

**MONTHLY REPORT ON
SHORT-TERM TRANSACTIONS OF ELECTRICITY
(September 2009)**

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. In this context, “short-term transactions of electricity” means the contracts of less than one year period for electricity transacted 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; and (iii) to disclose/disseminate all relevant market information. The analysis of the report for the month of September 2009 is as under:

The month of September 2009 witnessed two significant developments:

- (i) The Commission, by its order dated 11.9.2009 in Petition No 178/2009(Suo-motu), imposed a ceiling on tariff for sale and purchase of electricity through bi-lateral agreements and through power exchanges for a period of 45 days starting from 11.9.2009. The ceiling was fixed at Rs. 8/kWh. This was in response to the maximum price of electricity transacted through power exchanges reaching a level of Rs.17/kwh and Rs.15/kwh respectively in IEX and PXIL in August 2009,
- (ii) Introduction of Term Ahead Contracts (weekly contracts) and Day-Ahead Contingency Contracts in both IEX and PXIL, as well as, introduction of Intra-Day and Daily Contracts in IEX. These contracts were introduced at both the exchanges from 15 of September 2009.

I: Volume of Short-term Transactions of Electricity

During the Month of September 2009, total electricity generation excluding generation from renewable and captive power plants in India was 63188.40 MUs (Table-1).

Of the total electricity generation, 5595.28 MUs (8.85%) were transacted through short-term, comprising of 2857.57 MUs (4.52%) through Bilateral (through traders and Power Exchanges and direct between distribution companies), followed by 2210.49 MUs (3.50%)

through UI and 527.22 MUs (0.83%) through Power Exchanges (IEX and PXIL) (Table-1 & Chart-2).

Of the total short-term transactions, Bilateral constitute 51.07% (45.01% through traders and Power Exchanges and 6.06% direct between distribution companies) followed by 39.51% through UI and 9.42% through Power Exchanges (Table-1& Chart-1). Daily volume of short-term transactions is shown in Chart-3&4.

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 & Chart-5. The trading licensees are undertaking electricity transactions through bilateral and through power exchanges. Here the volume of electricity transacted by the licensees represents only bilateral transactions. There are 38 trading licensees as on 30.9.2009, of which only 11 have engaged in trading during September 2009. Top 5 trading licenses had a share of 88.41% in the total volume traded by all the licensees.

Herfindahl-Hirschman Index (HHI) has been used for measuring the competition among the trading licensees. Increases in the HHI generally indicate a decrease in competition and an increase of market power, whereas decreases indicate the opposite. A HHI above 0.18 indicates high concentration. The HHI computed for volume of electricity traded by trading licensees was 0.3161 shows high concentration/market power (Table-2).

The volume of electricity transacted through IEX and PXIL was 472.48 MUs and 54.75 MUs respectively. The volume of total Buy bids and Sale bids was 881.88 MUs and 936.28 MUs respectively in IEX and 144.84 MUs and 241.71 MUs respectively in PXIL. The gap between the volume of buy bids and sale bids placed through power exchange shows that there was less demand (0.94 times in IEX and 0.60 times in PXIL) when compared with the supply offered through IEX and PXIL.

The volume of electricity transacted through IEX in the newly introduced contracts was 8.13 MUs. Of which, the volume in the 'intra-day' contracts was 0.37 MU, 'day ahead contingency contracts' was 5.60 MU and 'weekly contracts' was 2.16 MU (Table-5A). The volume of electricity transacted through PXIL in the newly introduced contracts was 1.42 MU. Of which, the volume in the 'day ahead contingency' contracts was 1.35 MU and 'weekly contracts' was 0.07 MU (Table-5B).

II: Price of Short-term Transactions of Electricity

(1) *Price of electricity transacted through Traders:* Weighted average sale price has been computed for the electricity transacted through traders and it was Rs.4.73. The weighted average sale price also computed for the transactions during Round the clock (RTC), Peak and Off-Peak periods separately and the sale price was Rs.4.60, Rs.6.02 and Rs.5.48 respectively. Minimum and Maximum sale price was Rs.1.84 and Rs.9.13 respectively (Table-3 & 4).

(2) *Price of electricity transacted Through Power Exchange:* The Minimum, Maximum and Weighted Average Price has been computed for the volume transacted through IEX and PXIL separately. The Minimum, Maximum and Weighted Average Price was Rs.0.66, Rs.8.00 and Rs.4.00 respectively in IEX and Rs.1.09, Rs.8.00 and Rs.4.32 respectively in PXIL (Table-5).

The weighted average price of electricity transacted through IEX in the newly introduced contracts was Rs.7.76/kWh in the 'intra-day contracts', Rs.3.54/kWh in the 'day ahead contingency contracts' and Rs.4.00/kWh in the 'weekly contracts' (Table-5A). The weighted average price of electricity transacted through PXIL in the newly introduced contracts was Rs.2.75/kWh in the 'day ahead contingency contracts' and Rs.2.43/kWh in the 'weekly contracts' (Table-5B).

(3) *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 Rs.5.02 in the NEW Grid and Rs.4.20 in the SR Grid. The frequency profile in the month of September 2009 in Southern Region was better than in the previous months of the year 2009-10. Minimum and Maximum price of UI was Rs.0.00 and Rs.10.29 respectively in the New Grid and Rs.0.00 and Rs.10.29 respectively in the SR Grid (Table-6).

The weighted average price/average price of electricity transacted through trading licensees, power exchanges and UI and its comparison is shown in Chart-6&7.

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

Of the total bilateral transactions, top 5 regional entities selling 57.82% of the volume are Himachal Pradesh, Karnataka, Jindal Power Ltd, Chattisgarh and Madhya Pradesh and top 5 regional entities purchasing 86.55% of the volume are Haryana, Punjab, Rajasthan, Delhi and Maharashtra (Table-7 & 8).

Of the total Power Exchange transactions, top 5 regional entities selling 69.25% of the volume are Karnataka, Chattisgarh, Sikkim, Haryana and Gujarat and top 5 regional entities

purchasing 91.31% of the volume are Rajasthan, Delhi, Andhra Pradesh, Dadra & Nagar Haveli and Maharashtra (Table-9 & 10)

Of the total UI transactions, top 5 regional entities exporting 42.26% of the volume are Madhya Pradesh, Delhi, Chattisgarh, LANCO Amarkantak (P) Ltd and Maharashtra and top 5 regional entities importing 57.94% of the volume are Uttar Pradesh, Gujarat, Tamilnadu, West Bengal and Andhra Pradesh (Table-11 & 12).

