Monthly Report on Short-term Transactions of Electricity in India

December, 2012

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Abbreviations

Abbreviation	Expanded Version
ACBIL	ACB (India) Ltd
ACP	Area Clearing Price
ACV	Area Clearing Volume
AD HYDRO	AD Hydro Power Limited
ADANI HVDC	Adani Power Ltd. (HVDC Mundra)
BALCO	Bharat Aluminium Company Limited
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGPL	Coastal Gujarat Power Ltd
DCPP	Donga Mahua Captive Power Plant
DVC	Damodar Valley Corporation
EMCO	EMCO Energy Limited
IEX	Indian Energy Exchange Limited
JINDAL POWER	Jindal Power Limited
KARCHAM WANGTOO	Jaypee Karcham Hydro Corporation Limited
LANKO_AMK	Lanco Amarkantak Power Private Limited
LANCO BUDHIL	Lanco Budhil Hydro Power Private Limited
LANKO_KONDAPALLY	Lanco Kondapalli Power Limited
Meenakshi	Meenakshi Energy Private Limited
MP	Madhya Pradesh
MUs	Million Units
NEEPCO Stations	North Eastern Electric Power Corporation Limited. Stations
NEW Grid	North, East, North-East and Western Regional Grid
NHPC Stations	National Hydro Electric Power Corporation Ltd. Stations
NJPC	Nathpa Jhakri Hydroelectric Power Station
NLDC	National Load Despatch Centre
NSPCL	NTPC - SAIL Power Company Private Limited
PX	Power Exchange
PXIL	Power Exchange India Limited
REC	Renewable Energy Certificate
RGPPL	Ratnagiri Gas and Power Private Limited
RLDC	Regional Load Despatch Centre
RTC	Round - the- Clock
SIMHAPURI	Simhapuri Energy Private Limited
SHREE CEMENT	Shree Cement Limited
SR Grid	Southern Regional Grid
STERLITE	Sterlite Energy Limited
UI	Unscheduled Interchange
UT	Union Territory

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 & intra-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 Unscheduled Interchange (UI). 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 analysis of the report for the month of December 2012 is as under:

I: Volume of Short-term Transactions of Electricity

During the month of December 2012, total electricity generation excluding generation from renewable and captive power plants in India was 76495.84MUs (Table-1).

Of the total electricity generation, 8250.56MUs (10.79%) were transacted through short-term, comprising of 4455.79MUs (5.82%) through Bilateral (through traders and term-ahead contracts on Power Exchanges and directly between distribution companies), followed by 2314.61MUs (3.03%) through day ahead collective transactions on Power Exchanges (IEX and PXIL) and 1480.16MUs (1.93%) through UI (Table-1 & Figure-2).

Of the total short-term transactions, Bilateral constitute 54.01% (40.84% through traders and term-ahead contracts on Power Exchanges and 13.17% directly between distribution companies) followed by 28.05% through day ahead collective transactions on Power Exchanges and 17.94% through UI (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 trading licensees is provided in Table-2 & Figure-4. The trading licensees undertake electricity transactions through bilateral and through power exchanges. Here, the volume of electricity transacted by the trading licensees includes bilateral

transactions and the transactions undertaken through power exchanges. There were 40 trading licensees as on 31.12.2012, of which only 21 have engaged in trading during December 2012. Top 5 trading licenses had a share of 69.74% in the total volume traded by all the licensees.

Herfindahl-Hirschman Index (HHI) has been used for measuring the competition among the trading licensees. Increase in the HHI generally indicates a decrease in competition and an increase of market power, whereas decrease indicates the opposite. The HHI below 0.15 indicates non-concentration of market power. The HHI computed for volume of electricity traded by trading licensees (inter-state & intra-state) was 0.1282 for the month of December 2012, which indicates that there was no concentration of market power (Table-2).

The volume of electricity transacted through IEX and PXIL in the day ahead market was 2242.51MUs and 72.10MUs respectively. The volume of total Buy bids and Sale bids was 3834.24 MUs and 3375.22 MUs respectively in IEX and 293.11MUs and 287.89 MUs respectively in PXIL. The gap between the volume of buy bids and sale bids placed through power exchanges shows that there was more demand in both IEX (1.14 times) and PXIL (1.02 times) when compared with the supply offered through these exchanges.

The volume of electricity transacted in term-ahead market through weekly contracts was 1.60 MUs in PXIL (Table-7). There were no weekly contracts through IEX.

II: Price of Short-term Transactions of Electricity

(i) ***Price of electricity transacted through Traders:*** Weighted average sale price has been computed for the electricity transacted through traders and it was ₹4.39/kWh. Weighted average sale price was also computed for the transactions during Round the Clock (RTC), Peak, and Off-Peak periods separately, and the sale prices were ₹4.35/kWh, ₹4.77/kWh and ₹4.67/kWh respectively. Minimum and Maximum sale prices were ₹2.90/kWh and ₹8.04/kWh respectively (Table-3 & 4).

(ii) ***Price of electricity transacted Through Power Exchanges:*** Minimum, Maximum and Weighted Average Prices have been computed for the electricity transacted through IEX and PXIL separately. The Minimum, Maximum and Weighted Average prices were ₹0.0004/kWh, ₹9.21/kWh and ₹3.90/kWh respectively in IEX and ₹1.45/kWh, ₹13.00/kWh and ₹3.08/kWh respectively in PXIL (Table-5).

The weighted average price of electricity transacted in term-ahead market through the weekly contracts was ₹3.20/kWh in PXIL (Table-7).

(iii) ***Price of electricity transacted Through UI:*** All-India UI price has been computed for NEW Grid and SR Grid separately. The average UI price was ₹2.33/kWh in the NEW Grid and ₹3.33/kWh in the SR Grid. Minimum and Maximum UI prices were ₹0.00/kWh and ₹10.80/kWh respectively in the New Grid, and ₹0.00/kWh and ₹7.93/kWh respectively in the SR Grid (Table-8).

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

III: Volume of Short-term Transactions of Electricity (Regional Entity[1]-Wise)

Of the total bilateral transactions, top 5 regional entities sold 55.07% of the volume, and these were Delhi, Gujarat, Punjab, Damodar Valley Corporation and West Bengal. Top 5 regional entities purchased 59.19% of the volume, and these were Madhya Pradesh, Maharashtra, Andhra Pradesh, Rajasthan and Jammu & Kashmir (Table-9, 10 & 19).

Of the total Power Exchange transactions, top 5 regional entities sold 71.77% of the volume, and these were Karnataka, Delhi, Gujarat, Jindal Power Limited and West Bengal. Top 5 regional entities purchased 73.68% of the volume, and these were Rajasthan, Gujarat, Tamil Nadu, Andhra Pradesh and Punjab (Table-11, 12 & 19).

Of the total UI transactions, top 5 regional entities underdrew 40.64% of the volume, and these were Uttar Pradesh, Maharashtra, Delhi, Gujarat and Haryana. Top 5 regional entities overdrew 33.69% of the volume, and these were Madhya Pradesh, Jammu & Kashmir, Kerala, Rajasthan and Maharashtra (Table-13, 14 & 19).

Regional entity-wise total volume of net short-term transactions of electricity i.e. volume of net transactions through bilateral, power exchanges and UI is shown in Table-15 & 19. Top 5 electricity selling regional entities were Delhi, Karnataka, Jindal Power Limited, Gujarat and Damodar Valley Corporation. Top 5 electricity purchasing regional entities were Madhya Pradesh, Rajasthan, Andhra Pradesh, Maharashtra and Tamilnadu.

[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.*

IV: Congestion[2] 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 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 December 2012, congestion occurred in both the power exchanges, the details of which are shown in Table-16. The volume of electricity that could not be cleared due to congestion and could not be transacted through power exchanges is the difference between unconstrained cleared volume (volume of electricity that would have been scheduled, had there been no congestion) and actual cleared volume.

