	JINDAL STAGE-II	2.56
44	COASTGEN	2.35
45	ARINSUM_RUMS	2.26
46	NTPL	1.76
47	NSPCL	1.49
48	BETAM_TCN	1.37
49	SB_SLR	1.33
50	EMCO	1.08
51	SBG_PVGD	0.91
52	MTPS II	0.82
53	LANKO KONDAPALLI	0.78
54	ACME_RUMS	0.77
55	DAMAN AND DIU	0.71
56	YARROW_PVGD	0.65
57	MEENAKSHI	0.51
58	FORTUM_PVGD	0.43



59	NEP	0.42
60	SIMHAPURI	0.39
61	SHREE CEMENT	0.32
62	TRN ENERGY	0.29
63	RENEW_PVGD	0.12
64	RENEW_SLR	0.11
65	AKS_PVGD	0.09
66	DOYANG HEP	0.03
67	FRV_ANTP	0.028
68	PARAM_PVGD	0.01
69	DCPP	-0.01
70	HVDC ALPD	-0.02
71	BRBCL,NABINAGAR	-0.04
72	HVDC RAIGARH	-0.07
73	NFF	-0.09
74	FRV_NPK	-0.10
75	AHSP_ANTP	-0.14
76	ABSP_ANTP	-0.14
77	AZURE_ANTP	-0.14
78	HVDC PUS	-0.15
79	ADY1_PVGD	-0.16
80	DHARIWAL POWER	-0.17
81	AKSP_ANTP	-0.21
82	BHADRAVATHI HVDC	-0.22
83	AGEMPL BHUJ	-0.22
84	VINDHYACHAL HVDC	-0.22
85	INOX_BHUJ	-0.23
86	PARE HEP	-0.26
87	TEHRI	-0.33
88	RANGIT HEP	-0.38
89	ACME_SLR	-0.40
90	ADY13_PVGD	-0.47
91	RKM POWER	-0.49
92	ARS_PVGD	-0.53
93	AZURE_SLR	-0.56
94	ADY2_PVGD	-0.61
95	KOTESHWAR	-0.70
96	NTPC STATIONS-NER	-0.84
97	NTPC_ANTP	-0.87
98	RANGANADI HEP	-0.89
99	HVDC CHAMPA	-0.94
100	MAHOBA_SLR	-0.97
101	AZURE34_SLR	-1.03
102	ARERJL_SLR	-1.09
103	TATA_ANTP	-1.09
104	TATA_PVGD	-1.15
105	RENEW_SLR_BKN	-1.50
106	TATA_SLR	-1.53
107	AVAADA_PVGD	-1.81
108	MANGDECHU HEP	-1.93
109	MAITHON POWER LTD	-2.17
110	NJPC	-2.26
111	LANCO BUDHIL	-2.37
112	KSMPL_SLR	-2.39
113	CLEAN_SLR	-2.46
114	OSTRO	-2.74
115	RAMPUR HEP	-3.22
116	ONGC PALATANA	-3.96
117	RAIL	-3.99
118	BARC	-4.15
119	GIWEL_BHUJ	-4.38