State-wise total net short-term transactions of electricity i.e. volume of net transactions through bilateral, power exchange and UI was shown in Table-13. Top 5 regional entities those selling electricity are Karnataka, Himachal Pradesh, Madhya Pradesh, Chattisgarh and Jindal Power Ltd and top 5 regional entities those purchasing electricity are Haryana, Rajasthan, Uttar Pradesh, Punjab and Delhi.

IV: Inferences:

- The percentage of short-term transactions of electricity to total electricity generation was 8.85%.
- Of the total short-term transactions of electricity, 51.07% transacted through bilateral (through traders and power exchanges and directly by distribution companies) followed by 39.51% through UI and 9.42% through Power Exchanges.
- Top 5 trading licenses are having share of 88.41% in the total volume traded by all the trading licensees.
- The price of electricity transacted through Power Exchanges was comparable with the price of electricity transacted through Trading Licensees and the price of electricity transacted through UI. The price range was between Rs.4.00/KWh and Rs.5.02/KWh.
- As a result of the CERC order dated 11.9.2009 on price cap, the maximum price during the month was Rs.8/kwh in both the exchanges.
- The HHI computed for volume of electricity traded by trading licensees was 0.32 and it shows high concentration/market power.
- The gap between the volume of buy bids and sale bids placed through power exchanges shows that there was less demand (0.94 times in IEX and 0.60 times in PXIL) when compared with the supply offered through the exchanges.
- Top 5 regional entities those selling electricity are Karnataka, Himachal Pradesh, Madhya Pradesh, Chattisgarh and Jindal Power Ltd and top 5 regional entities those purchasing electricity are Haryana, Rajasthan, Uttar Pradesh, Punjab and Delhi.

VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA) (MUs)						Total Electricity Generation (MUs) as given at CEA Website*
Month: Sep 2009						
Date	Bilateral		Power Exchange (Market Clearing Volume of day ahead market)		Unscheduled Interchange (Over Drawl+Under Generation)	
	Through Traders and PXs	Direct	IEX	PXI		
1	74.49	11.36	15.82	3.10	65.35	2051.71
2	77.86	12.15	13.84	2.60	64.60	2039.67
3	75.97	9.82	19.04	2.45	80.17	2017.19
4	76.27	11.89	18.46	3.39	76.71	1981.88
5	75.89	11.39	16.08	3.14	81.87	1998.12
6	76.86	9.40	12.80	1.24	84.33	1981.86
7	76.49	11.26	12.85	1.00	78.34	2060.36
8	78.44	8.91	15.37	1.68	76.44	2101.95
9	82.58	8.66	14.32	1.73	83.42	2100.86
10	78.53	11.72	13.91	2.12	96.97	2093.73
11	77.56	11.98	13.89	2.88	92.36	2104.04
12	86.02	12.52	20.40	1.39	89.40	2100.34
13	81.71	10.19	16.89	1.68	95.34	2074.46
14	84.56	12.30	18.85	2.30	79.45	2121.29
15	83.51	11.30	19.19	2.19	73.80	2141.90
16	92.10	10.75	13.97	1.80	67.92	2180.99
17	88.10	10.75	18.67	1.39	71.92	2196.48
18	88.63	11.32	22.28	0.99	57.05	2193.14
19	81.43	11.29	20.76	1.55	68.38	2233.87
20	83.24	9.55	16.18	1.50	70.06	2227.21
21	89.56	9.62	12.86	1.06	64.91	2223.63
22	89.59	10.09	10.73	0.30	62.67	2198.83
23	87.81	12.22	13.40	0.23	62.39	2192.62
24	91.04	12.05	14.01	1.01	57.39	2065.12
25	91.08	12.32	13.41	1.09	62.90	2060.26
26	90.76	12.07	13.76	2.52	61.14	2061.15
27	87.70	9.98	13.95	2.59	69.42	2063.68
28	88.32	11.72	14.39	2.26	82.50	2119.31
29	96.16	13.21	15.60	1.44	66.97	2090.60
30	86.44	17.09	16.80	2.15	66.31	2112.15
Total	2518.69	338.88	472.48	54.75	2210.49	63188.40

Source: NLDC

* Gross Electricity Generation excluding electricity generation from renewables and captive power plants.

PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (Rs/KWh)												
Month: Sep 2009												
Market Segment	Day ahead market of IEX			Day ahead market of PXIL			Under Drawl/Over Drawl from the Grid (UI)					
Date	Minimum MCP	Maximum MCP	Weighted Average*	Minimum MCP	Maximum MCP	Weighted Average*	NEW Grid			SR Grid		
							Minimum Price	Maximum Price	Average Price**	Minimum Price	Maximum Price	Average Price**
1-Sep-09	2.00	4.50	3.50	2.50	4.87	3.57	1.92	10.29	4.48	1.80	5.82	4.02
2-Sep-09	2.89	6.00	3.98	2.55	5.50	3.92	1.56	10.29	4.20	0.60	5.14	3.46
3-Sep-09	2.50	4.50	3.42	3.00	5.00	4.13	0.36	5.14	2.54	0.00	4.44	2.81
4-Sep-09	2.50	4.50	3.39	3.00	5.50	4.36	0.24	7.01	2.86	0.72	5.31	3.02
5-Sep-09	1.50	4.50	2.77	2.44	4.50	4.21	0.24	4.80	2.14	0.00	3.72	1.58
6-Sep-09	0.66	3.49	2.29	1.09	4.50	3.16	0.00	6.16	2.11	0.00	4.20	1.50
7-Sep-09	1.50	3.60	2.28	2.30	3.60	3.10	1.56	10.29	4.08	1.32	5.31	3.00
8-Sep-09	1.50	3.60	2.57	1.25	3.57	2.80	2.88	10.29	6.41	2.16	7.18	4.26
9-Sep-09	1.75	3.60	2.67	1.18	4.00	2.96	0.96	6.84	2.86	2.04	6.84	4.32
10-Sep-09	2.00	3.49	2.73	1.49	3.60	3.12	0.00	10.29	2.94	2.76	5.48	4.19
11-Sep-09	2.00	3.50	2.60	1.62	3.45	2.76	0.24	5.31	2.15	2.04	10.29	4.54
12-Sep-09	1.00	4.50	2.38	1.49	4.35	2.91	0.72	7.01	2.95	2.04	10.29	5.02
13-Sep-09	1.00	2.49	1.63	1.49	3.50	2.31	0.60	10.29	3.47	1.80	6.67	4.83
14-Sep-09	1.50	4.00	2.36	2.00	4.00	2.59	0.00	10.29	3.35	1.68	6.50	4.94
15-Sep-09	2.00	5.00	2.79	1.37	5.00	2.81	0.00	6.84	3.59	2.88	10.29	5.20
16-Sep-09	2.50	5.25	3.26	1.62	4.60	2.96	1.08	10.29	5.02	2.88	10.29	5.62
17-Sep-09	2.50	5.75	3.49	2.75	4.97	3.22	0.96	10.29	3.93	3.00	10.29	5.30
18-Sep-09	3.00	6.00	3.64	2.80	4.97	3.75	1.80	10.29	5.95	2.16	10.29	5.53
19-Sep-09	2.00	6.00	3.62	2.99	5.12	3.79	0.30	10.29	7.05	0.00	6.84	4.55
20-Sep-09	2.60	6.00	3.75	1.99	5.75	3.79	1.68	10.29	5.22	0.96	6.84	4.64
21-Sep-09	2.70	6.25	4.59	3.00	5.32	3.77	3.72	10.29	6.62	2.64	10.29	6.06
22-Sep-09	3.50	7.00	5.46	3.50	5.25	3.82	2.64	10.29	8.20	2.52	10.29	6.35
23-Sep-09	5.00	7.80	6.67	4.25	7.50	5.22	3.00	10.29	7.96	3.24	10.29	5.39
24-Sep-09	4.50	8.00	6.73	5.00	7.75	7.60	3.24	10.29	8.31	3.24	10.29	5.15
25-Sep-09	2.60	8.00	7.00	5.30	8.00	6.86	3.96	10.29	8.57	1.92	10.29	4.98
26-Sep-09	3.59	8.00	7.26	3.00	8.00	7.23	3.60	10.29	8.11	1.32	10.29	4.88
27-Sep-09	3.50	8.00	6.46	3.24	8.00	7.49	0.60	10.29	6.85	0.24	5.65	2.69
28-Sep-09	3.59	8.00	6.10	3.00	8.00	6.70	0.72	10.29	2.99	0.00	4.97	2.60
29-Sep-09	5.20	8.00	7.07	4.00	8.00	7.54	1.92	10.29	7.18	0.00	6.67	2.75
30-Sep-09	4.00	8.00	7.12	4.75	8.00	7.53	4.08	10.29	8.42	0.00	6.33	2.82
	0.66#	8.00#	4.00	1.09#	8.00#	4.32	0.00#	10.29#	5.02	0.00#	10.29#	4.20

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

* Weighted average price computed based on Market Clearing Volume (MCV) and Market Clearing Price (MCP) for each hour of the day

** 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

VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (STATE-WISE) (MUs)										
Month: Sep 2009										
Name of the State/UT/Other Regional Entity	Through Bilateral			Through Power Exchange			Through UI with Regional Grid			Total Net**
	Sale	Purchase	Net*	Sale	Purchase	Net*	Export (Under Drawl)	Import (Over Drawl)	Net*	
Punjab	35.42	536.47	501.05	0.19	6.14	5.96	62.00	102.23	40.24	547.24
Haryana	7.84	916.29	908.45	55.94	9.76	-46.17	62.55	86.06	23.51	885.78
Rajasthan	92.90	438.22	345.32	4.83	320.72	315.89	72.36	61.55	-10.81	650.41
Delhi	16.29	373.03	356.74	1.97	66.88	64.91	159.12	20.54	-138.58	283.07
Uttar Pradesh	29.43	40.31	10.88	0.00	0.00	0.00	13.14	613.67	600.54	611.42
Uttarakhand	37.90	0.00	-37.90	0.00	0.00	0.00	26.27	50.22	23.95	-13.95
Himachal Pradesh	452.73	0.00	-452.73	36.55	0.00	-36.55	25.96	32.11	6.15	-483.13
J & K	167.78	21.99	-145.79	0.00	0.00	0.00	18.55	68.90	50.36	-95.43
UT Chandigarh	0.00	5.25	5.25	0.00	0.00	0.00	5.04	14.97	9.93	15.19
MP	251.54	10.80	-240.74	26.30	0.00	-26.30	235.27	19.89	-215.38	-482.42
Maharashtra	10.85	328.98	318.13	2.96	22.61	19.65	126.17	43.17	-83.00	254.78
Gujarat	122.00	0.00	-122.00	46.21	2.85	-43.36	24.47	225.24	200.77	35.42
Chattisgarh	275.40	0.00	-275.40	97.39	0.00	-97.39	127.37	30.51	-96.85	-469.64
Daman and Diu	0.00	72.00	72.00	0.00	3.44	3.44	3.94	16.51	12.57	88.02
Dadra & Nagar Haveli	0.00	72.00	72.00	0.00	32.81	32.81	8.01	11.83	3.82	108.63
Andhra Pradesh	85.00	1.96	-83.04	13.59	38.37	24.78	70.37	108.57	38.20	-20.05
Karnataka	366.97	0.00	-366.97	110.69	0.00	-110.69	67.61	53.92	-13.69	-491.35
Kerala	80.95	13.83	-67.12	0.00	19.87	19.87	3.75	60.62	56.87	9.62
Tamilnadu	82.48	105.35	22.87	0.00	0.00	0.00	50.02	160.18	110.15	133.02
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	14.01	1.06	-12.95	-12.95
West Bengal	138.00	26.85	-111.15	28.14	0.95	-27.19	39.40	113.40	74.00	-64.34
Orissa	60.36	26.36	-33.99	0.00	2.58	2.58	118.22	12.74	-105.48	-136.90
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	46.12	30.63	-15.49	-15.49
Jharkhand	0.00	0.00	0.00	0.00	0.00	0.00	4.09	56.40	52.32	52.32
Sikkim	20.49	0.00	-20.49	56.77	0.00	-56.77	3.44	15.73	12.29	-64.97
DVC	31.57	0.00	-31.57	0.00	0.00	0.00	78.17	33.84	-44.33	-75.90
Arunachal Pradesh	3.69	0.00	-3.69	1.54	0.00	-1.54	5.20	3.15	-2.05	-7.27
Assam	33.48	0.87	-32.61	0.00	0.22	0.22	10.52	26.68	16.16	-16.23
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	12.02	1.10	-10.92	-10.92
Meghalaya	6.75	0.00	-6.75	1.61	0.00	-1.61	10.65	2.30	-8.35	-16.70
Mizoram	0.54	0.00	-0.54	0.28	0.00	-0.28	5.93	0.45	-5.49	-6.31
Nagaland	16.25	0.00	-16.25	0.00	0.00	0.00	1.11	7.27	6.16	-10.09
Tripura	8.35	2.22	-6.13	2.64	0.00	-2.64	10.94	0.73	-10.21	-18.98
GOA	0.00	3.30	3.30	7.26	0.00	-7.26	13.36	9.11	-4.25	-8.20
JINDAL POWER	313.82	0.00	-313.82	35.10	0.00	-35.10	73.52	1.09	-72.43	-421.34
LANCO_AMK	0.00	0.00	0.00	0.00	0.00	0.00	126.19	0.00	-126.19	-126.19
MUNDRA APL	123.00	0.00	-123.00	0.00	0.00	0.00	97.07	11.24	-85.83	-208.83

