# MONTHLY REPORT ON SHORT-TERM TRANSACTIONS OF ELECTRICITY (May 2009)

#### Introduction

A Market Monitoring Cell (MMC) was set up in CERC in August 2008. As advised by the Steering Committee of MMC, MONTHLY REPORT ON SHORT-TERM TRANSACTIONS OF ELECTRICITY i.e. for the period from August 2008 to April 2009 was prepared and posted on the website of CERC. This is the report for the month of May 2009. The objective of the report is to see the trends in volume and price of the short-term transactions of electricity in India. Here, the "short-term transactions of electricity" includes the electricity transacted through Trading Licensees, Power Exchanges and Unscheduled Interchange. The report is mainly based on the data collected from Inter-State Trading Licensees, Power Exchanges i.e. Indian Energy Exchange Ltd (IEX) and Power Exchange India Ltd (PXIL) and National Load Despatch Centre (NLDC) as per the formats prescribed by MMC. The same has been analysed as below: -

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

During the Month of May 2009, total electricity generation excluding generation from renewables and captive power plants in India was 63465.58 MUs (Table-1).

Of the total electricity generation, 4656.38 MUs (7.34%) transacted through short-term i.e. 2317.30 MUs (3.65%) through Bilateral (through traders and direct between distribution companies), followed by 1997.38 MUs (3.15%) through Unscheduled Interchange (UI) and 341.70 MUs (0.54%) through Power Exchanges (IEX and PXIL) (Table-1).

Of the total short-term transactions, Bilateral constitute 49.77% (44.46% through traders and 5.31% direct between distribution companies) followed by 42.90% through UI and 7.34% through Power Exchanges (Table-1). Daily volume of short-term transactions is shown in Chart-1.

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. Here the volume includes the volume traded by licensees through power exchanges also. There are 42 trading licensees as on 31.5.2009, of which 13 licensees are undertaking trading during May 2009. Top 5 trading licensees are having share of 86.86% in the total volume traded by all the licensees.

The volume of electricity transacted through IEX and PXIL was 323.90 MUs and 17.80 MUs respectively. The volume of total Buy bids and Sale bids was 574.74 MUs and 825.88 MUs respectively in IEX and 22.14 MUs and 58.28 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 (0.70 times) when compared with the supply offered through IEX and it was less demand (0.38 times) when compared with the supply offered through PXIL.

# **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.6.82. 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.6.60, Rs.8.18 and Rs.8.03 respectively. Minimum and Maximum sale price was Rs.1.84 and Rs.10.54 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.1.65, Rs.15.00 and Rs.6.84 respectively in IEX and Rs.0.00, Rs.14.49 and Rs.8.74 respectively in PXIL (Table-5).
- (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.4.17 in the NEW Grid and Rs.3.99 in the SR Grid. The power deficit is more in the Southern Region when compared with other regions, however, the UI price was lower in the SR Grid when compared with the UI price in the NEW Grid. Minimum and Maximum price of UI was Rs.0.00 and Rs.7.35 respectively in the New Grid and Rs.0.00 and Rs.7.35 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-2.

### **III: Volume of Short-term Transactions of Electricity (State-Wise):**

Of the total bilateral transactions, top 5 states selling 72.11% of the volume are Chattisgarh, Jindal Power Ltd, Himachal Pradesh, J&K and Gujarat and top 5 states purchasing 69.16% of the volume are Tamil Nadu, Rajasthan, Maharashtra, Andhra Pradesh, and Delhi (Table-7 & 8).