120	RENEW_BHACHAU	-4.83
121	TEESTA HEP	-6.48
122	PONDICHERRY	-7.10
123	BBMB	-7.51
124	NEEPCO STATIONS	-9.88
125	TASHIDENG HEP	-11.11
126	LANKO_AMK	-11.66
127	JORETHANG	-12.28
128	DAGACHU	-12.35
129	ARUNACHAL PRADESH	-13.40
130	MIZORAM	-13.44
131	CHUZACHEN HEP	-18.37
132	SAINJ HEP	-18.42
133	KARCHAM WANGTOO	-20.18
134	DIKCHU HEP	-20.34
135	GOA	-21.20
136	AD HYDRO	-22.53
137	SIKKIM	-25.74
138	MARUTI COAL	-29.92
139	MB POWER	-31.70
140	NTPC STATIONS-WR	-36.02
141	JHABUA POWER_MP	-37.02
142	IL&FS	-38.38
143	SKS POWER	-43.40
144	TRIPURA	-43.46
145	SASAN UMPP	-43.62
146	ACBIL	-44.64
147	CHANDIGARH	-44.77
148	NHPC STATIONS	-46.47
149	DADRA & NAGAR HAVELI	-51.29
150	LOKTAK	-53.46
151	SPECTRUM	-54.87
152	CHUKHA HEP	-59.94
153	REGL	-63.84
154	KSK MAHANADI	-73.24
155	NLC	-74.54
156	JAYPEE NIGRIE	-76.30
157	DVC	-76.40
158	ADHUNIK POWER LTD	-81.28
159	J & K	-81.53
160	JINDAL POWER	-81.70
161	PUNJAB	-107.48
162	RAJASTHAN	-111.18
163	THERMAL POWERTECH	-111.81
164	DELHI	-122.25
165	ESSAR POWER	-126.95
166	DB POWER	-133.00
167	ASSAM	-148.35
168	UTTARAKHAND	-160.26
169	MP	-178.12
170	TEESTA STG3	-226.06
171	UTTAR PRADESH	-234.95
172	JITPL	-248.46
173	DGEN MEGA POWER	-262.99
174	RPREL	-302.10
175	SEMBCORP	-382.11
176	ODISHA	-453.22
177	HIMACHAL PRADESH	-472.91
* 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		

<b>Table-16: DETAILS OF CONGESTION IN POWER EXCHANGES, APRIL 2020</b>			
	<b>Details of Congestion</b>	<b>IEX</b>	<b>PXIL</b>
A	Unconstrained Cleared Volume (MUs)	3692.04	0.00
B	Actual Cleared Volume and hence scheduled (MUs)	3692.04	0.00
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)	0.00	0.00
E	Volume of electricity that could not be cleared as % to Unconstrained Cleared Volume	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%	-
G	Congestion occurrence (%) time block wise		
	0.00 - 6.00 hours	0.00%	-
	6.00 - 12.00 hours	0.00%	-
	12.00 - 18.00 hours	0.00%	-
	18.00 - 24.00 hours	0.00%	-
<i>*This power would have been scheduled had there been no congestion.</i>			
<i>Source: IEX &amp; PXIL &amp; NLDC</i>			

**Table-17: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (DAY-WISE) (MUs), APRIL 2020**

Date	Bilateral		Power Exchange (Area Clearing Volume <sup>#</sup> of Day Ahead Market)		Deviation Settlement (Over Draw+Under Generation)	Total Electricity Generation (MU) as given at CEA Website*
	Through Traders and PXs**	Direct	IEX	PXIL		
1-Apr-20	61.26	28.66	123.55	0.00	52.61	NA
2-Apr-20	64.43	28.98	134.24	0.00	51.68	NA
3-Apr-20	59.16	29.46	135.62	0.00	50.60	NA
4-Apr-20	58.36	29.72	142.76	0.00	49.00	NA
5-Apr-20	60.59	29.46	111.40	0.00	54.64	NA
6-Apr-20	59.17	29.50	115.45	0.00	49.63	NA
7-Apr-20	59.22	29.46	107.05	0.00	50.41	NA
8-Apr-20	66.22	36.61	113.60	0.00	51.20	NA
9-Apr-20	65.86	36.52	104.74	0.00	51.92	NA
10-Apr-20	64.41	36.71	92.47	0.00	51.61	NA
11-Apr-20	59.10	36.62	99.42	0.00	50.64	NA
12-Apr-20	58.54	36.67	117.14	0.00	48.60	NA
13-Apr-20	55.88	36.62	137.37	0.00	51.64	NA
14-Apr-20	71.76	36.70	120.58	0.00	54.91	NA
15-Apr-20	68.10	39.46	125.78	0.00	55.32	NA
16-Apr-20	73.10	39.47	123.00	0.00	50.62	NA
17-Apr-20	74.14	39.57	113.61	0.00	54.62	NA
18-Apr-20	71.41	38.25	131.61	0.00	55.67	NA
19-Apr-20	71.88	39.72	131.88	0.00	56.20	NA
20-Apr-20	77.73	39.16	140.01	0.00	60.17	NA
21-Apr-20	65.35	34.97	133.73	0.00	61.47	NA
22-Apr-20	65.04	33.73	114.29	0.00	55.52	NA
23-Apr-20	68.85	34.95	114.86	0.00	52.75	NA
24-Apr-20	68.26	34.90	127.25	0.00	54.16	NA
25-Apr-20	66.51	35.36	137.89	0.00	55.99	NA
26-Apr-20	65.71	35.07	130.01	0.00	61.32	NA
27-Apr-20	66.81	34.90	111.19	0.00	58.62	NA
28-Apr-20	65.87	34.56	125.03	0.00	56.06	NA
29-Apr-20	66.98	32.76	125.29	0.00	54.97	NA
30-Apr-20	69.21	34.34	151.23	0.00	55.92	NA
<b>Total</b>	<b>1968.92</b>	<b>1042.83</b>	<b>3692.04</b>	<b>0.00</b>	<b>1618.48</b>	<b>81045.22 \$</b>