During the month, the volume of electricity that could not be cleared in the power exchanges due to congestion was 17.43% and 156.59% of the actual cleared volume in IEX and PXIL, respectively. In terms of time, congestion occurred was 99.97% and 98.59% in IEX and PXIL, respectively.

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[2] *"Congestion" means a situation where the demand for transmission capacity exceeds the available transfer capability*

[3] *" Market Splitting" is a mechanism adopted by Power 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.

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

The concept of Renewable Energy Certificates (RECs) seeks to address mismatch between availability of renewable energy sources 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 market in electricity.

One REC is equivalent to 1 MWh of 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 session was held on power exchanges in March 2011.

The details of REC transactions for the month of December 2012 are shown in Table-20. The market clearing volume of Solar RECs transacted on IEX and PXIL were 931 and 277 respectively and the market clearing price of these RECs was ₹12620/MWh and ₹12100/MWh respectively. Market clearing volume of Non-Solar RECs transacted on IEX and PXIL were 173644 and 100000 respectively and the market clearing price of these RECs was ₹1500/MWh on both the power exchanges.

The gap between the volume of buy and sell bids of RECs placed through power exchanges shows that there was more demand for Solar RECs and less demand for Non-Solar RECs. For Solar RECs, the ratio of buy and sell bids was 1.65 and 1.20 in IEX and PXIL respectively. For Non-Solar RECs, the ratio of buy and sell bids was 0.20 and 0.17 in IEX and PXIL respectively.

VI: Inferences:

- The percentage of short-term transactions of electricity to total electricity generation was 10.79%.
- Of the total short-term transactions of electricity, 54.01% was transacted through bilateral (through traders and term ahead contracts on power exchanges and directly by distribution companies), followed by 28.05% through Power Exchanges and 17.94% through UI.
- Top 5 trading licensees had a share of 69.74% in the total volume traded by all the trading licensees.
- The Herfindahl Hirschman Index computed for volume of electricity traded by trading licensees was 0.1282, indicating an unconcentration of market power.
- The price of electricity transacted through trading licensees (₹4.39/kWh) was higher when compared with the price of electricity transacted through IEX (₹3.90/kWh) and PXIL (₹3.08/kWh) respectively.
- The price of electricity transacted through UI was ₹2.33/kWh in the NEW Grid and ₹3.33/kWh in the SR Grid.
- The gap between the volume of sale bids and buy bids placed through power exchanges indicates that there was less demand in IEX (1:1.14) and more demand in PXIL (1:1.02) when compared with the supply offered through these exchanges.
- Top 5 electricity selling regional entities were Delhi, Karnataka, Jindal Power Limited, Gujarat and Damodar Valley Corporation. Top 5 electricity purchasing regional entities were Madhya Pradesh, Rajasthan, Andhra Pradesh, Maharashtra and Tamilnadu.
- The volume of electricity that could not be cleared in the power exchanges due to congestion was about 17.43% and 156.59% of the actual cleared volume in IEX and PXIL, respectively. In terms of time, congestion occurred was 99.97% and 98.59% in IEX and PXIL, respectively.
- The market clearing volume of Solar RECs transacted on IEX and PXIL were 931 and 277 respectively and the market clearing price of these RECs was ₹12620/MWh and ₹12100/MWh respectively. Market clearing volume of Non-Solar RECs transacted on IEX and PXIL were 173644 and 100000 respectively and the market clearing price of these RECs was ₹1500/MWh on both the power exchanges.

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA), DECEMBER 2012				
Sr.No	**Short-term transactions**	**Volume (MUs)**	**% to Volume of short-term transactions**	**% to Total Generation**
1	Bilateral	4455.79	54.01%	5.82%
	(i) Through Traders and PXs	*3369.52*	40.84%	4.40%
	(ii) Direct	*1086.27*	13.17%	1.42%
2	Through Power Exchanges	2314.61	28.05%	3.03%
	(i) IEX	*2242.51*	27.18%	2.93%
	(ii) PXIL	*72.10*	0.87%	0.09%
3	Through UI	1480.16	17.94%	1.93%
	Total	**8250.56**	**100.00%**	**10.79%**
	Total Generation	**76495.84**	_	_
Source: NLDC				

Figure-1: Volume of Short-term Transactions of Electricity, December 2012

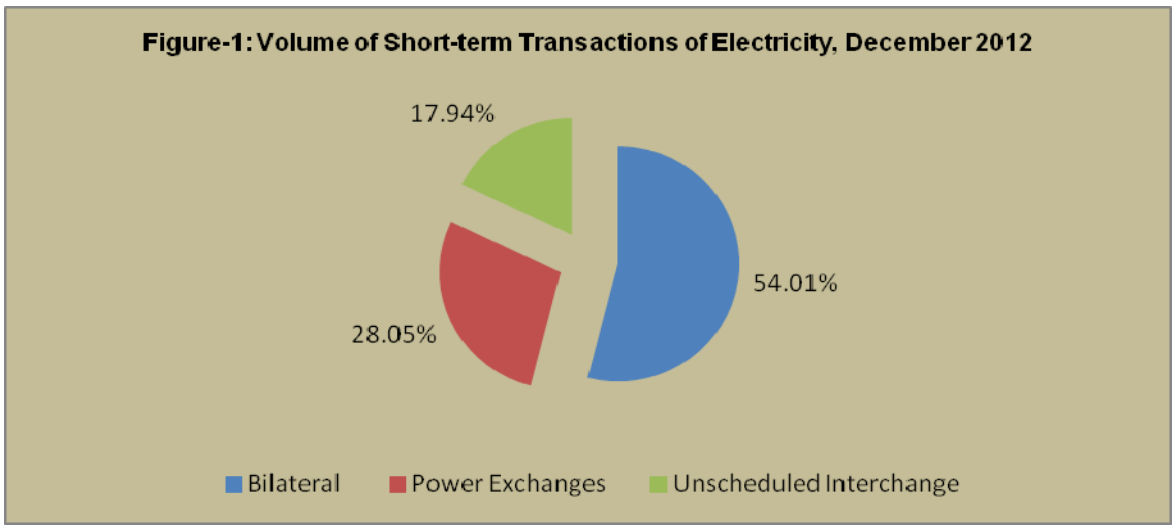
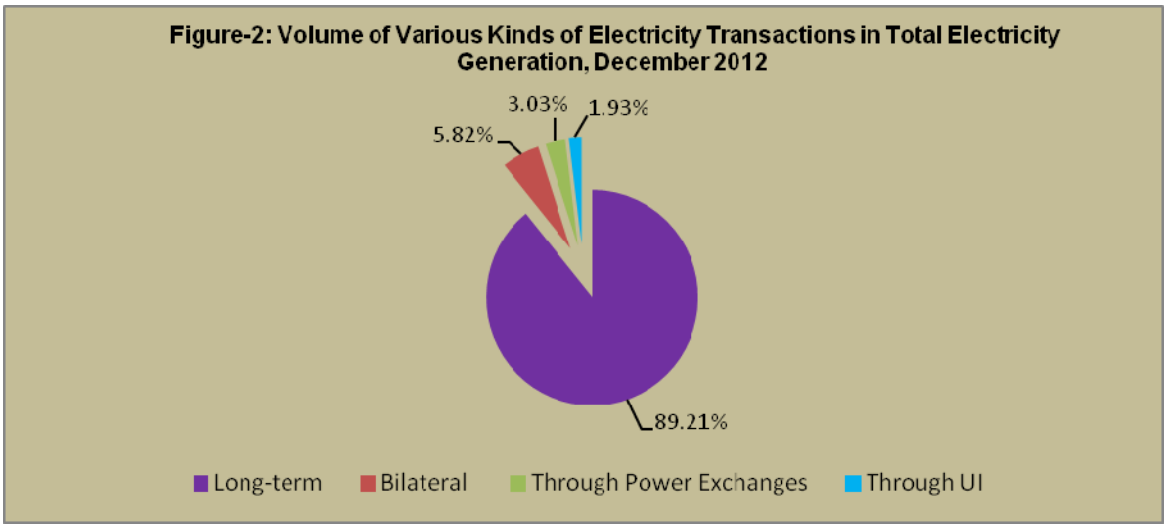