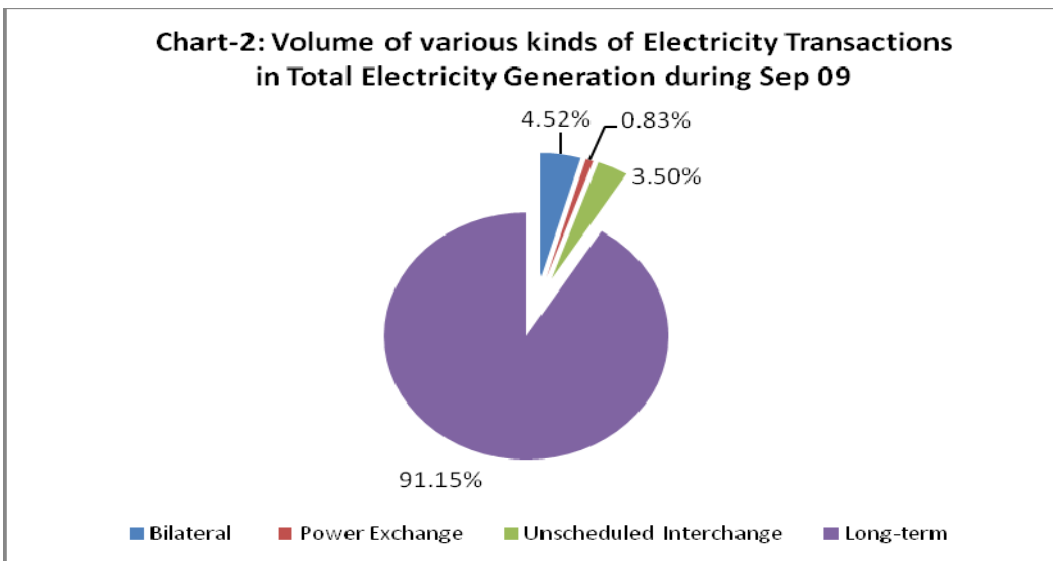
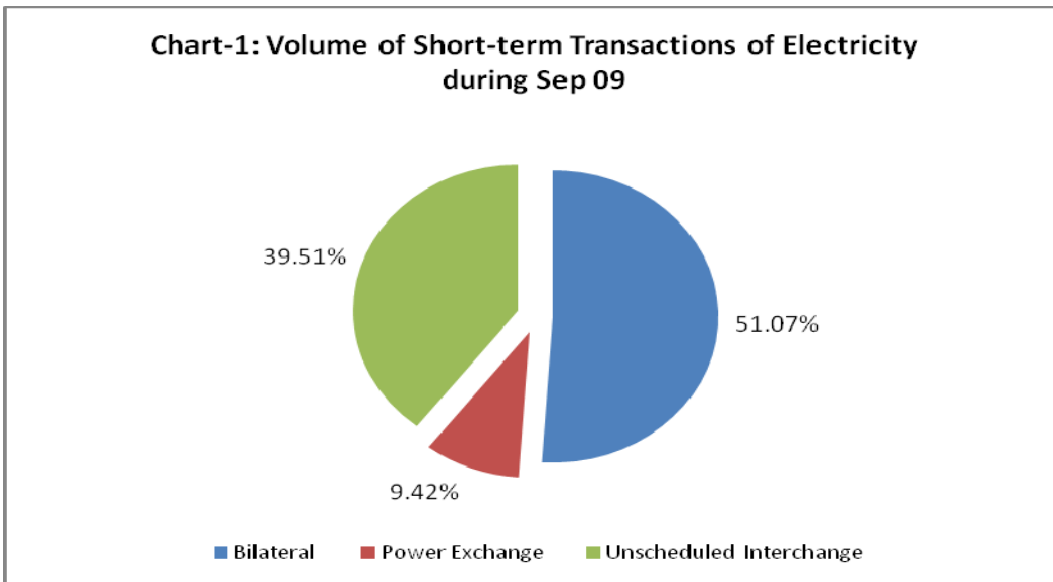
Source: NLDC

* (-) indicates sale and (+) indicates purchase

** Total net includes net of transactions through bilateral, power exchange and UI

Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA) DURING SEP 2009				
Sr.No	Short-term transactions	Volume (MUs)	% to Volume of short-term transactions	% to Total Generation
1	Bilateral	2857.57	51.07%	4.52%
	(i) Through Traders and PXs	2518.69	45.01%	3.99%
	(ii) Direct	338.88	6.06%	0.54%
2	Through Power Exchange	527.22	9.42%	0.83%
3	Through UI	2210.49	39.51%	3.50%
	Total	5595.28	100.00%	8.85%
	Total Generation	63188.40		