Source: NLDC & CEA Monthly Actual Generation Report- All India Summary, April2020

\* 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.

NA – Not Available

\$ Actual Total Generation for the month of April2020 as per CEA Monthly Actual Generation Report. Data of Daily Generation not available for April 2020.

Table-18: PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (DAY-WISE)(₹/kWh), APRIL 2020									
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Under Drawl/Over Drawl from the Grid (DSM)		
Date	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	All India Grid		
							Minimum Price	Maximum Price	Average Price**
1-Apr-20	1.00	3.19	2.37	-	-	-	0.00	8.00	3.58
2-Apr-20	2.05	3.25	2.54	-	-	-	0.00	8.00	1.93
3-Apr-20	2.06	3.17	2.60	-	-	-	0.00	7.32	2.41
4-Apr-20	2.05	3.16	2.66	-	-	-	0.00	8.00	2.85
5-Apr-20	0.70	2.97	2.42	-	-	-	0.00	7.30	2.59
6-Apr-20	1.96	3.16	2.48	-	-	-	0.00	6.96	2.23
7-Apr-20	1.50	3.06	2.34	-	-	-	0.00	6.21	2.10
8-Apr-20	2.05	3.16	2.47	-	-	-	0.00	7.31	2.56
9-Apr-20	1.68	2.82	2.39	-	-	-	0.00	8.00	2.37
10-Apr-20	1.29	2.60	2.15	-	-	-	0.00	8.00	2.40
11-Apr-20	1.80	2.80	2.37	-	-	-	0.00	6.59	2.67
12-Apr-20	2.05	3.26	2.65	-	-	-	0.00	8.00	2.48
13-Apr-20	2.06	3.25	2.72	-	-	-	0.00	8.00	3.21
14-Apr-20	1.94	3.20	2.54	-	-	-	0.00	7.66	2.54
15-Apr-20	1.95	3.25	2.56	-	-	-	0.00	8.00	2.33
16-Apr-20	1.50	3.75	2.62	-	-	-	0.00	7.66	2.65
17-Apr-20	1.30	3.87	2.48	-	-	-	0.00	6.60	2.46
18-Apr-20	0.70	3.05	2.56	-	-	-	0.00	6.97	2.15
19-Apr-20	1.50	2.80	2.48	-	-	-	0.00	6.61	1.99
20-Apr-20	1.84	2.92	2.42	-	-	-	0.00	6.60	1.93
21-Apr-20	1.65	2.90	2.39	-	-	-	0.00	8.00	2.92
22-Apr-20	1.30	2.78	2.30	-	-	-	0.00	8.00	3.20
23-Apr-20	1.67	3.00	2.41	-	-	-	0.00	8.00	2.21
24-Apr-20	1.50	3.06	2.56	-	-	-	0.00	7.66	2.48
25-Apr-20	1.98	3.17	2.63	-	-	-	0.00	5.97	2.33
26-Apr-20	1.80	3.06	2.39	-	-	-	0.00	7.29	1.84
27-Apr-20	1.76	2.80	2.23	-	-	-	0.00	6.18	1.80
28-Apr-20	1.45	2.84	2.29	-	-	-	0.00	6.20	2.17
29-Apr-20	1.00	3.00	2.30	-	-	-	0.00	5.12	2.11
30-Apr-20	1.80	3.15	2.55	-	-	-	0.00	5.26	2.16
	<b>0.70<sup>#</sup></b>	<b>3.87<sup>#</sup></b>	<b>2.47</b>	-	-	-	<b>0.00<sup>#</sup></b>	<b>8.00<sup>#</sup></b>	<b>2.42</b>