Figure-2: Volume of Various Kinds of Electricity Transactions in Total Electricity Generation, December 2012



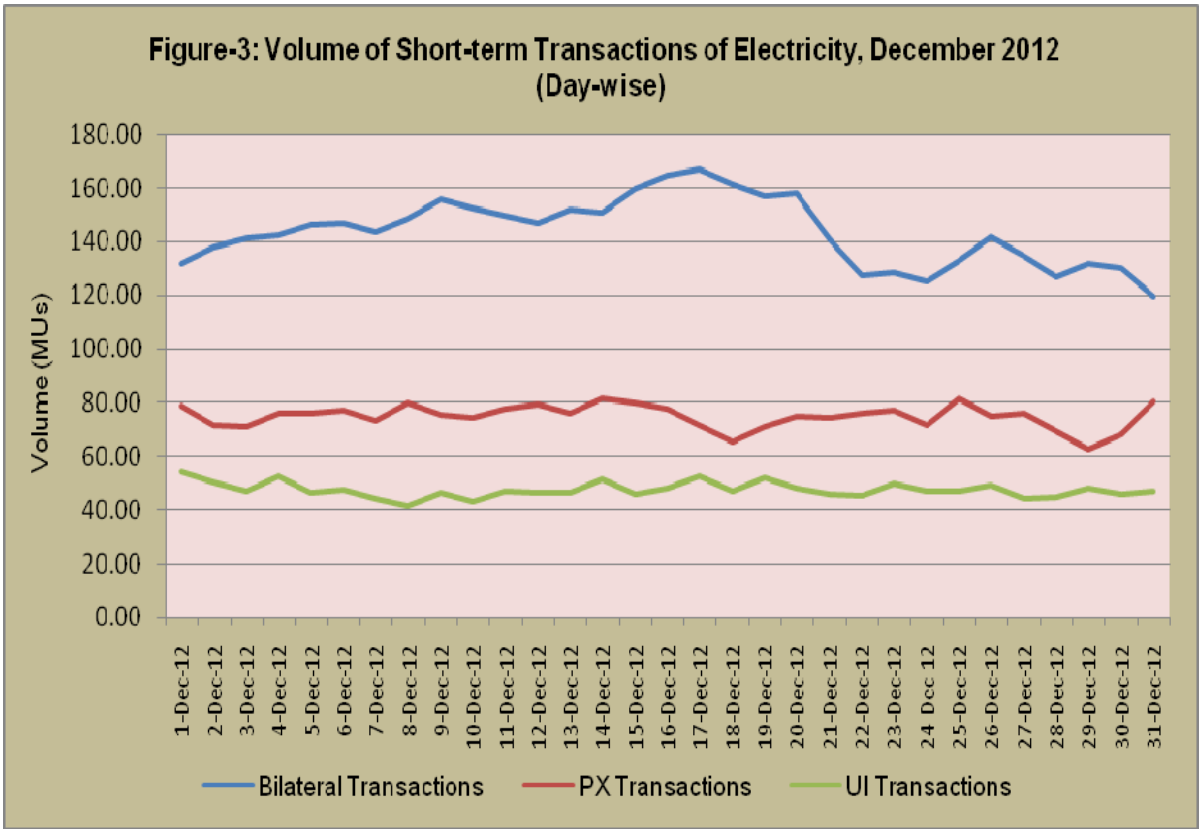


Figure-3: Volume of Short-term Transactions of Electricity, December 2012
(Day-wise)
Volume (MUs)
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
1-Dec-12
2-Dec-12
3-Dec-12
4-Dec-12
5-Dec-12
6-Dec-12
7-Dec-12
8-Dec-12
9-Dec-12
10-Dec-12
11-Dec-12
12-Dec-12
13-Dec-12
14-Dec-12
15-Dec-12
16-Dec-12
17-Dec-12
18-Dec-12
19-Dec-12
20-Dec-12
21-Dec-12
22-Dec-12
23-Dec-12
24 Dec 12
25-Dec-12
26-Dec-12
27-Dec-12
28-Dec-12
29-Dec-12
30-Dec-12
31-Dec-12
Bilateral Transactions
PX Transactions
UI Transactions

Table-2: PERCENTAGE SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES, DECEMBER 2012			
Sr.No	**Name of the Trading Licensee**	**% Share in total Volume transacted by Trading Licensees**	**Herfindahl-Hirschman Index**
1	PTC India Ltd.	24.88%	0.0619
2	JSW Power Trading Company Ltd.	13.47%	0.0181
3	Adani Enterprises Ltd.	11.58%	0.0134
4	Tata Power Trading Company (P) Ltd.	10.32%	0.0107
5	Reliance Energy Trading (P) Ltd	9.49%	0.0090
6	NTPC Vidyut Vyapar Nigam Ltd.	8.10%	0.0066
7	Mittal Processors (P) Ltd.	6.69%	0.0045
8	Knowledge Infrastructure Systems (P) Ltd	4.64%	0.0022
9	National Energy Trading & Services Ltd.	3.07%	0.0009
10	Shree Cement Ltd.	2.33%	0.0005
11	Instinct Infra & Power Ltd.	1.05%	0.0001
12	RPG Power Trading Company Ltd.	0.80%	0.0001
13	GMR Energy Trading Ltd.	0.78%	0.0001
14	Jindal Power Trading Company Ltd.	0.67%	0.0000
15	Essar Electric Power Development Corp. Ltd.	0.56%	0.0000
16	Arunachal Pradesh Power Corporation Pvt. Ltd.	0.49%	0.0000
17	Manikaran Power Ltd.	0.45%	0.0000
18	Jaiprakash Associates Ltd.	0.23%	0.0000
19	Indrajit Power Technology (P) Ltd.	0.23%	0.0000
20	Pune Power Development Pvt. Ltd.	0.10%	0.0000
21	Customized Energy Solutions India Pvt. Ltd.	0.05%	0.0000
TOTAL		**100.00%**	**0.1282**
Top 5 trading licensees		**69.74%**	
Note: Volume of electricity transacted by the trading licensees includes bilateral transactions (inter-state & intra-state) and the transactions undertaken through power exchanges. *Note2: Volume of electricity transacted by Global Energy Ltd is not included.*			
Source: Information submitted by trading licensees			

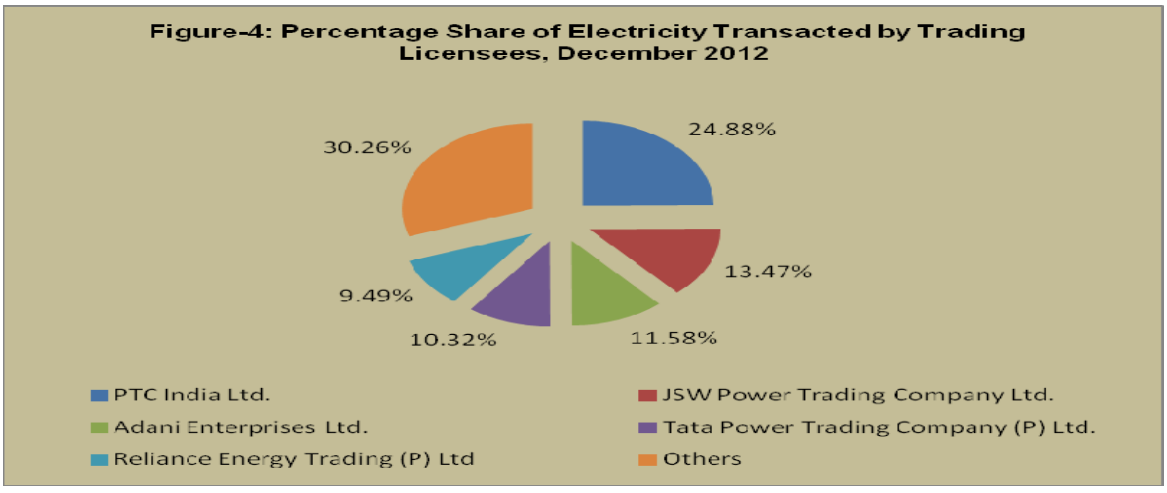


Table-3: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS, DECEMBER 2012		
Sr.No		**Sale Price of Traders (₹/kWh)**
1	Minimum	2.90
2	Maximum	8.04
3	Weighted Average	4.39