Source: NLDC



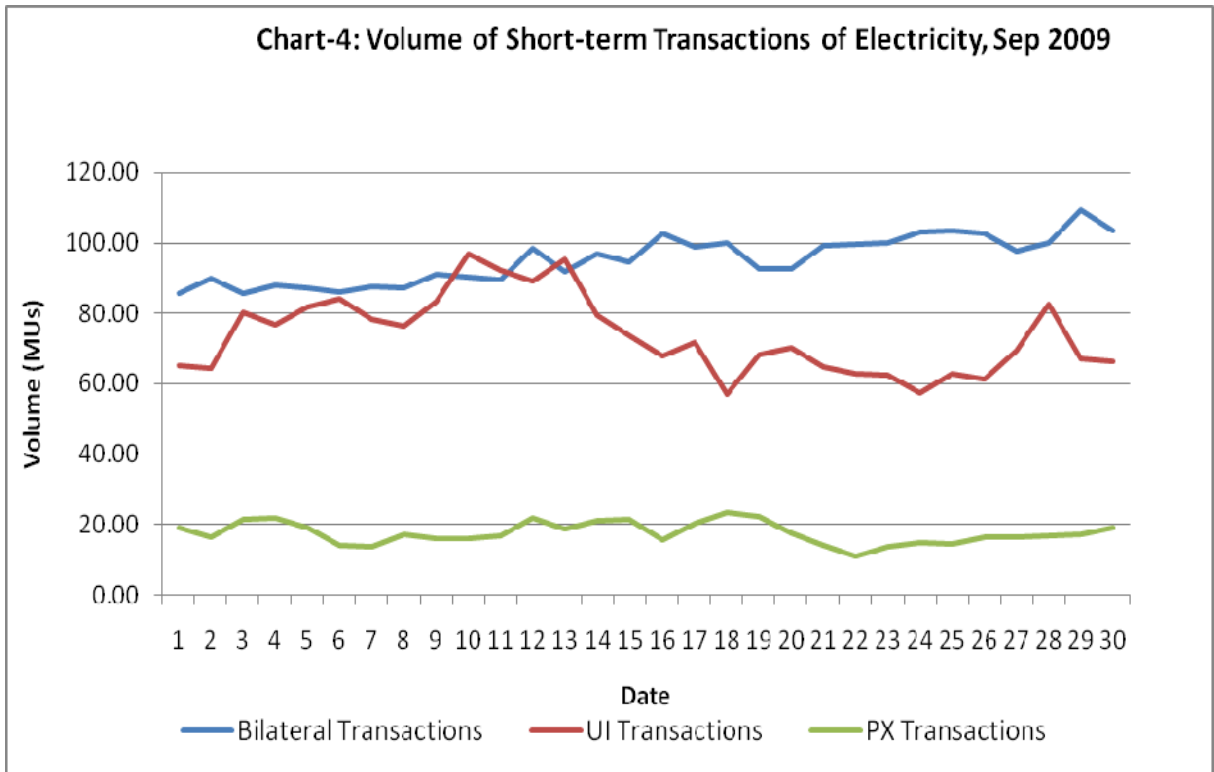
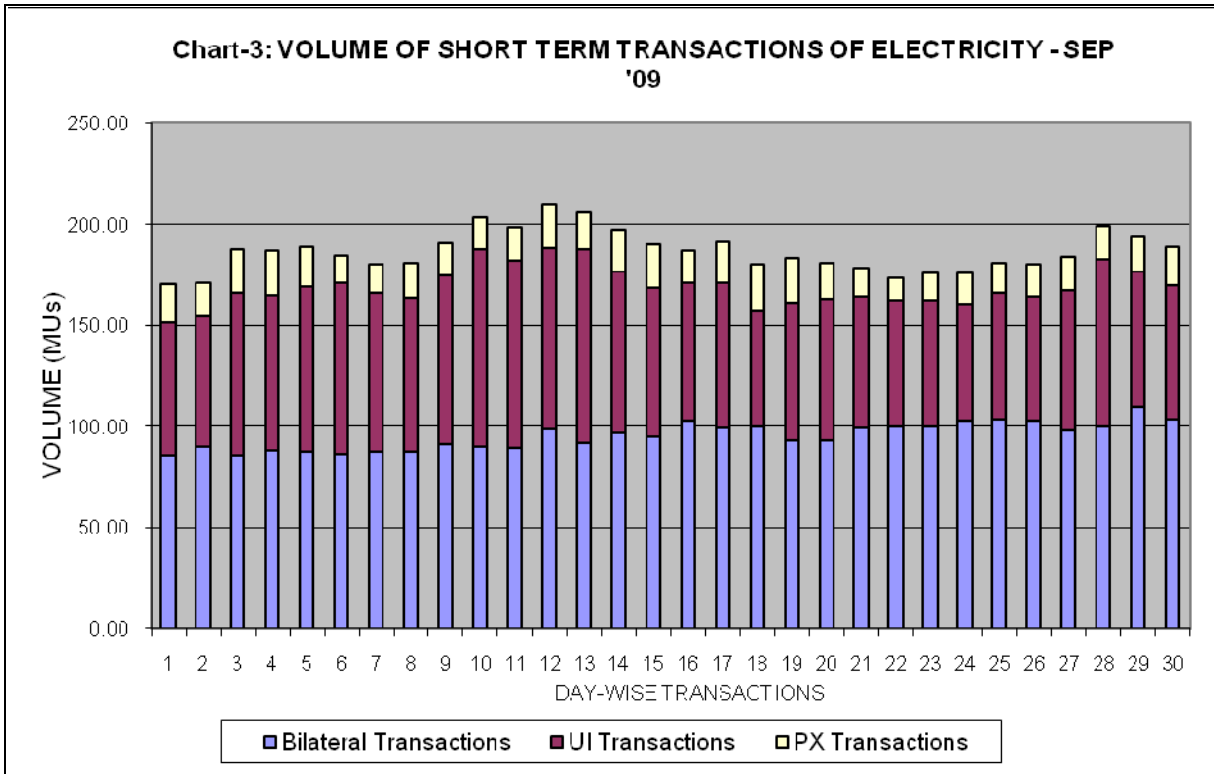


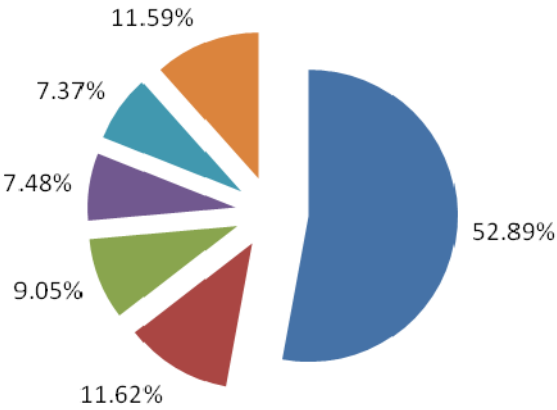
Table-2: Percentage Share of Electricity Traded by Trading Licensees during Sep 2009