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),  
APRIL 2020**

Name of the Entity	Through Bilateral			Through Power Exchange			Through DSM with Regional Grid			Total Net***
	Sale	Purchase	Net**	Sale	Purchase	Net**	Import (Over Draw)	Export (Under Draw)	Net**	
PUNJAB	256.12	0.10	-256.02	0.00	186.93	186.93	19.68	58.07	-38.38	-107.48
HARYANA	32.76	56.26	23.50	89.15	56.16	-32.99	57.11	21.71	35.40	25.90
RAJASTHAN	115.34	19.08	-96.26	56.28	52.76	-3.52	73.55	84.94	-11.40	-111.18
DELHI	57.75	72.13	14.38	127.04	12.17	-114.87	6.60	28.37	-21.77	-122.25
U P	0.00	39.92	39.92	431.14	89.42	-341.72	116.09	49.24	66.85	-234.95
UTTARAKHAND	0.00	3.94	3.94	161.61	7.44	-154.18	12.17	22.20	-10.03	-160.26
HIMACHAL P	88.58	0.00	-88.58	362.85	0.54	-362.32	10.82	32.84	-22.01	-472.91
J & K	38.38	0.00	-38.38	36.95	5.42	-31.53	20.74	32.35	-11.61	-81.53
CHANDIGARH	0.00	0.00	0.00	43.24	0.00	-43.24	3.81	5.34	-1.53	-44.77
MP	216.47	67.63	-148.84	8.44	5.65	-2.78	32.77	59.26	-26.49	-178.12
MAHARASHTRA	70.64	130.70	60.06	0.02	1335.01	1334.99	64.55	41.36	23.20	1418.25
GUJARAT	383.34	0.21	-383.13	115.16	552.40	437.24	49.60	65.18	-15.59	38.53
CHHATTISGARH	0.00	264.96	264.96	115.44	3.04	-112.40	7.45	41.88	-34.43	118.14
GOA	0.00	26.03	26.03	47.58	0.76	-46.82	4.18	4.59	-0.41	-21.20
DAMAN & DIU	0.00	0.00	0.00	0.00	0.00	0.00	2.15	1.45	0.71	0.71
DADRA & NAGAR H	0.00	0.00	0.00	51.68	0.00	-51.68	2.82	2.42	0.39	-51.29
ANDHRA P	5.11	562.68	557.57	5.18	755.28	750.11	29.27	46.32	-17.06	1290.62
KARNATAKA	0.00	0.50	0.50	16.27	26.90	10.63	53.54	39.57	13.97	25.11
KERALA	0.00	125.55	125.55	1.94	13.97	12.03	29.39	6.60	22.79	160.37
TAMIL NADU	0.00	1121.38	1121.38	1.67	72.34	70.67	57.12	37.16	19.96	1212.01
PONDICHERRY	0.00	0.00	0.00	0.00	0.00	0.00	2.56	9.66	-7.10	-7.10
TELANGANA	0.00	8.47	8.47	0.08	343.11	343.03	32.12	53.85	-21.73	329.77
WEST BENGAL	20.34	112.90	92.56	29.68	11.41	-18.27	52.31	28.52	23.79	98.08
ODISHA	13.02	4.65	-8.36	448.52	18.17	-430.35	19.31	33.82	-14.50	-453.22
BIHAR	0.52	119.30	118.78	37.79	107.32	69.53	36.48	48.43	-11.95	176.36