Source: Information submitted by trading licensees

Table-4: PRICE OF ELECTRICITY TRANSACTED THROUGH TRADERS (TIME-WISE), DECEMBER 2012		
Sr.No	**Period of Trade**	**Sale Price of Traders (₹/kWh)**
1	RTC	4.35
2	PEAK	4.77
3	OFF PEAK	4.67

Source: Information submitted by trading licensees

Table-5: PRICE OF ELECTRICITY TRANSACTED THROUGH POWER EXCHANGES, DECEMBER 2012			
Sr.No	**ACP**	**Price in IEX (₹/kWh)**	**Price in PXIL (₹/kWh)**
1	Minimum	0.0004	1.45
2	Maximum	9.21	13.00
3	Weighted Average	3.90	3.08

Source: Information submitted by IEX and PXIL

Table-6: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF IEX, DECEMBER 2012			
Sr.No	**Term ahead contracts**	**Actual Scheduled Volume (MUs)**	**Weighted Average Price (₹/kWh)**
1	Intra-Day Contracts	2.90	4.14
2	Day-ahead Contingency Contracts	2.97	5.41
	Total	**5.87**	**4.78**

Source: IEX

Table-7: VOLUME AND PRICE OF ELECTRICITY IN TERM AHEAD MARKET OF PXIL, DECEMBER 2012			
Sr.No	**Term ahead contracts**	**Actual Scheduled Volume (MUs)**	**Weighted Average Price (₹/kWh)**
1	Intra-Day Contracts	1.89	5.35
2	Weekly Contracts	1.60	3.20
	Total	**3.49**	**4.37**

Source: PXIL

Table-8: PRICE OF ELECTRICITY TRANSACTED THROUGH UI, DECEMBER 2012			
Sr.No		**Price in NEW Grid (₹/kWh)**	**Price in SR Grid (₹/kWh)**
1	Minimum	0.00	0.00
2	Maximum	10.80	7.93
3	Average	2.33	3.33

Source: NLDC

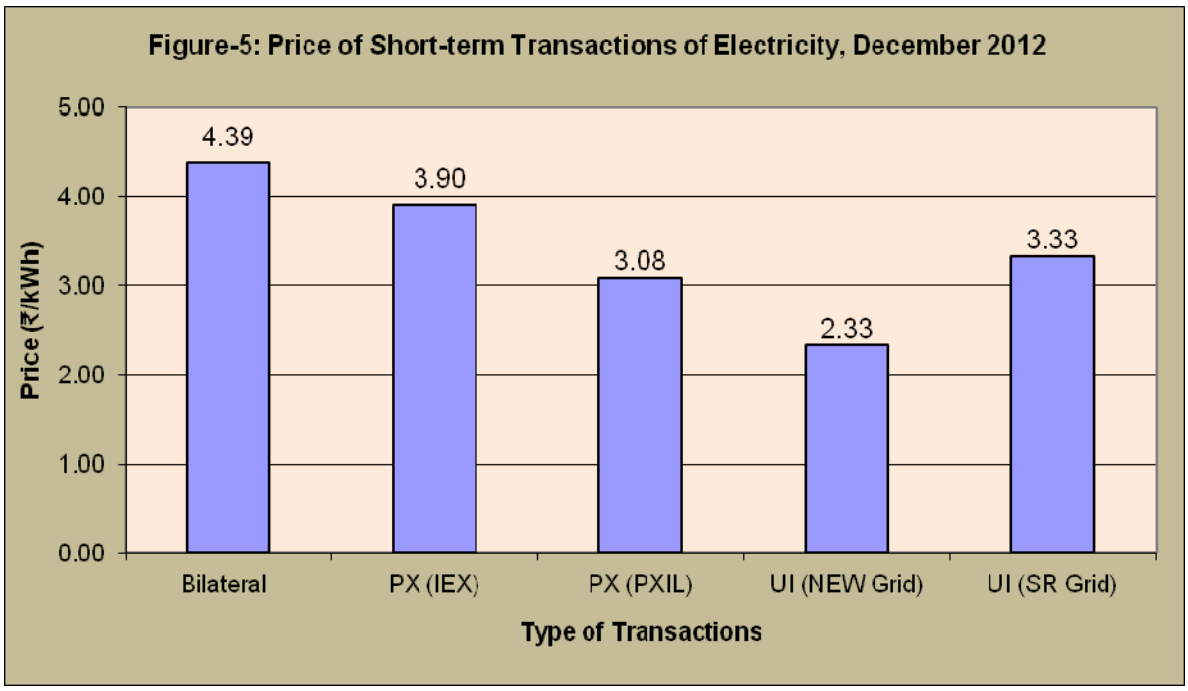


Figure-5: Price of Short-term Transactions of Electricity, December 2012
5.00
4.00
3.00
2.00
1.00
0.00
Price (₹/kWh)
4.39
3.90
3.08
2.33
3.33
Bilateral
PX (IEX)
PX (PXIL)
UI (NEW Grid)
UI (SR Grid)
Type of Transactions