Sr.No	Name of the Trading Licensee	% Share in total Volume traded by Licensees	HHI
1	PTC India Ltd	52.89%	0.2798
2	NTPC Vidyut Vyapar Nigam Ltd	11.62%	0.0135
3	Lanco Electric Utility Ltd	9.05%	0.0082
4	Tata Power Trading Company (P) Ltd	7.48%	0.0056
5	JSW Power Trading Company Ltd	7.37%	0.0054
6	Adani Enterprises Ltd	4.99%	0.0025
7	GMR Energy Trading Ltd	2.29%	0.0005
8	Reliance Energy Trading (P) Ltd	1.78%	0.0003
9	Mittal Processors (P) Ltd	1.43%	0.0002
10	RPG Power Trading Company Ltd	0.75%	0.0001
11	Instinct Advertisement & Marketing Ltd	0.34%	0.0000
	Total	100.00%	0.3161
	Top 5 trading licensees	88.41%	

Note: Volume of electricity traded by the licensees is exclusively bilateral transactions and not the transactions undertaken through power exchanges.

Source: Information submitted by trading licensees

Chart-5: Percentage Share of Electricity Traded by Trading Licensees during Sep 09



- PTC India Ltd
- NTPC Vidyut Vyapar Nigam Ltd
- Lanco Electric Utility Ltd
- Tata Power Trading Company (P) Ltd
- JSW Power Trading Company Ltd
- Others

Table-3: PRICE OF POWER TRANSACTED THROUGH TRADERS		
Sr.No	Period of Trade	Weighted Average Sale Price (Rs)
1	RTC	4.60
2	PEAK	6.02
3	OFF PEAK	5.48
	Total	4.73

Source: Information submitted by trading licensees

Table-4: PRICE OF POWER TRANSACTED THROUGH TRADERS		
Sr.No		Sale Price (Rs/KWh)
1	Minimum	1.84
2	Maximum	9.13
3	Weighted Average	4.73

Source: Information submitted by trading licensees

Table-5: PRICE OF POWER TRANSACTED THROUGH POWER EXCHANGE (Rs/KWh)			
Sr.No	MCP	IEX	PXIL
1	Minimum	0.66	1.09
2	Maximum	8.00	8.00
3	Weighted Average	4.00	4.32

Source: Information submitted by IEX and PXIL

Table-5A: Term ahead market of IEX			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs) [#]	Weighted Average Price (Rs/kwh)
1	Intra-Day Contracts	0.37	7.76
2	Day-Ahead Contingency Contracts	5.60	3.54
3	Weekly Contracts	2.16	4.00
	Total	8.13	

All the Figures are at Seller's State Periphery

Table-5B: Term ahead market of PXIL			
Sr.No	Term ahead contracts	Actual Scheduled Volume (MUs)	Weighted Average Price (Rs/kwh)
1	Intra-Day Contracts		
2	Day-Ahead Contingency Contracts	1.35	2.75
3	Weekly Contracts	0.07	2.43
	Total	1.42	

Table-6: PRICE OF POWER TRANSACTED THROUGH UI (Rs/KWh)			
Sr.No		NEW Grid	SR Grid
1	Minimum	0.00	0.00
2	Maximum	10.29	10.29
3	Average	5.02	4.20