JHARKHAND	0.10	91.78	91.68	42.47	0.00	-42.47	26.35	14.97	11.38	60.59
SIKKIM	0.00	6.56	6.56	29.88	0.00	-29.88	2.15	4.57	-2.42	-25.74
DVC	85.44	0.00	-85.44	3.08	0.00	-3.08	30.34	18.22	12.12	-76.40
ARUNACHAL P	0.00	0.00	0.00	14.03	0.00	-14.03	4.16	3.53	0.63	-13.40
ASSAM	0.00	54.46	54.46	213.99	3.73	-210.26	14.87	7.42	7.45	-148.35
MANIPUR	0.00	7.20	7.20	5.51	2.64	-2.86	2.16	3.39	-1.24	3.10
MEGHALAYA	10.08	27.00	16.92	4.29	3.19	-1.10	0.79	9.13	-8.35	7.47
MIZORAM	1.80	0.00	-1.80	10.17	0.00	-10.17	1.54	3.01	-1.47	-13.44
NAGALAND	0.00	12.30	12.30	0.24	0.00	-0.24	0.82	3.60	-2.78	9.28
TRIPURA	0.00	0.00	0.00	28.20	0.15	-28.06	2.32	17.73	-15.41	-43.46
NTPC STNS-NR	0.00	0.00	0.00	0.00	0.00	0.00	35.64	28.98	6.67	6.67
NHPC STNS	0.00	0.00	0.00	0.00	0.00	0.00	12.75	59.22	-46.47	-46.47
NFF	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.21	-0.09	-0.09
RAIL	0.00	0.00	0.00	0.00	0.00	0.00	0.56	4.55	-3.99	-3.99
NEP	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.55	0.42	0.42
NAPP	0.00	0.00	0.00	0.00	0.00	0.00	7.82	1.13	6.69	6.69
RAP B	0.00	0.00	0.00	0.00	0.00	0.00	5.11	1.38	3.73	3.73
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	4.74	6.99	-2.26	-2.26
TEHRI	0.00	0.00	0.00	0.00	0.00	0.00	1.98	2.31	-0.33	-0.33
BBMB	0.00	0.00	0.00	0.00	0.00	0.00	4.06	11.57	-7.51	-7.51
RAP C	0.00	0.00	0.00	0.00	0.00	0.00	8.43	3.73	4.71	4.71
AD HYDRO	12.06	0.00	-12.06	9.76	0.00	-9.76	0.57	1.27	-0.71	-22.53
IGSTPS	0.00	0.00	0.00	0.00	0.00	0.00	4.58	0.00	4.58	4.58
KOTESHWAR	0.00	0.00	0.00	0.00	0.00	0.00	1.13	1.83	-0.70	-0.70
KARCHAM WANGT	0.00	0.00	0.00	19.12	0.00	-19.12	3.18	4.24	-1.06	-20.18
SHREE CEMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.32	0.32
LANCO BUDHIL	0.00	0.00	0.00	1.65	0.00	-1.65	0.23	0.96	-0.73	-2.37
RAMPUR HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.94	4.16	-3.22	-3.22
SAINJ HEP	0.00	0.00	0.00	16.17	0.00	-16.17	0.33	2.59	-2.26	-18.42
RENEW_SLR	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.67	0.11	0.11
AZURE_SLR	0.00	0.00	0.00	0.00	0.00	0.00	2.15	2.70	-0.56	-0.56
SB_SLR	0.00	0.00	0.00	0.00	0.00	0.00	3.95	2.62	1.33	1.33