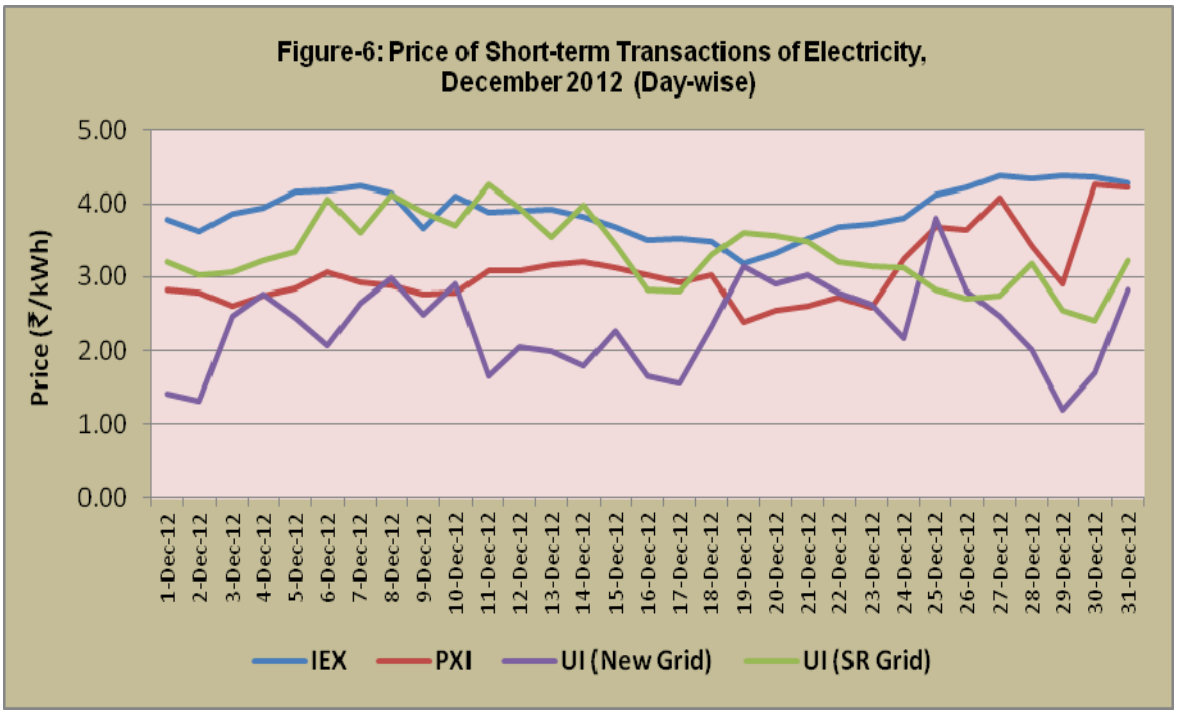


Figure-6: Price of Short-term Transactions of Electricity, December 2012 (Day-wise)
5.00
4.00
3.00
2.00
1.00
0.00
Price (₹/kWh)
1-Dec-12
2-Dec-12
3-Dec-12
4-Dec-12
5-Dec-12
6-Dec-12
7-Dec-12
8-Dec-12
9-Dec-12
10-Dec-12
11-Dec-12
12-Dec-12
13-Dec-12
14-Dec-12
15-Dec-12
16-Dec-12
17-Dec-12
18-Dec-12
19-Dec-12
20-Dec-12
21-Dec-12
22-Dec-12
23-Dec-12
24-Dec-12
25-Dec-12
26-Dec-12
27-Dec-12
28-Dec-12
29-Dec-12
30-Dec-12
31-Dec-12
IEX
PXI
UI (New Grid)
UI (SR Grid)

Table-9: VOLUME OF ELECTRICITY SALE THROUGH BILATERAL, DECEMBER 2012		
Name of the State/UT/Other Regional Entity	**Volume of Sale (MUs)**	**% of Volume**
Delhi	651.93	15.68%
Gujarat	597.32	14.36%
Punjab	366.34	8.81%
DVC	342.24	8.23%
West Bengal	331.88	7.98%
Haryana	270.07	6.49%
Uttar Pradesh	266.96	6.42%
Karnataka	244.10	5.87%
STERLITE	194.07	4.67%
Chattisgarh	171.83	4.13%
JINDAL POWER	163.93	3.94%
KARCHAM WANGTOO	70.33	1.69%
Orissa	67.59	1.63%
Maharashtra	64.83	1.56%
Himachal Pradesh	62.51	1.50%
Rajasthan	52.14	1.25%
SHREE CEMENT	52.14	1.25%
SIMHAPURI	40.39	0.97%
LANKO_AMK	33.62	0.81%
Jharkhand	26.77	0.64%
LANKO_KONDAPALLY	25.02	0.60%
AD HYDRO	15.82	0.38%
J & K	15.37	0.37%
MAITHON POWER LTD	14.14	0.34%
UT Chandigarh	7.44	0.18%
MP	5.38	0.13%
Andhra Pradesh	4.02	0.10%
Total	**4158.18**	**100.00%**
Volume of sale by top 5 States	**2289.70**	**55.07%**

Table-10: VOLUME OF ELECTRICITY PURCHASE THROUGH BILATERAL, DECEMBER 2012		
Name of the State/UT/Other Regional Entity	**Volume of Purchase (MUs)**	**% of Volume**
MP	786.07	18.69%
Maharashtra	568.51	13.52%
Andhra Pradesh	479.04	11.39%
Rajasthan	337.06	8.01%
J & K	318.90	7.58%
Himachal Pradesh	299.79	7.13%
Uttarakhand	291.34	6.93%
Bihar	222.82	5.30%
West Bengal	160.83	3.82%
Tamilnadu	151.37	3.60%
Kerala	117.73	2.80%
Jharkhand	76.76	1.82%
DVC	56.88	1.35%
Uttar Pradesh	55.17	1.31%
Gujarat	53.55	1.27%
Dadra & Nagar Haveli	52.08	1.24%
Haryana	46.92	1.12%
Assam	46.07	1.10%
Meghalaya	41.75	0.99%
Delhi	21.78	0.52%
Punjab	13.04	0.31%
GOA	4.80	0.11%
Karnataka	1.49	0.04%
Mizoram	1.47	0.03%
Meenakshi	0.99	0.02%
Total	**4206.20**	**100.00%**
Volume of sale by top 5 States	**2489.58**	**59.19%**

Table-11: VOLUME OF ELECTRICITY SALE THROUGH POWER EXCHANGES, DECEMBER 2012		
Name of the State/UT/Other Regional Entity	**Volume of Sale (MUs)**	**% of Volume**
Karnataka	509.49	22.01%
Delhi	408.91	17.67%
Gujarat	334.09	14.43%
JINDAL POWER	304.86	13.17%
West Bengal	103.82	4.49%
Andhra Pradesh	90.33	3.90%
Maharashtra	69.10	2.99%
STERLITE	63.00	2.72%
DCPP	57.83	2.50%
NHPC Stations	49.22	2.13%
SHREE CEMENT	42.23	1.82%
MP	36.85	1.59%
Chattisgarh	34.79	1.50%
Himachal Pradesh	24.96	1.08%
Rajasthan	21.43	0.93%
NEEPCO Stations	19.81	0.86%
Orissa	19.53	0.84%
Uttar Pradesh	17.79	0.77%
Sikkim	13.10	0.57%
Uttarakhand	12.70	0.55%
KARCHAM WANGTOO	12.00	0.52%
LANKO_AMK	11.71	0.51%
MAITHON POWER LTD	11.38	0.49%
DVC	9.45	0.41%
ADANI HVDC	8.68	0.38%
SIMHAPURI	7.90	0.34%
ACBIL	6.84	0.30%
J & K	5.36	0.23%
UT Chandigarh	2.50	0.11%
Punjab	1.73	0.07%
Meghalaya	1.13	0.05%
BALCO	0.92	0.04%
LANCO BUDHIL	0.37	0.02%
Tripura	0.34	0.01%
Mizoram	0.24	0.01%
Haryana	0.23	0.01%
Total	**2314.61**	**100.00%**
Volume of sale by top 5 States	**1661.17**	**71.77%**

Table-12: VOLUME OF ELECTRICITY PURCHASE THROUGH POWER EXCHANGES, DECEMBER 2012		
Name of the State/UT/Other Regional Entity	**Volume of Purchase (MUs)**	**% of Volume**
Rajasthan	562.67	24.31%
Gujarat	475.44	20.54%
Tamilnadu	267.79	11.57%
Andhra Pradesh	251.79	10.88%
Punjab	147.75	6.38%
Haryana	146.27	6.32%
Maharashtra	129.26	5.58%
Kerala	104.05	4.50%
MP	92.83	4.01%
Uttar Pradesh	41.42	1.79%
Assam	21.55	0.93%
West Bengal	13.89	0.60%
Chattisgarh	13.38	0.58%
Uttarakhand	11.62	0.50%
Arunachal Pradesh	11.13	0.48%
Nagaland	6.73	0.29%
Meghalaya	6.04	0.26%
Karnataka	4.77	0.21%
Delhi	2.25	0.10%
Jharkhand	1.61	0.07%
EMCO	1.58	0.07%
UT Chandigarh	0.53	0.02%
Himachal Pradesh	0.19	0.01%
Tripura	0.06	0.00%
Total	**2314.61**	**100.00%**
Volume of purchase by top 5 States	**1705.44**	**73.68%**