Source: NLDC

Chart-6: PRICE OF SHORT TERM TRANSACTIONS OF ELECTRICITY - SEP '09

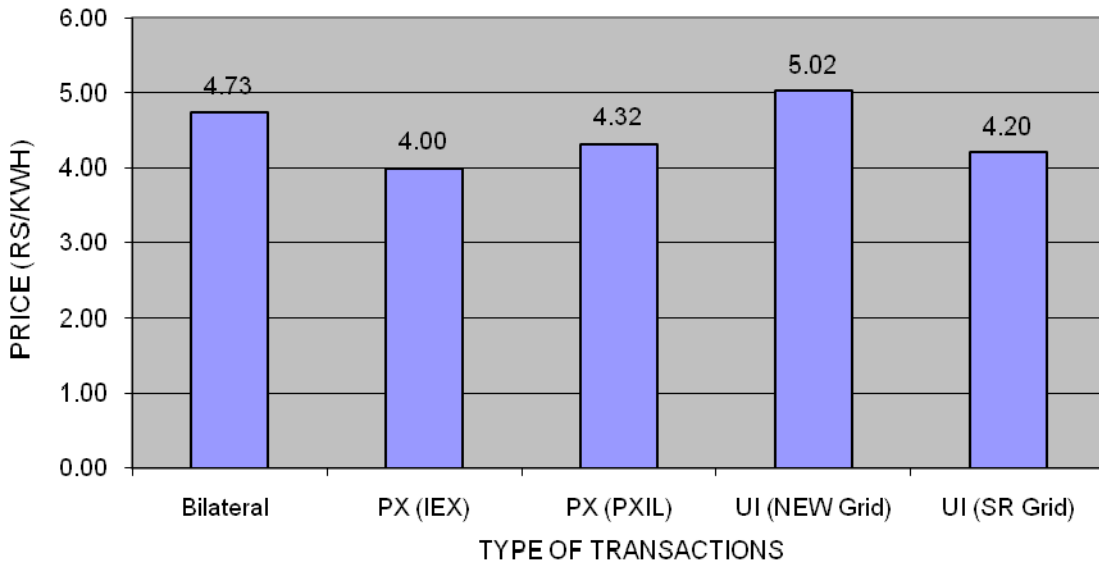


Chart-7: Price of Short-term Transactions of Electricity, Sep 2009

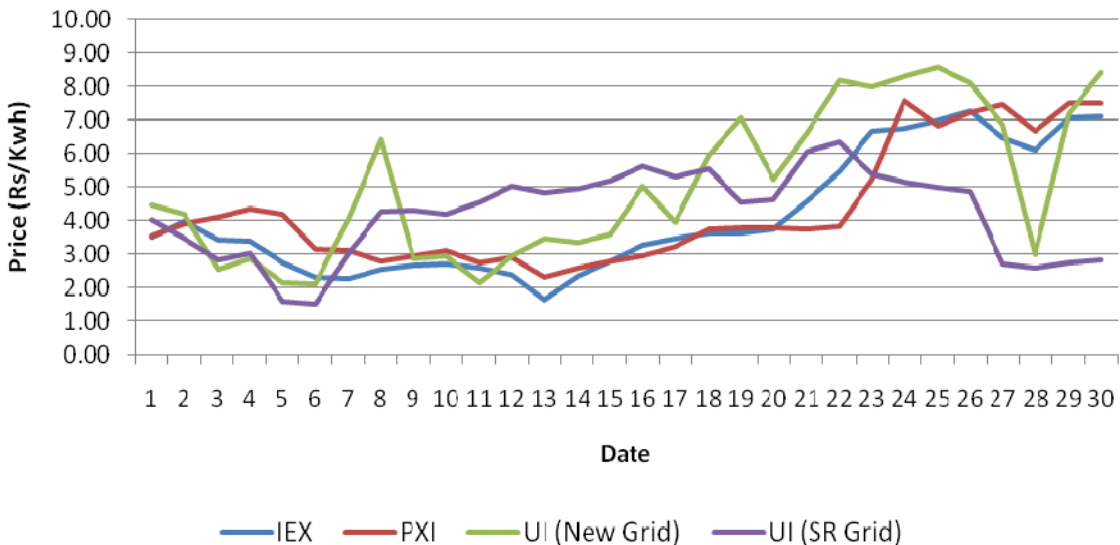


Table-7: VOLUME OF ELECTRICITY SALE THROUGH BILATERAL		
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume
Himachal Pradesh	452.73	15.77%
Karnataka	366.97	12.78%
JINDAL POWER	313.82	10.93%
Chattisgarh	275.40	9.59%
MP	251.54	8.76%
J & K	167.78	5.84%
West Bengal	138.00	4.81%
MUNDRA APL	123.00	4.28%
Gujarat	122.00	4.25%
Rajasthan	92.90	3.23%
Andhra Pradesh	85.00	2.96%
Tamilnadu	82.48	2.87%
Kerala	80.95	2.82%
Orissa	60.36	2.10%
Uttarakhand	37.90	1.32%
Punjab	35.42	1.23%
Assam	33.48	1.17%
DVC	31.57	1.10%
Uttar Pradesh	29.43	1.02%
Sikkim	20.49	0.71%
Delhi	16.29	0.57%
Nagaland	16.25	0.57%
Maharashtra	10.85	0.38%
Tripura	8.35	0.29%
Haryana	7.84	0.27%
Meghalaya	6.75	0.23%
Arunachal Pradesh	3.69	0.13%
Mizoram	0.54	0.02%
UT Chandigarh	0.00	0.00%
Daman and Diu	0.00	0.00%
Dadra & Nagar Haveli	0.00	0.00%
Pondicherry	0.00	0.00%
Bihar	0.00	0.00%
Jharkhand	0.00	0.00%
Manipur	0.00	0.00%
GOA	0.00	0.00%
LANCO_AMK	0.00	0.00%
Total	2871.75	100.00%
Volume of sale by top 5 States	1660.45	57.82%

Table-8: VOLUME OF ELECTRICITY PURCHASE THROUGH BILATERAL		
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume
Haryana	916.29	30.58%
Punjab	536.47	17.91%
Rajasthan	438.22	14.63%
Delhi	373.03	12.45%
Maharashtra	328.98	10.98%
Tamilnadu	105.35	3.52%
Daman and Diu	72.00	2.40%
Dadra & Nagar Haveli	72.00	2.40%
Uttar Pradesh	40.31	1.35%
West Bengal	26.85	0.90%
Orissa	26.36	0.88%
J & K	21.99	0.73%
Kerala	13.83	0.46%
MP	10.80	0.36%
UT Chandigarh	5.25	0.18%
GOA	3.30	0.11%
Tripura	2.22	0.07%
Andhra Pradesh	1.96	0.07%
Assam	0.87	0.03%
Uttarakhand	0.00	0.00%
Himachal Pradesh	0.00	0.00%
Gujarat	0.00	0.00%
Chattisgarh	0.00	0.00%
Karnataka	0.00	0.00%
Pondicherry	0.00	0.00%
Bihar	0.00	0.00%
Jharkhand	0.00	0.00%
Sikkim	0.00	0.00%
DVC	0.00	0.00%
Arunachal Pradesh	0.00	0.00%
Manipur	0.00	0.00%
Meghalaya	0.00	0.00%
Mizoram	0.00	0.00%
Nagaland	0.00	0.00%
JINDAL POWER	0.00	0.00%
LANCO_AMK	0.00	0.00%
MUNDRA APL	0.00	0.00%
Total	2996.09	100.00%
Volume of purchase by top 5 States	2592.99	86.55%

Table-9: VOLUME OF ELECTRICITY SALE THROUGH POWER EXCHANGES		
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume
Karnataka	110.69	20.89%
Chattisgarh	97.39	18.38%
Sikkim	56.77	10.71%
Haryana	55.94	10.56%
Gujarat	46.21	8.72%
Himachal Pradesh	36.55	6.90%
JINDAL POWER	35.10	6.62%
West Bengal	28.14	5.31%
MP	26.30	4.96%
Andhra Pradesh	13.59	2.56%
GOA	7.26	1.37%
Rajasthan	4.83	0.91%
Maharashtra	2.96	0.56%
Tripura	2.64	0.50%
Delhi	1.97	0.37%
Meghalaya	1.61	0.30%
Arunachal Pradesh	1.54	0.29%
Mizoram	0.28	0.05%
Punjab	0.19	0.03%
Uttar Pradesh	0.00	0.00%
Uttarakhand	0.00	0.00%
J & K	0.00	0.00%
UT Chandigarh	0.00	0.00%
Daman and Diu	0.00	0.00%
Dadra & Nagar Haveli	0.00	0.00%
Kerala	0.00	0.00%
Tamilnadu	0.00	0.00%
Pondicherry	0.00	0.00%
Orissa	0.00	0.00%
Bihar	0.00	0.00%
Jharkhand	0.00	0.00%
DVC	0.00	0.00%
Assam	0.00	0.00%
Manipur	0.00	0.00%
Nagaland	0.00	0.00%
LANCO_AMK	0.00	0.00%
MUNDRA APL	0.00	0.00%
Total	529.95	100.00%
Volume of sale by top 5 States	367.00	69.25%