Of the total Power Exchange transactions, top 5 states selling 69.12% of the volume are Gujarat, West Bengal, Chattisgarh, Himachal Pradesh and Jindal Power Ltd and top 5 states purchasing 94.55% of the volume are Rajasthan, Haryana, Maharashtra, Tamil Nadu and Andhra Pradesh (Table-9 & 10)

Of the total UI transactions, top 5 states exporting 48.84% of the volume are Chattisgarh, DVC, Andhra Pradesh, Delhi and Orissa and top 5 states importing 47.24% of the volume are Uttar Pradesh, West Bengal, Maharashtra, Punjab and Haryana (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 states those selling electricity are Chattisgarh, Jindal Power Ltd, Himachal Pradesh, J&K and Gujarat and top 5 states those purchasing electricity are Tamil Nadu, Rajasthan, Maharashtra, Uttar Pradesh and Haryana.

### **IV:** Key findings/Observations:

- The percentage of short-term transactions of electricity to total electricity generation was 7.34%.
- Of the total short-term transactions of electricity, 49.77% transacted through bilateral (through traders and directly by distribution companies) followed by 42.90% through UI and 7.34% through Power Exchanges.
- Top 5 trading licenses are having share of 86.86% in the total volume traded by all the trading licensees.
- The price of electricity for UI transactions was around Rs.4.00/KWh, which was relatively less when compared with the price of electricity transacted through Trading Licensees (Rs.6.82/KWh) and the price of electricity transacted through Power Exchanges (Rs.6.84/KWh in IEX and Rs.8.74/KWh in PXIL).
- The gap between the volume of buy bids and sale bids placed through power exchanges shows that there was less demand in both the power exchanges (i.e. 0.70 times in IEX and 0.38 times in PXIL) when compared with the supply offered through these exchanges.
- Top 5 states those selling electricity are Chattisgarh, Jindal Power Ltd, Himachal Pradesh, J&K and Gujarat and top 5 states those purchasing electricity are Tamil Nadu, Rajasthan, Maharashtra, Uttar Pradesh and Haryana.

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VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA) (MUs)						1 Offiliat-1
Month:	May 2009					Total Electricity
Date	Bilate			xchange Clearing ime)	Unscheduled Interchange (Over	Generation (MUs) as given at CEA Website*
	Through Traders	Direct	IEX	PXI	Drawl+Under Generation)	
1	65.22	6.42	10.36	2.53	67.65	2142.12
2	64.39	6.78	13.13	1.90	58.44	2166.51
3	66.54	6.81	14.53	0.60	76.22	2070.53
4	68.30	6.78	14.31	0.33	81.16	2054.35
5	66.26	6.37	14.09	1.85	64.25	2066.90
6	67.42	6.42	13.08	0.00	55.22	2082.00
7	70.53	6.42	17.21	0.70	59.19	2103.84
8	64.22	6.42	15.12	0.45	48.31	2103.42
9	63.61	6.42	16.09	0.35	47.14	2103.50
10	64.23	6.60	10.52	0.41	67.61	1987.91
11	66.70	6.92	15.62	0.55	62.24	2043.50
12	73.78	8.39	13.79	0.65	66.37	2056.92
13	65.15	7.05	14.14	0.80	58.88	2037.57
14	64.93	7.05	11.70	1.95	55.47	2030.28
15	63.42	6.72	10.24	1.43	64.05	2024.97
16	70.11	6.76	9.33	0.00	60.14	2047.31
17	69.90	7.12	7.92	0.20	55.01	2024.33
18	70.85	7.90	8.99	0.55	57.12	2051.50
19	75.37	9.66	9.93	0.45	67.28	2058.79
20	73.32	10.39	10.94	0.55	62.15	2016.56
21	70.16	9.34	6.67	0.00	54.16	2056.98
22	67.12	9.23	8.70	0.00	67.09	2044.27
23	67.15	9.05	4.84	0.00	67.93	2057.04
24	59.30	8.50	6.90	0.00	79.28	1928.15
25	59.54	9.88	5.97	0.00	72.54	1923.01
26	61.68	9.43	2.17	0.00	78.51	1980.54
27	63.83	9.64	5.92	0.00	65.91	2043.34
28	65.89	10.28	11.98	0.00	57.17	2068.66
29	70.32	10.22	9.05	0.00	73.54	2076.99
30	65.55	9.97	8.61	0.00	70.63	2057.24
31	65.20	8.38	2.06	1.57	76.72	1956.55
Total	2070.01	247.29	323.90	17.80	1997.38	63465.58