Table-13: VOLUME OF ELECTRICITY EXPORT THROUGH UI, DECEMBER 2012		
Name of the State/UT/Other Regional Entity	**Volume of Export (MUs)**	**% of Volume**
Uttar Pradesh	122.75	9.60%
Maharashtra	104.08	8.14%
Delhi	97.68	7.64%
Gujarat	97.63	7.63%
Haryana	97.63	7.63%
Rajasthan	68.00	5.32%
JINDAL POWER	58.86	4.60%
Punjab	45.79	3.58%
NHPC Stations	44.43	3.47%
Pondicherry	41.14	3.22%
Orissa	36.29	2.84%
Jharkhand	34.12	2.67%
West Bengal	31.69	2.48%
DVC	29.52	2.31%
Tamilnadu	28.27	2.21%
LANKO_AMK	28.07	2.19%
MP	27.31	2.14%
Bihar	27.26	2.13%
Andhra Pradesh	25.54	2.00%
Karnataka	23.01	1.80%
Chattisgarh	22.05	1.72%
J & K	19.78	1.55%
Assam	16.89	1.32%
STERLITE	15.20	1.19%
GOA	15.12	1.18%
MAITHON POWER LTD	13.28	1.04%
Dadra & Nagar Haveli	10.52	0.82%
Himachal Pradesh	9.01	0.70%
Daman and Diu	8.92	0.70%
NJPC	8.76	0.68%
Sikkim	7.67	0.60%
Uttarakhand	7.45	0.58%
DCPP	6.51	0.51%
SHREE CEMENT	6.22	0.49%
NEEPCO Stations	6.09	0.48%
Meghalaya	5.46	0.43%
CGPL	4.00	0.31%
UT Chandigarh	3.70	0.29%
Tripura	3.67	0.29%
BALCO	2.94	0.23%
KARCHAM WANGTOO	2.93	0.23%
Manipur	2.87	0.22%
ACBIL	2.30	0.18%
RGPPL(Dabhol)	1.87	0.15%
Mizoram	1.61	0.13%
NSPCL	1.44	0.11%
SIMHAPURI	1.21	0.09%
Arunachal Pradesh	0.56	0.04%
Kerala	0.53	0.04%
AD HYDRO	0.46	0.04%
Nagaland	0.41	0.03%
LANKO_KONDAPALLY	0.40	0.03%
Total	**1278.90**	**100.00%**
Volume of Export by top 5 States	**519.77**	**40.64%**

Table-14: VOLUME OF ELECTRICITY IMPORT THROUGH UI, DECEMBER 2012		
Name of the State/UT/Other Regional Entity	**Volume of Import (MUs)**	**% of Volume**
MP	99.54	8.58%
J & K	80.39	6.93%
Kerala	73.52	6.34%
Rajasthan	69.49	5.99%
Maharashtra	67.68	5.84%
Uttarakhand	65.80	5.67%
Chattisgarh	60.51	5.22%
Punjab	51.35	4.43%
Uttar Pradesh	45.24	3.90%
Tamilnadu	42.20	3.64%
NHPC Stations	41.18	3.55%
Haryana	38.97	3.36%
Himachal Pradesh	36.68	3.16%
Andhra Pradesh	35.86	3.09%
West Bengal	35.70	3.08%
Gujarat	30.86	2.66%
Orissa	28.31	2.44%
Karnataka	26.16	2.26%
CGPL	22.64	1.95%
DVC	20.59	1.78%
Jharkhand	15.51	1.34%
STERLITE	14.04	1.21%
Arunachal Pradesh	11.35	0.98%
RGPPL(Dabhol)	10.79	0.93%
UT Chandigarh	10.57	0.91%
Manipur	9.37	0.81%
Meghalaya	8.49	0.73%
JINDAL POWER	8.10	0.70%
GOA	7.98	0.69%
SIMHAPURI	7.59	0.65%
Delhi	7.34	0.63%
Nagaland	7.33	0.63%
NJPC	6.33	0.55%
Mizoram	5.77	0.50%
Assam	5.61	0.48%
Tripura	5.45	0.47%
Bihar	5.32	0.46%
ACBIL	4.92	0.42%
MAITHON POWER LTD	4.91	0.42%
NEEPCO Stations	4.90	0.42%
Dadra & Nagar Haveli	4.66	0.40%
SHREE CEMENT	3.75	0.32%
LANKO_AMK	2.46	0.21%
Daman and Diu	2.40	0.21%
LANKO_KONDAPALLY	2.33	0.20%
KARCHAM WANGTOO	2.26	0.20%
DCPP	1.86	0.16%
BALCO	1.70	0.15%
NSPCL	1.55	0.13%
Sikkim	1.19	0.10%
AD HYDRO	1.07	0.09%
Pondicherry	0.03	0.00%
Total	**1159.56**	**100.00%**
Volume of Export by top 5 States	**390.61**	**33.69%**

Table-15: TOTAL VOLUME OF NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE), DECEMBER 2012		
Sr.No.	**Name of the State/UT/Other Regional Entity**	**Total volume of net short-term transactions of electricity***
1	MP	908.90
2	Rajasthan	827.64
3	Andhra Pradesh	646.81
4	Maharashtra	527.44
5	Tamilnadu	433.09
6	J & K	358.77
7	Uttarakhand	348.61
8	Kerala	294.77
9	Himachal Pradesh	240.17
10	Bihar	200.88
11	Assam	56.34
12	Meghalaya	49.69
13	Dadra & Nagar Haveli	46.22
14	Jharkhand	32.99
15	Arunachal Pradesh	21.92
16	CGPL	18.63
17	Nagaland	13.64
18	RGPPL(Dabhol)	8.92
19	Manipur	6.50
20	Mizoram	5.38
21	EMCO	1.58
22	Tripura	1.50
23	Meenakshi	0.99
24	NSPCL	0.11
25	LANCO BUDHIL	-0.37
26	BALCO	-2.15
27	GOA	-2.34
28	NJPC	-2.43
29	UT Chandigarh	-2.54
30	ACBIL	-4.22
31	Daman and Diu	-6.53
32	ADANI HVDC	-8.68
33	AD HYDRO	-15.21
34	Sikkim	-19.58
35	NEEPCO Stations	-20.99
36	LANKO_KONDAPALLY	-23.09
37	MAITHON POWER LTD	-33.90
38	Pondicherry	-41.12
39	SIMHAPURI	-41.91
40	NHPC Stations	-52.45
41	DCPP	-62.48
42	LANKO_AMK	-71.89
43	KARCHAM WANGTOO	-83.00
44	Orissa	-95.11
45	SHREE CEMENT	-96.84
46	Haryana	-135.76
47	Chattisgarh	-154.79
48	Punjab	-201.72
49	West Bengal	-256.97
50	STERLITE	-258.23
51	Uttar Pradesh	-265.68
52	DVC	-303.74
53	Gujarat	-469.19
54	JINDAL POWER	-519.54
55	Karnataka	-744.17
56	Delhi	-1127.15
** 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, DECEMBER 2012			
	Details of Congestion	**IEX**	**PXIL**
A	Unconstrained Cleared Volume* (MUs)	2633.36	185.00
B	Actual Cleared Volume and hence scheduled (MUs)	2242.51	72.10
C	Volume of electricity that could not be cleared and hence not scheduled because of congestion (MUs) (A-B)	390.85	112.90
D	Volume of electricity that could not be cleared as % to Actual Cleared Volume	17.43%	156.59%
E	Percentage of the time congestion occurred during the month (Number of hours congestion occurred/Total number of hours in the month)	99.97%	98.59%
F	Congestion occurrence (%) time block wise		
	0.00 - 6.00 hours	25.01%	25.36%
	6.00 - 12.00 hours	25.01%	25.09%
	12.00 - 18.00 hours	25.01%	24.20%
	18.00 - 24.00 hours	24.97%	25.36%
** This power would have been scheduled had there been no congestion.*			
Source: IEX & PXIL			