Table-10: VOLUME OF ELECTRICITY PURCHASE THROUGH POWER EXCHANGES		
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume
Rajasthan	320.72	60.83%
Delhi	66.88	12.69%
Andhra Pradesh	38.37	7.28%
Dadra & Nagar Haveli	32.81	6.22%
Maharashtra	22.61	4.29%
Kerala	19.87	3.77%
Haryana	9.76	1.85%
Punjab	6.14	1.16%
Daman and Diu	3.44	0.65%
Gujarat	2.85	0.54%
Orissa	2.58	0.49%
West Bengal	0.95	0.18%
Assam	0.22	0.04%
Uttar Pradesh	0.00	0.00%
Uttarakhand	0.00	0.00%
Himachal Pradesh	0.00	0.00%
J & K	0.00	0.00%
UT Chandigarh	0.00	0.00%
MP	0.00	0.00%
Chattisgarh	0.00	0.00%
Karnataka	0.00	0.00%
Tamilnadu	0.00	0.00%
Pondicherry	0.00	0.00%
Bihar	0.00	0.00%
Jharkhand	0.00	0.00%
Sikkim	0.00	0.00%
DVC	0.00	0.00%
Arunachal Pradesh	0.00	0.00%
Manipur	0.00	0.00%
Meghalaya	0.00	0.00%
Mizoram	0.00	0.00%
Nagaland	0.00	0.00%
Tripura	0.00	0.00%
GOA	0.00	0.00%
JINDAL POWER	0.00	0.00%
LANCO_AMK	0.00	0.00%
MUNDRA APL	0.00	0.00%
Total	527.22	100.00%
Volume of purchase by top 5 States	481.40	91.31%

Table-11: VOLUME OF ELECTRICITY EXPORT THROUGH UI		
Name of the State/UT/Other Regional Entity	Volume of Export (MUs)	% of Volume
MP	235.27	12.84%
Delhi	159.12	8.69%
Chattisgarh	127.37	6.95%
LANCO_AMK	126.19	6.89%
Maharashtra	126.17	6.89%
Orissa	118.22	6.45%
MUNDRA APL	97.07	5.30%
DVC	78.17	4.27%
JINDAL POWER	73.52	4.01%
Rajasthan	72.36	3.95%
Andhra Pradesh	70.37	3.84%
Karnataka	67.61	3.69%
Haryana	62.55	3.41%
Punjab	62.00	3.38%
Tamilnadu	50.02	2.73%
Bihar	46.12	2.52%
West Bengal	39.40	2.15%
Uttarakhand	26.27	1.43%
Himachal Pradesh	25.96	1.42%
Gujarat	24.47	1.34%
J & K	18.55	1.01%
Pondicherry	14.01	0.76%
GOA	13.36	0.73%
Uttar Pradesh	13.14	0.72%
Manipur	12.02	0.66%
Tripura	10.94	0.60%
Meghalaya	10.65	0.58%
Assam	10.52	0.57%
Dadra & Nagar Haveli	8.01	0.44%
Mizoram	5.93	0.32%
Arunachal Pradesh	5.20	0.28%
UT Chandigarh	5.04	0.28%
Jharkhand	4.09	0.22%
Daman and Diu	3.94	0.22%
Kerala	3.75	0.20%
Sikkim	3.44	0.19%
Nagaland	1.11	0.06%
Total	1831.94	100.00%
Volume of Export by top 5 States	774.11	42.26%

Table-12: VOLUME OF ELECTRICITY IMPORT THROUGH UI		
Name of the State/UT/Other Regional Entity	Volume of Import (MUs)	% of Volume
Uttar Pradesh	613.67	29.12%
Gujarat	225.24	10.69%
Tamilnadu	160.18	7.60%
West Bengal	113.40	5.38%
Andhra Pradesh	108.57	5.15%
Punjab	102.23	4.85%
Haryana	86.06	4.08%
J & K	68.90	3.27%
Rajasthan	61.55	2.92%
Kerala	60.62	2.88%
Jharkhand	56.40	2.68%
Karnataka	53.92	2.56%
Uttarakhand	50.22	2.38%
Maharashtra	43.17	2.05%
DVC	33.84	1.61%
Himachal Pradesh	32.11	1.52%
Bihar	30.63	1.45%
Chattisgarh	30.51	1.45%
Assam	26.68	1.27%
Delhi	20.54	0.97%
MP	19.89	0.94%
Daman and Diu	16.51	0.78%
Sikkim	15.73	0.75%
UT Chandigarh	14.97	0.71%
Orissa	12.74	0.60%
Dadra & Nagar Haveli	11.83	0.56%
MUNDRA APL	11.24	0.53%
GOA	9.11	0.43%
Nagaland	7.27	0.34%
Arunachal Pradesh	3.15	0.15%
Meghalaya	2.30	0.11%
Manipur	1.10	0.05%
JINDAL POWER	1.09	0.05%
Pondicherry	1.06	0.05%
Tripura	0.73	0.03%
Mizoram	0.45	0.02%
LANCO_AMK	0.00	0.00%
Total	2107.63	100.00%
Volume of Export by top 5 States	1221.06	57.94%

Table-13: TOTAL NET SHORT-TERM TRANSACTIONS OF ELECTRICITY (REGIONAL ENTITY-WISE)		
Sr.No	Name of the State/UT/Other Regional Entity	Total short-term transactions*
1	Haryana	885.78
2	Rajasthan	650.41
3	Uttar Pradesh	611.42
4	Punjab	547.24
5	Delhi	283.07
6	Maharashtra	254.78
7	Tamilnadu	133.02
8	Dadra & Nagar Haveli	108.63
9	Daman and Diu	88.02
10	Jharkhand	52.32
11	Gujarat	35.42
12	UT Chandigarh	15.19
13	Kerala	9.62
14	Mizoram	-6.31
15	Arunachal Pradesh	-7.27
16	GOA	-8.20
17	Nagaland	-10.09
18	Manipur	-10.92
19	Pondicherry	-12.95
20	Uttarakhand	-13.95
21	Bihar	-15.49
22	Assam	-16.23
23	Meghalaya	-16.70
24	Tripura	-18.98
25	Andhra Pradesh	-20.05
26	West Bengal	-64.34
27	Sikkim	-64.97
28	DVC	-75.90
29	J & K	-95.43
30	LANCO_AMK	-126.19
31	Orissa	-136.90
32	MUNDRA APL	-208.83
33	JINDAL POWER	-421.34
34	Chattisgarh	-469.64
35	MP	-482.42
36	Himachal Pradesh	-483.13
37	Karnataka	-491.35
* Total net short-term transactions of electricity includes net of transactions through bilateral, power exchange and UI		
(-) indicates sale and (+) indicates purchase		