Source: NLDC
\* Gross Electricity Gneration excluding electricity generation from renewables and captive power plants

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	PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (Rs/KWh)											
Month: May	2009											
Market Segment				Powe	er Exchan	ge (PXIL)	Under Drawl/Over Drawl from the Grid (UI)					
	Mini-	Maxi-	Weighted	Mini-	Maxi-	Weighted		NEW Gr	id		SR Grid	t
Date	mum MCP	mum MCP	Average*	mum MCP	mum MCP	Average*	Mini- mum Price	Maxi- mum Price	Ave- rage Price**	Mini- mum Price	Maxi- mum Price	Ave- rage Price**
1-May-09	8.00	15.00	10.63	9.30	13.90	12.48	1.56	7.35	4.55	0.24	7.35	3.90
2-May-09	7.00	14.50	10.29	7.99	14.49	11.31	0.36	7.35	4.97	2.40	7.35	5.68
3-May-09	5.25	14.00	8.81	6.49	11.99	9.76	0.00	6.67	3.86	0.60	7.35	5.34
4-May-09	5.60	14.00	10.40	7.60	12.85	7.60	0.96	7.35	4.26	0.00	7.35	4.65
5-May-09	5.00	14.60	10.62	6.45	14.25	10.25	0.36	7.35	3.72	0.84	7.35	4.37
6-May-09	2.00	14.50	8.94	0.00	0.00	0.00	1.68	7.35	5.18	0.84	7.35	5.31
7-May-09	4.00	14.50	8.52	4.78	11.00	7.58	2.88	7.35	6.01	0.00	7.35	6.01
8-May-09	4.80	14.75	9.22	0.00	9.00	7.75	3.48	7.35	6.30	2.04	7.35	6.09
9-May-09	4.49	10.30	6.93	4.74	12.50	7.98	3.60	7.35	6.40	0.00	7.35	5.56
10-May-09	4.64	7.98	5.72	4.70	10.00	7.77	0.72	7.35	4.66	0.00	7.35	4.11
11-May-09	4.50	11.00	7.74	5.00	9.50	7.93	1.32	7.35	4.30	1.08	7.35	5.44
12-May-09	4.40	11.00	8.07	5.00	9.50	8.00	0.00	7.35	3.73	0.00	7.35	5.34
13-May-09	3.70	9.00	6.41	5.00	9.50	7.53	0.96	7.35	4.72	1.68	7.35	4.44
14-May-09	3.70	9.00	6.28	3.70	8.25	7.69	1.32	7.35	5.16	0.84	7.35	4.29
15-May-09	4.40	8.00	6.32	3.70	8.00	7.42	0.24	7.35	4.61	0.24	7.35	4.51
16-May-09	3.90	12.60	7.00	0.00	0.00	0.00	0.36	7.35	4.21	0.36	7.35	4.21
17-May-09	3.60	5.60	4.34	3.70	7.50	4.13	0.00	7.01	3.04	0.00	4.80	2.16
18-May-09	4.80	8.00	6.27	3.70	7.74	7.19	0.36	7.35	3.61	0.00	7.35	3.00
19-May-09	4.00	7.50	5.53	3.70	7.62	7.18	0.00	7.35	4.22	0.00	7.35	3.22
20-May-09	3.60	7.70	5.31	3.70	7.62	6.58	0.00	7.35	3.58	0.00	7.35	3.29
21-May-09	3.00	7.00	5.02	0.00	0.00	0.00	0.48	6.50	3.51	0.00	4.97	2.48
22-May-09	3.00	6.00	4.68	0.00	0.00	0.00	0.24	6.33	2.96	0.00	4.97	0.21
23-May-09	3.00	4.90	3.91	0.00	0.00	0.00	0.00	6.50	2.68	0.00	4.20	2.04
24-May-09	2.20	3.90	3.04	0.00	0.00	0.00	0.00	4.44	1.48	0.00	3.96	1.72
25-May-09	2.50	4.90	3.46	0.00	0.00	0.00	3.72	7.35	6.34	2.16	7.35	5.47
26-May-09	1.65	3.00	2.35	0.00	0.00	0.00	3.00	7.35	5.83	0.00	7.35	5.22
27-May-09	1.65	3.70	2.98	0.00	0.00	0.00	0.00	7.01	1.39	0.00	7.35	3.20
28-May-09	2.50	6.00	4.22	0.00	0.00	0.00	0.24	7.18	3.04	0.36	7.35	0.50
29-May-09	2.50	7.00	5.57	0.00	0.00	0.00	3.60	7.35	6.96	2.28	7.35	6.46
30-May-09	2.50	6.75	5.22	0.00	0.00	0.00	0.00	4.56	1.79	0.00	7.35	3.11
31-May-09	1.90	2.49	2.10	3.00	5.90	4.90	0.00	4.08	2.17	0.00	6.50	2.43
	1.65#	15.00#	6.84	0.00#	14.49#	8.74	0.00#	7.35#	4.17	0.00#	7.35#	3.99