Table-17: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY IN INDIA (MUs), DECEMBER 2012 (DAY-WISE)						
Date	Bilateral		Power Exchange (Area Clearing Volume# of day ahead market)		Unscheduled Interchange (Over Drawl+Under Generation)	Total Electricity Generation (MUs) as given at CEA Website*
	Through Traders and PXs**	Direct	IEX	PXI		
1-Dec-12	98.86	32.86	77.14	1.52	54.43	2418
2-Dec-12	101.87	36.28	69.30	2.20	50.60	2385
3-Dec-12	105.33	36.17	69.43	1.45	46.96	2405
4-Dec-12	107.15	35.45	73.77	1.88	53.04	2427
5-Dec-12	112.87	33.59	73.34	2.41	46.82	2425
6-Dec-12	109.79	36.97	75.30	1.54	47.70	2429
7-Dec-12	109.98	33.72	70.89	1.91	44.54	2502
8-Dec-12	115.05	33.75	76.59	3.03	41.66	2492
9-Dec-12	118.40	37.56	72.07	3.13	46.85	2439
10-Dec-12	117.94	34.56	71.75	2.33	43.42	2493
11-Dec-12	115.83	33.77	74.74	2.70	47.16	2510
12-Dec-12	113.85	32.98	75.95	3.35	46.79	2498
13-Dec-12	119.43	32.60	71.92	3.80	46.55	2465
14-Dec-12	116.03	34.85	77.32	4.03	51.74	2460
15-Dec-12	124.86	34.61	76.47	3.41	46.14	2466
16-Dec-12	127.53	36.77	73.86	3.79	48.29	2386
17-Dec-12	131.44	35.33	69.04	2.30	52.71	2414
18-Dec-12	125.62	35.41	62.77	2.43	47.12	2444
19-Dec-12	122.17	34.45	69.29	1.69	52.21	2440
20-Dec-12	121.09	36.77	71.87	2.74	48.44	2489
21-Dec-12	104.07	36.92	71.45	2.93	46.08	2486
22-Dec-12	90.89	36.88	74.34	1.56	45.57	2475
23-Dec-12	91.58	37.00	75.79	1.38	49.76	2450
24-Dec-12	88.34	37.22	69.36	1.88	47.46	2443
25-Dec-12	98.00	35.28	80.07	1.02	47.41	2535
26-Dec-12	102.55	39.55	72.41	2.41	49.45	2530
27-Dec-12	101.30	33.42	73.80	1.95	44.36	2552
28-Dec-12	94.65	32.59	67.64	1.59	44.94	2525
29-Dec-12	99.57	32.53	61.81	0.66	48.41	2516
30-Dec-12	97.69	32.43	65.10	2.72	46.25	2465
31-Dec-12	85.78	34.00	77.96	2.36	47.29	2535
Total	**3369.52**	**1086.27**	**2242.51**	**72.10**	**1480.16**	**76495.84**
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 (₹/kWh), DECEMBER 2012 (DAY-WISE)												
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Under Drawl/Over Drawl from the Grid (UI)					
Date							NEW Grid			SR Grid		
	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum ACP	Maximum ACP	Weighted Average Price*	Minimum Price	Maximum Price	Average Price**	Minimum Price	Maximum Price	Average Price**
1-Dec-12	0.90	9.20	3.78	1.90	4.00	2.82	0.00	3.93	1.41	0.00	5.06	3.20
2-Dec-12	0.70	9.20	3.63	2.15	3.60	2.78	0.00	5.06	1.30	0.50	7.65	3.03
3-Dec-12	0.50	9.20	3.87	2.00	3.60	2.6	0.00	7.65	2.46	0.00	5.63	3.06
4-Dec-12	1.49	9.20	3.94	1.70	4.00	2.75	0.00	8.21	2.76	0.17	5.91	3.22
5-Dec-12	0.01	9.20	4.16	1.85	4.00	2.85	0.00	7.09	2.44	0.50	5.91	3.34
6-Dec-12	1.20	9.21	4.18	1.79	10.00	3.06	0.00	5.06	2.08	0.17	5.91	4.07
7-Dec-12	1.50	9.21	4.24	1.80	10.00	2.92	0.00	5.91	2.65	0.00	7.09	3.60
8-Dec-12	0.001	9.21	4.15	1.75	4.01	2.89	0.33	7.65	2.99	0.83	7.09	4.12
9-Dec-12	1.50	6.97	3.67	1.65	3.70	2.76	0.00	9.62	2.48	0.99	5.63	3.89
10-Dec-12	1.45	7.10	4.11	1.80	3.70	2.78	0.00	9.34	2.91	0.66	5.91	3.70
11-Dec-12	0.50	6.98	3.88	1.60	4.00	3.09	0.00	4.78	1.66	1.16	7.65	4.26
12-Dec-12	1.42	6.98	3.90	1.50	4.10	3.08	0.00	5.63	2.04	0.50	5.91	3.94
13-Dec-12	0.84	6.88	3.92	1.65	10.00	3.17	0.00	7.09	2.00	0.17	5.91	3.53
14-Dec-12	0.002	6.58	3.83	1.55	4.20	3.21	0.00	5.34	1.79	0.00	5.91	3.98
15-Dec-12	0.74	6.28	3.69	1.50	4.40	3.13	0.00	5.63	2.27	0.00	7.37	3.45
16-Dec-12	0.30	5.68	3.50	1.50	4.00	3.03	0.00	5.34	1.65	0.00	5.91	2.83
17-Dec-12	0.30	5.10	3.52	1.50	4.00	2.93	0.00	5.63	1.56	0.00	7.09	2.82
18-Dec-12	0.30	5.50	3.48	1.90	3.90	3.03	0.00	8.21	2.32	0.33	7.93	3.31
19-Dec-12	0.74	5.20	3.18	1.49	3.69	2.39	0.00	9.62	3.15	0.50	5.91	3.61
20-Dec-12	1.20	5.29	3.32	1.45	3.50	2.54	0.00	9.06	2.91	0.00	5.91	3.57
21-Dec-12	1.20	5.50	3.52	1.50	3.50	2.61	0.00	9.34	3.03	0.17	5.63	3.49
22-Dec-12	1.38	5.62	3.67	2.00	7.00	2.73	0.00	7.09	2.79	0.00	5.34	3.21
23-Dec-12	1.20	5.79	3.72	1.80	4.10	2.59	0.00	7.93	2.62	0.00	5.91	3.16
24-Dec-12	0.75	5.80	3.80	2.00	6.50	3.25	0.00	8.49	2.17	0.00	5.34	3.12
25-Dec-12	1.50	5.79	4.11	2.00	7.00	3.69	0.00	10.80	3.80	0.00	5.34	2.82
26-Dec-12	1.00	5.91	4.22	1.56	12.00	3.65	0.00	8.21	2.81	0.00	5.63	2.71
27-Dec-12	1.80	5.91	4.37	1.56	12.00	4.08	0.00	7.93	2.46	0.00	5.34	2.74
28-Dec-12	0.98	5.92	4.35	2.00	6.00	3.42	0.00	7.37	2.01	0.00	5.63	3.18
29-Dec-12	0.0004	6.00	4.39	2.00	5.61	2.91	0.00	4.78	1.20	0.00	5.34	2.54
30-Dec-12	1.00	8.00	4.37	2.00	6.25	4.26	0.00	7.09	1.70	0.00	5.34	2.42
31-Dec-12	1.35	5.99	4.28	2.00	13.00	4.22	0.00	7.65	2.84	0.00	7.65	3.22
	0.0004#	**9.21#**	**3.90**	**1.45#**	**13.00#**	**3.08**	**0.00#**	**10.80#**	**2.33**	**0.00#**	**7.93#**	**3.33**

Source: Data on price of PX transactions from IEX and PXIL and data on UI 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 UI of 96 time blocks of 15 minutes each in a day. UI price includes Ceiling UI Rate +40% additional UI charge.