MAHOBASLR	0.00	0.00	0.00	0.00	0.00	0.00	0.28	1.25	-0.97	-0.97
ACMESLR	0.00	0.00	0.00	0.00	0.00	0.00	2.25	2.65	-0.40	-0.40
AZURE34SLR	0.00	0.00	0.00	0.00	0.00	0.00	1.24	2.27	-1.03	-1.03
TATASLR	0.00	0.00	0.00	0.00	0.00	0.00	1.43	2.96	-1.53	-1.53
RENEW_SLR_BKN	0.00	0.00	0.00	0.00	0.00	0.00	2.53	4.03	-1.50	-1.50
CLEAN_SLR	0.00	0.00	0.00	0.00	0.00	0.00	5.07	7.54	-2.46	-2.46
ARERJLSLR	0.00	0.00	0.00	0.00	0.00	0.00	1.69	2.78	-1.09	-1.09
KSMPLSLR	0.00	0.00	0.00	2.39	0.00	-2.39	0.23	0.23	0.00	-2.39
NTPC STNS-WR	0.00	0.00	0.00	16.29	0.00	-16.29	57.36	77.09	-19.73	-36.02
BHADRAVATHI HV	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.25	-0.22	-0.22
VINDHYACHAL HV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	-0.22	-0.22
JINDAL POWER	77.88	0.00	-77.88	4.51	0.00	-4.51	2.47	1.78	0.69	-81.70
LANKO_AMK	8.44	0.00	-8.44	0.00	0.00	0.00	0.22	3.45	-3.22	-11.66
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.63	1.49	1.49
ACBIL	1.10	0.00	-1.10	46.13	0.00	-46.13	5.65	3.07	2.58	-44.64
BALCO	9.98	1.64	-8.34	0.00	0.00	0.00	18.79	0.54	18.24	9.90
RGPPL (DABHOL)	0.00	0.00	0.00	0.00	0.00	0.00	14.55	0.08	14.47	14.47
CGPL	0.00	0.00	0.00	0.00	0.00	0.00	28.42	5.99	22.43	22.43
DCPP	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	-0.01	-0.01
EMCO	0.00	0.00	0.00	0.00	0.00	0.00	2.80	1.71	1.08	1.08
ESSAR STEEL	0.00	0.00	0.00	0.00	0.00	0.00	10.06	5.29	4.77	4.77
KSK MAHANADI	71.41	0.00	-71.41	0.00	0.00	0.00	1.54	3.37	-1.83	-73.24
ESSAR POWER	124.25	0.00	-124.25	5.27	0.00	-5.27	3.46	0.89	2.56	-126.95
JINDAL STAGE-II	0.00	0.00	0.00	0.00	0.00	0.00	4.43	1.87	2.56	2.56
DB POWER	127.95	0.00	-127.95	9.82	0.00	-9.82	5.69	0.91	4.77	-133.00
DHARIWAL PWR	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.76	-0.17	-0.17
JAYPEE NIGRIE	71.27	0.00	-71.27	3.21	0.00	-3.21	0.47	2.29	-1.82	-76.30
DGEN MEGA POWER	1.22	0.00	-1.22	262.58	0.00	-262.58	3.90	3.09	0.81	-262.99
GMR CHATTISGARH	0.00	0.00	0.00	0.00	0.00	0.00	11.62	1.55	10.08	10.08
KORBA WEST PWR	0.00	0.00	0.00	0.00	0.00	0.00	4.28	0.43	3.85	3.85
MB POWER	8.56	0.00	-8.56	22.13	0.00	-22.13	6.13	7.14	-1.01	-31.70
MARUTI COAL	0.00	0.00	0.00	29.92	0.00	-29.92	0.00	0.00	0.00	-29.92
SPECTRUM	0.00	0.00	0.00	54.87	0.00	-54.87	0.00	0.00	0.00	-54.87