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

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

<sup>\*\*</sup> Simple average price of UI of 96 time blocks of 15 minutes each in a day

<sup>#</sup> Maximum/Minimum in the month

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	VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (STATE-WISE) (MUs)									
Month: May 2009  Name of the State/UT/Other	Thr	ough Bilate	eral	Through	n Power E	xchange	Throug	gh UI with Regional Grid		
Regional Entity	Sale	Pur- chase	Net*	Sale	Pur- chase	Net*	Export (Under Drawl)	Import (Over Drawl)	Net*	Total Net**
Punjab	29.27	94.89	65.62	3.56	0.00	-3.56	28.35	141.18	112.82	174.89
Haryana	45.31	63.68	18.37	0.01	89.69	89.69	29.30	136.05	106.74	214.80
Rajasthan	76.27	412.84	336.57	5.63	119.01	113.38	71.22	90.73	19.51	469.47
Delhi	12.56	171.08	158.52	15.24	11.55	-3.69	136.11	28.93	-107.18	47.65
Uttar Pradesh	5.94	127.76	121.82	0.00	0.00	0.00	72.29	247.07	174.78	296.59
Uttarakhand	26.20	1.73	-24.47	0.25	0.55	0.30	28.95	47.85	18.91	-5.26
Himachal Pradesh	358.59	2.40	-356.19	31.48	0.00	-31.48	21.76	52.95	31.19	-356.47
J&K	248.83	0.00	-248.83	0.00	0.00	0.00	90.79	6.20	-84.59	-333.41
UT Chandigarh	0.00	3.85	3.85	0.00	0.00	0.00	4.14	12.69	8.55	12.40
MP	103.09	25.32	-77.77	16.45	0.00	-16.45	49.80	70.62	20.82	-73.41
Maharashtra	26.83	318.09	291.26	18.75	57.34	38.59	52.64	157.75	105.11	434.96
Gujarat	130.54	0.00	-130.54	91.57	0.00	-91.57	91.77	104.35	12.58	-209.54
Chattisgarh	503.39	77.85	-425.53	38.88	0.00	-38.88	209.64	11.43	-198.21	-662.62
Daman and Diu	0.00	0.00	0.00	0.00	0.00	0.00	1.72	14.67	12.95	12.95
Dadra & Nagar	0.00	0.00	0.00	0.00	1.50	1.50	1.26	25.40	24.12	25.62
Haveli Andhra Pradesh	0.00 1.00	0.00 249.38	0.00 248.38	0.00 17.53	1.50 14.28	1.50 -3.25	1.36 169.00	25.48 53.13	24.13 -115.87	25.63 129.26
Karnataka	0.00	163.97	163.97	0.00	0.00	0.00	38.53	85.17	46.64	210.61
Kerala	106.92	1.02	-105.90	7.34	0.00	-7.34	4.45	86.04	81.59	-31.65
Tamilnadu	0.00	451.35	451.35	0.00	42.74	42.74	77.58	115.64	38.06	532.15
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	10.35	1.55	-8.81	-8.81
Goa	8.04	0.00	-8.04	5.85	0.00	-5.85	12.36	12.57	0.21	-13.67
West Bengal	105.73	100.33	-5.40	55.18	0.00	-55.18	13.85	246.53	232.68	172.10
Orissa	34.69	25.94	-8.75	0.00	0.00	0.00	133.57	8.18	-125.39	-134.14
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	33.37	55.36	21.99	21.99
Jharkhand	0.00	0.00	0.00	4.27	0.00	-4.27	5.39	65.44	60.05	55.78
Sikkim	43.68	0.00	-43.68	7.57	0.00	-7.57	11.90	4.60	-7.29	-58.54
DVC	29.31	0.00	-29.31	0.00	0.00	0.00	171.41	5.65	-165.76	-195.07
Arunachal Pradesh	4.10	0.00	-4.10	0.00	0.00	0.00	4.96	3.39	-1.56	-5.66
Assam	0.63	21.73	21.10	0.00	3.99	3.99	32.69	13.66	-19.02	6.07
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	8.00	2.38	-5.62	-5.62
Meghalaya	0.13	4.09	3.96	0.00	0.00	-0.02	6.38	6.65	0.26	4.21
Mizoram	0.00	0.00	0.00	0.02	1.01	1.01	1.63	2.94	1.31	2.32
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	2.31	4.71	2.39	2.39
Tripura	7.43	0.00	-7.43	3.06	0.00	-3.03	7.97	3.77	-4.19	-14.65
JINDAL POWER	483.60	0.00	-483.60	19.07	0.00	-19.07	42.95	40.43	-2.51	-505.18
Source: NLDC	.00.00	0.00	100.00	10.07	0.00	10.07	.2.00	10.40	2.01	550.10