Maximum/Minimum in the month

Table-19: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY*-WISE) (MUs), DECEMBER 2012										
Name of the State/UT/Other Regional Entity	Through Bilateral			Through Power Exchange			Through UI with Regional Grid			Total Net***
	Sale	Pur-chase	Net**	Sale	Pur-chase	Net**	Export (Under Drawl)	Import (Over Drawl)	Net**	
Punjab	366.34	13.04	-353.29	1.73	147.75	146.02	45.79	51.35	5.55	-201.72
Haryana	270.07	46.92	-223.16	0.23	146.27	146.05	97.63	38.97	-58.65	-135.76
Rajasthan	52.14	337.06	284.92	21.43	562.67	541.23	68.00	69.49	1.49	827.64
Delhi	651.93	21.78	-630.15	408.91	2.25	-406.66	97.68	7.34	-90.34	-1127.15
Uttar Pradesh	266.96	55.17	-211.79	17.79	41.42	23.63	122.75	45.24	-77.52	-265.68
Uttarakhand	0.00	291.34	291.34	12.70	11.62	-1.08	7.45	65.80	58.36	348.61
Himachal Pradesh	62.51	299.79	237.28	24.96	0.19	-24.77	9.01	36.68	27.67	240.17
J & K	15.37	318.90	303.53	5.36	0.00	-5.36	19.78	80.39	60.61	358.77
UT Chandigarh	7.44	0.00	-7.44	2.50	0.53	-1.97	3.70	10.57	6.87	-2.54
MP	5.38	786.07	780.70	36.85	92.83	55.98	27.31	99.54	72.22	908.90
Maharashtra	64.83	568.51	503.68	69.10	129.26	60.16	104.08	67.68	-36.40	527.44
Gujarat	597.32	53.55	-543.76	334.09	475.44	141.35	97.63	30.86	-66.78	-469.19
Chattisgarh	171.83	0.00	-171.83	34.79	13.38	-21.41	22.05	60.51	38.46	-154.79
Daman and Diu	0.00	0.00	0.00	0.00	0.00	0.00	8.92	2.40	-6.53	-6.53
Dadra & Nagar Haveli	0.00	52.08	52.08	0.00	0.00	0.00	10.52	4.66	-5.86	46.22
Andhra Pradesh	4.02	479.04	475.02	90.33	251.79	161.47	25.54	35.86	10.32	646.81
Karnataka	244.10	1.49	-242.61	509.49	4.77	-504.72	23.01	26.16	3.15	-744.17
Kerala	0.00	117.73	117.73	0.00	104.05	104.05	0.53	73.52	72.99	294.77
Tamilnadu	0.00	151.37	151.37	0.00	267.79	267.79	28.27	42.20	13.93	433.09
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	41.14	0.03	-41.12	-41.12
West Bengal	331.88	160.83	-171.05	103.82	13.89	-89.93	31.69	35.70	4.01	-256.97
Orissa	67.59	0.00	-67.59	19.53	0.00	-19.53	36.29	28.31	-7.99	-95.11
Bihar	0.00	222.82	222.82	0.00	0.00	0.00	27.26	5.32	-21.94	200.88
Jharkhand	26.77	76.76	49.99	0.00	1.61	1.61	34.12	15.51	-18.61	32.99
Sikkim	0.00	0.00	0.00	13.10	0.00	-13.10	7.67	1.19	-6.48	-19.58
DVC	342.24	56.88	-285.37	9.45	0.00	-9.45	29.52	20.59	-8.93	-303.74
Arunachal Pradesh	0.00	0.00	0.00	0.00	11.13	11.13	0.56	11.35	10.79	21.92
Assam	0.00	46.07	46.07	0.00	21.55	21.55	16.89	5.61	-11.28	56.34
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	2.87	9.37	6.50	6.50
Meghalaya	0.00	41.75	41.75	1.13	6.04	4.91	5.46	8.49	3.03	49.69
Mizoram	0.00	1.47	1.47	0.24	0.00	-0.24	1.61	5.77	4.15	5.38
Nagaland	0.00	0.00	0.00	0.00	6.73	6.73	0.41	7.33	6.92	13.64
Tripura	0.00	0.00	0.00	0.34	0.06	-0.28	3.67	5.45	1.78	1.50
GOA	0.00	4.80	4.80	0.00	0.00	0.00	15.12	7.98	-7.14	-2.34
NHPC Stations	0.00	0.00	0.00	49.22	0.00	-49.22	44.43	41.18	-3.23	-52.45
NJPC	0.00	0.00	0.00	0.00	0.00	0.00	8.76	6.33	-2.43	-2.43
AD HYDRO	15.82	0.00	-15.82	0.00	0.00	0.00	0.46	1.07	0.61	-15.21
KARCHAM WANGTOO	70.33	0.00	-70.33	12.00	0.00	-12.00	2.93	2.26	-0.66	-83.00
SHREE CEMENT	52.14	0.00	-52.14	42.23	0.00	-42.23	6.22	3.75	-2.46	-96.84
LANCO BUDHIL	0.00	0.00	0.00	0.37	0.00	-0.37	0.00	0.00	0.00	-0.37
ADANI HVDC	0.00	0.00	0.00	8.68	0.00	-8.68	0.00	0.00	0.00	-8.68
JINDAL POWER	163.93	0.00	-163.93	304.86	0.00	-304.86	58.86	8.10	-50.76	-519.54
LANKO_AMK	33.62	0.00	-34.58	11.71	0.00	-11.71	28.07	2.46	-25.61	-71.89
NSPCL	0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.55	0.11	0.11
ACBIL	0.00	0.00	0.00	6.84	0.00	-6.84	2.30	4.92	2.61	-4.22
BALCO	0.00	0.00	0.00	0.92	0.00	-0.91	2.94	1.70	-1.24	-2.15
RGPPL(Dabhol)	0.00	0.00	0.00	0.00	0.00	0.00	1.87	10.79	8.92	8.92
CGPL	0.00	0.00	0.00	0.00	0.00	0.00	4.00	22.64	18.63	18.63
DCPP	0.00	0.00	0.00	57.83	0.00	-57.83	6.51	1.86	-4.65	-62.48
EMCO	0.00	0.00	0.00	0.00	1.58	1.58	0.00	0.00	0.00	1.58
LANKO_KONDAPALLY	25.02	0.00	-25.02	0.00	0.00	0.00	0.40	2.33	1.93	-23.09
SIMHAPURI	40.39	0.00	-40.39	7.90	0.00	-7.90	1.21	7.59	6.38	-41.91
Meenakshi	0.00	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.99
STERLITE	194.07	0.00	-194.07	63.00	0.00	-63.00	15.20	14.04	-1.16	-258.23
MAITHON POWER LTD	14.14	0.00	-14.14	11.38	0.00	-11.38	13.28	4.91	-8.38	-33.90
NEEPCO Stations	0.00	0.00	0.00	19.81	0.00	-19.81	6.09	4.90	-1.18	-20.99
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 UI										

Table-20 : VOLUME AND PRICE OF RENEWABLE ENERGY CERTIFICATES (RECs) TRANSACTED THROUGH POWER EXCHANGES, DECEMBER 2012					
Sr.No.	**Details of REC Transactions**	**IEX**		**PXIL**	
		Solar	**Non-Solar**	**Solar**	**Non Solar**
A	Volume of Buy Bid	1608	173644	583	100000
B	Volume of Sell Bid	977	855784	484	597842
C	Ratio of Buy Bid to Sell Bid Volume	1.65	0.20	1.20	0.17
D	Market Clearing Volume (MWh)	931	173644	277	100000
E	Market Clearing Price (₹/MWh)	12620	1500	12100	1500

Source: IEX and PXIL

Note 1: 1 REC = 1 MWh

Note 2:

Forbearance and Floor Price w.e.f 1st April 2012		
Type of REC	*Floor Price (₹/MWh)*	*Forbearance Price (₹/MWh)*
Solar	*9300.00*	*13400.00*
Non-Solar	*1500.00*	*3300.00*