JHABUA PWR_MP	2.32	0.00	-2.32	47.02	0.00	-47.02	12.75	0.43	12.32	-37.02
SASAN UMPP	0.00	0.00	0.00	0.00	0.00	0.00	0.50	44.12	-43.62	-43.62
TRN ENERGY	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.29	0.29
RKM POWER	0.00	0.00	0.00	0.00	0.00	0.00	0.87	1.36	-0.49	-0.49
SKS POWER	9.93	0.00	-9.93	34.10	0.00	-34.10	1.26	0.63	0.63	-43.40
BARC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15	-4.15	-4.15
KAPP 3&4	0.00	0.00	0.00	0.00	0.00	0.00	2.76	0.00	2.76	2.76
HVDC CHAMPA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	-0.94	-0.94
MAHINDRA_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	5.49	2.77	2.71	2.71
ARINSUM_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	4.88	2.62	2.26	2.26
OSTRO	0.00	0.00	0.00	0.00	0.00	0.00	8.19	10.93	-2.74	-2.74
ACME_RUMS	0.00	0.00	0.00	0.00	0.00	0.00	3.46	2.68	0.77	0.77
RENEW_BHACHAU	0.00	0.00	0.00	0.00	0.00	0.00	6.07	10.90	-4.83	-4.83
GIWEL_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	15.09	19.47	-4.38	-4.38
INOX_BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	3.10	3.33	-0.23	-0.23
AGEMPL BHUJ	0.00	0.00	0.00	0.00	0.00	0.00	5.16	5.38	-0.22	-0.22
REGL	52.21	0.00	-52.21	11.63	0.00	-11.63	0.00	0.00	0.00	-63.84
RPREL	258.36	0.00	-258.36	43.75	0.00	-43.75	0.00	0.00	0.00	-302.10
AMPS Hazira	0.00	0.00	0.00	0.00	26.13	26.13	0.00	0.00	0.00	26.13
HVDC RAIGARH	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.12	-0.07	-0.07
NTPC STNS-SR	0.40	0.00	-0.40	6.31	0.00	-6.31	33.18	19.72	13.46	6.76
LANKO KONDAPALLE	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.78	0.78
SIMHAPURI	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.39	0.39
MEENAKSHI	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.51	0.51
COASTGEN	0.00	0.00	0.00	0.00	0.00	0.00	3.49	1.14	2.35	2.35
THERMAL POWER	109.20	0.00	-109.20	7.07	0.00	-7.07	6.26	1.81	4.46	-111.81
IL&FS	42.24	0.00	-42.24	0.52	0.00	-0.52	4.53	0.15	4.38	-38.38
NLC	0.00	0.00	0.00	43.15	0.00	-43.15	18.10	49.49	-31.39	-74.54
SEMBCORP	353.89	0.00	-353.89	25.91	0.00	-25.91	2.12	4.42	-2.31	-382.11
NETCL VALLUR	0.00	0.00	0.00	0.00	0.00	0.00	10.07	0.04	10.02	10.02
NTPL	0.00	0.00	0.00	0.02	0.00	-0.02	3.92	2.15	1.77	1.76

AHSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.65	-0.143	-0.143
AKSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.66	-0.21	-0.21
ABSP_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.69	-0.14	-0.14
AZURE_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.68	-0.14	-0.14
TATA_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.60	1.69	-1.09	-1.09
FRV_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.53	0.03	0.03
NTPC_ANTP	0.00	0.00	0.00	0.00	0.00	0.00	1.78	2.64	-0.87	-0.87
GIWEL_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.72	5.07	4.65	4.65
MYTRAH_TCN	0.00	0.00	0.00	0.00	0.00	0.00	9.42	3.66	5.76	5.76
FRV_NPK	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.70	-0.10	-0.10
ORANGE_TCN	0.00	0.00	0.00	0.00	0.00	0.00	8.90	4.18	4.72	4.72
BETAM_TCN	0.00	0.00	0.00	0.00	0.00	0.00	2.50	1.13	1.37	1.37
SBG_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.80	1.88	0.91	0.91
SBG_NPK	0.00	0.00	0.00	0.00	0.00	0.00	5.84	0.85	4.98	4.98
FORTUM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.54	1.11	0.43	0.43
PARAM_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.87	1.86	0.01	0.01
YARROW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.35	0.65	0.65
TATA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	2.59	3.74	-1.15	-1.15
RENEW_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.71	0.12	0.12
AKS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.54	0.09	0.09
ARS_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.70	-0.53	-0.53
AVAADA_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.88	2.69	-1.81	-1.81
ADY1_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.66	-0.16	-0.16
ADY2_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.89	-0.61	-0.61
ADY13_PVGD	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.85	-0.47	-0.47
NTPC STNS-ER	0.25	0.00	-0.25	2.16	0.00	-2.16	55.67	24.47	31.21	28.80
MAITHON POWER	0.00	0.00	0.00	0.00	0.00	0.00	4.01	6.19	-2.17	-2.17
NPGC	0.00	0.00	0.00	0.00	0.00	0.00	5.14	2.52	2.61	2.61
ADHUNIK POWER	91.78	0.00	-91.78	0.00	0.00	0.00	10.75	0.26	10.49	-81.28
CHUZACHEN HEP	15.91	0.00	-15.91	2.52	0.00	-2.52	1.00	0.95	0.05	-18.37
RANGIT HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.79	-0.38	-0.38
GMR KAMALANGA	0.00	0.00	0.00	0.00	0.00	0.00	4.77	0.63	4.14	4.14
JITPL	112.20	0.00	-112.20	145.26	0.00	-145.26	10.21	1.22	8.99	-248.46
TEESTA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.13	6.61	-6.48	-6.48
DAGACHU	18.00	0.00	-18.00	0.00	0.00	0.00	6.04	0.40	5.65	-12.35
JORETHANG	0.00	0.00	0.00	13.48	0.00	-13.48	2.06	0.86	1.20	-12.28
NEPAL(NVVN)	0.00	46.59	46.59	0.00	0.00	0.00	4.95	7.74	-2.79	43.80
BANGLADESH	0.00	27.83	27.83	0.00	0.00	0.00	8.77	9.42	-0.66	27.17
HVDC PUS	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.16	-0.15	-0.15
TEESTA STG3	0.30	0.00	-0.30	229.47	0.00	-229.47	5.95	2.24	3.71	-226.06
DIKCHU HEP	0.00	0.00	0.00	20.44	0.00	-20.44	2.48	2.38	0.10	-20.34
HVDC ALPD	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.05	-0.02	-0.02
TASHIDENG HEP	0.00	0.00	0.00	12.20	0.00	-12.20	1.60	0.51	1.09	-11.11
BRBCL,NABINAGA	0.00	0.00	0.00	0.00	0.00	0.00	5.74	5.77	-0.04	-0.04
MTPS II	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.77	0.82	0.82
TALA HEP	0.00	0.00	0.00	0.00	0.00	0.00	78.45	0.08	78.37	78.37
CHUKHA HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.51	60.44	-59.94	-59.94
KURICHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	7.21	2.97	4.24	4.24
MANGDECHU HEP	0.00	0.00	0.00	0.00	0.00	0.00	5.19	7.11	-1.93	-1.93
NTPC STNS-NER	0.00	0.00	0.00	0.02	0.00	-0.02	2.46	3.28	-0.82	-0.84
NEEPCO STNS	0.14	0.00	-0.14	0.00	0.00	0.00	0.82	10.57	-9.75	-9.88
RANGANADI HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.95	1.84	-0.89	-0.89
DOYANG HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.19	0.03	0.03
ONGC PALATANA	0.00	0.00	0.00	3.65	0.00	-3.65	0.67	0.98	-0.31	-3.96
LOKTAK	53.12	0.00	-53.12	0.00	0.00	0.00	0.23	0.57	-0.34	-53.46
PARE HEP	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.42	-0.26	-0.26
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										



<b>Table-20 : VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, APRIL 2020</b>					
<b>Sr. No.</b>	<b>Details of REC Transactions</b>	<b>IEX</b>		<b>PXIL</b>	
		<b>Solar</b>	<b>Non-Solar</b>	<b>Solar</b>	<b>Non Solar</b>
A	Volume of Buy Bid	38176	172488	4851	44605
B	Volume of Sell Bid	15991	439233	10127	106339
C	Ratio of Buy Bid to Sell Bid Volume	2.39	0.39	0.48	0.42
D	Market Clearing Volume (MWh)	15991	172488	4851	44605
E	Weighted average Market Clearing Price (₹/MWh)	2400	1000	2000	1000

Source: IEX and PXIL

Note 1: 1 REC = 1 MWh

Note 2:

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