Source: NLDC

<sup>\* (-)</sup> indicates sale and (+) indicates purchase

<sup>\*\*</sup> Total net includes net of transactions through bilateral, power exchange and UI

Tab	Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF POWER (ALL INDIA)					
Sr.No	Short-term transactions	Volume (MUs)	% to Volume of short-	% to Total Generation		
			transactions			
1	Bilateral	2317.30	49.77%	3.65%		
	(i) Through Traders	2070.01	44.46%	3.26%		
	(ii) Direct	247.29	5.31%	0.39%		
2	Through Power Exchange	341.70	7.34%	0.54%		
3	Through UI	1997.38	42.90%	3.15%		
	Total	4656.38	100.00%	7.34%		
	Total Generation	63465.58				

Source: NLDC

Table	Table-2: Percentage Share of Electricity Traded by Trading Licensees during May 2009				
Sr.No	Name of the Trading Licensee	% Share in total Volume traded by Licensees			
1	PTC India Ltd	45.47%			
2	Tata Power Trading Company (P) Ltd	13.12%			
3	Lanco Electric Utility Ltd	11.04%			
4	NTPC Vidyut Vyapar Nigam Ltd	9.34%			
5	Reliance Energy Trading (P) Ltd	7.90%			
6	JSW Power Trading Company Ltd	6.76%			
7	GMR Energy Trading Ltd	2.92%			
8	Adani Enterprises Ltd	1.64%			
9	Kalyani Power Development (P) Ltd	1.13%			
10	RPG Power Trading Company Ltd	0.34%			
11	Instinct Advertisement & Marketing Ltd	0.32%			
12	Mittal Processors (P) Ltd	0.02%			
	Knowledge Infrastructure Systems (P)				
13	Ltd	0.00%			
	Total	100.00%			
	Top 5 trading licensees	86.86%			

Note: Percentage Share in total volume traded by licensees computed based on the volume which includes the volume traded by trading licensees through power exchanges also.

Source: Information submitted by trading licensees

Table-3: PRICE OF POWER TRANSACTED THROUGH TRADERS					
Sr.No	Period of Trade	Weighted Average Sale Price (Rs)			
1	RTC	6.60			
2	PEAK	8.18			
3 OFF PEAK 8.03					
	Total	6.82			

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	10.54				
3	Weighted Average	6.82				

Source: Information submitted by trading licensees

Table-5: PRICE OF POWER TRANSACTED THROUGH POWER EXCHANGE (Rs/KWh)						
Sr.No	MCP IEX PXIL					
1	Minimum	1.65	0.00			
2	2 Maximum 15.00 14.49					
3	Weighted Average	6.84	8.74			

Source: Information submitted by IEX and PXIL

Table-6: PRICE OF POWER TRANSACTED THROUGH UI (Rs/KWh)					
Sr.No		NEW Grid	SR Grid		
1	Minimum	0.00	0.00		
2	Maximum	7.35	7.35		
3	Average	4.17	3.99		

Source: NLDC

Table-7: VOLUME OF ELECTRICITY SALE BY STATES THROUGH BILATERAL				
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume		
Chattisgarh	503.39	21.04%		
JINDAL POWER	483.60	20.22%		
Himachal Pradesh	358.59	14.99%		
J&K	248.83	10.40%		
Gujarat	130.54	5.46%		
Kerala	106.92	4.47%		
West Bengal	105.73	4.42%		
MP	103.09	4.31%		
Rajasthan	76.27	3.19%		
Haryana	45.31	1.89%		
Sikkim	43.68	1.83%		
Orissa	34.69	1.45%		
DVC	29.31	1.23%		
Punjab	29.27	1.22%		
Maharashtra	26.83	1.12%		
Uttarakhand	26.20	1.10%		
Delhi	12.56	0.53%		
Goa	8.04	0.34%		
Tripura	7.43	0.31%		
Uttar Pradesh	5.94	0.25%		
Arunachal Pradesh	4.10	0.17%		
Andhra Pradesh	1.00	0.04%		
Assam	0.63	0.03%		
Meghalaya	0.13	0.01%		
UT Chandigarh	0.00	0.00%		
Daman and Diu	0.00	0.00%		
Dadra & Nagar Haveli	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%		
Manipur	0.00	0.00%		
Mizoram	0.00	0.00%		
Nagaland	0.00	0.00%		
Total	2392.06	100.00%		
Volume of sale by top 5 States	1724.94	72.11%		

	Table-8: VOLUME OF ELECTRICITY PURCHASE BY STATES THROUGH BILATERAL				
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume			
Tamilnadu	451.35	19.48%			
Rajasthan	412.84	17.82%			
Maharashtra	318.09	13.73%			
Andhra Pradesh	249.38	10.76%			
Delhi	171.08	7.38%			
Karnataka	163.97	7.08%			
Uttar Pradesh	127.76	5.51%			
West Bengal	100.33	4.33%			
Punjab	94.89	4.09%			
Chattisgarh	77.85	3.36%			
Haryana	63.68	2.75%			
Orissa	25.94	1.12%			
MP	25.32	1.09%			
Assam	21.73	0.94%			
Meghalaya	4.09	0.18%			
UT Chandigarh	3.85	0.17%			
Himachal Pradesh	2.40	0.10%			
Uttarakhand	1.73	0.07%			
Kerala	1.02	0.04%			
J&K	0.00	0.00%			
Gujarat	0.00	0.00%			
Daman and Diu	0.00	0.00%			
Dadra & Nagar Haveli	0.00	0.00%			
Pondicherry	0.00	0.00%			
Goa	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%			
Mizoram	0.00	0.00%			
Nagaland	0.00	0.00%			
Tripura	0.00	0.00%			
JINDAL POWER	0.00	0.00%			
Total	2317.30	100.00%			
Volume of purchase by top 5 States	1602.74	69.16%			

Table-9: VOLUME OF ELECTRICITY SALE BY STATES THROUGH POWER EXCHANGE				
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume		
Gujarat	91.57	26.80%		
West Bengal	55.18	16.15%		
Chattisgarh	38.88	11.38%		
Himachal Pradesh	31.48	9.21%		
JINDAL POWER	19.07	5.58%		
Maharashtra	18.75	5.49%		
Andhra Pradesh	17.53	5.13%		
MP	16.45	4.81%		
Delhi	15.24	4.46%		
Sikkim	7.57	2.21%		
Kerala	7.34	2.15%		
Goa	5.85	1.71%		
Rajasthan	5.63	1.65%		
Jharkhand	4.27	1.25%		
Punjab	3.56	1.04%		
Tripura	3.06	0.89%		
Uttarakhand	0.25	0.07%		
Meghalaya	0.02	0.00%		
Haryana	0.01	0.00%		
Uttar Pradesh	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%		
Karnataka	0.00	0.00%		
Tamilnadu	0.00	0.00%		
Pondicherry	0.00	0.00%		
Orissa	0.00	0.00%		
Bihar	0.00	0.00%		
DVC	0.00	0.00%		
Arunachal Pradesh	0.00	0.00%		
Assam	0.00	0.00%		
Manipur	0.00	0.00%		
Mizoram	0.00	0.00%		
Nagaland	0.00	0.00%		
Total	341.70	100.00%		
Volume of sale by top 5 States	236.18	69.12%		

Table-10: VOLUME OF ELECTRICITY PURCHASE BY STATES THROUGH POWER EXCHANGE			
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume	
Rajasthan	119.01	34.83%	
Haryana	89.69	26.25%	
Maharashtra	57.34	16.78%	
Tamilnadu	42.74	12.51%	
Andhra Pradesh	14.28	4.18%	
Delhi	11.55	3.38%	
Assam	3.99	1.17%	
Dadra & Nagar Haveli	1.50	0.44%	
Mizoram	1.01	0.29%	
Uttarakhand	0.55	0.16%	
Tripura	0.03	0.01%	
Punjab	0.00	0.00%	
Uttar Pradesh	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%	
Gujarat	0.00	0.00%	
Chattisgarh	0.00	0.00%	
Daman and Diu	0.00	0.00%	
Karnataka	0.00	0.00%	
Kerala	0.00	0.00%	
Pondicherry	0.00	0.00%	
Goa	0.00	0.00%	
West Bengal	0.00	0.00%	
Orissa	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%	
Nagaland	0.00	0.00%	
JINDAL POWER	0.00	0.00%	
Total	341.70	100.00%	
Volume of purchase by top 5 States	323.07	94.55%	

Table-11: VOLUME OF ELECTRICITY EXPORT BY STATES THROUGH UI			
Name of the State/UT/Other Regional Entity	Volume of Export (MUs)	% of Volume	
Chattisgarh	209.64	12.49%	
DVC	171.41	10.21%	
Andhra Pradesh	169.00	10.07%	
Delhi	136.11	8.11%	
Orissa	133.57	7.96%	
Gujarat	91.77	5.47%	
J&K	90.79	5.41%	
Tamilnadu	77.58	4.62%	
Uttar Pradesh	72.29	4.31%	
Rajasthan	71.22	4.24%	
Maharashtra	52.64	3.14%	
MP	49.80	2.97%	
JINDAL POWER	42.95	2.56%	
Karnataka	38.53	2.30%	
Bihar	33.37	1.99%	
Assam	32.69	1.95%	
Haryana	29.30	1.75%	
Uttarakhand	28.95	1.72%	
Punjab	28.35	1.69%	
Himachal Pradesh	21.76	1.30%	
West Bengal	13.85	0.83%	
Goa	12.36	0.74%	
Sikkim	11.90	0.71%	
Pondicherry	10.35	0.62%	
Manipur	8.00	0.48%	
Tripura	7.97	0.47%	
Meghalaya	6.38	0.38%	
Jharkhand	5.39	0.32%	
Arunachal Pradesh	4.96	0.30%	
Kerala	4.45	0.27%	
UT Chandigarh	4.14	0.25%	
Nagaland	2.31	0.14%	
Daman and Diu	1.72	0.10%	
Mizoram	1.63	0.10%	
Dadra & Nagar Haveli	1.36	0.08%	
Total	1678.47	100.00%	
Volume of Export by top 5 States	819.72	48.84%	

Table-12: VOLUME OF ELECTRICITY IMPORT BY STATES THROUGH UI		
Name of the State/UT/Other Regional Entity	Volume of Import (MUs)	% of Volume
Uttar Pradesh	247.07	12.57%
West Bengal	246.53	12.54%
Maharashtra	157.75	8.02%
Punjab	141.18	7.18%
Haryana	136.05	6.92%
Tamilnadu	115.64	5.88%
Gujarat	104.35	5.31%
Rajasthan	90.73	4.62%
Kerala	86.04	4.38%
Karnataka	85.17	4.33%
MP	70.62	3.59%
Jharkhand	65.44	3.33%
Bihar	55.36	2.82%
Andhra Pradesh	53.13	2.70%
Himachal Pradesh	52.95	2.69%
Uttarakhand	47.85	2.43%
JINDAL POWER	40.43	2.06%
Delhi	28.93	1.47%
Dadra & Nagar Haveli	25.48	1.30%
Daman and Diu	14.67	0.75%
Assam	13.66	0.70%
UT Chandigarh	12.69	0.65%
Goa	12.57	0.64%
Chattisgarh	11.43	0.58%
Orissa	8.18	0.42%
Meghalaya	6.65	0.34%
J&K	6.20	0.32%
DVC	5.65	0.29%
Nagaland	4.71	0.24%
Sikkim	4.60	0.23%
Tripura	3.77	0.19%
Arunachal Pradesh	3.39	0.17%
Mizoram	2.94	0.15%
Manipur	2.38	0.12%
Pondicherry	1.55	0.08%
Total	1965.74	100.00%
Volume of Export by top 5 States	928.58	47.24%

Sr.No	Name of the State/UT/Other Regional Entity	Total short-term transactions*
1	Tamilnadu	532.15
2	Rajasthan	469.47
3	Maharashtra	434.96
4	Uttar Pradesh	296.59
5	Haryana	214.80
6	Karnataka	210.61
7	Punjab	174.89
8	West Bengal	172.10
9	Andhra Pradesh	129.26
10	Jharkhand	55.78
11	Delhi	47.65
12	Dadra & Nagar Haveli	25.63
13	Bihar	21.99
14	Daman and Diu	12.95
15	UT Chandigarh	12.40
16	Assam	6.07
17	Meghalaya	4.21
18	Nagaland	2.39
19	Mizoram	2.32
20	Uttarakhand	-5.26
21	Manipur	-5.62
22	Arunachal Pradesh	-5.66
23	Pondicherry	-8.8
24	Goa	-13.67
25	Tripura	-14.65
26	Kerala	-31.65
27	Sikkim	-58.54
28	MP	-73.4
29	Orissa	-134.14
30	DVC	-195.07
31	Gujarat	-209.54
32	J&K	-333.4
33	Himachal Pradesh	-356.47
34	JINDAL POWER	-505.18
35	Chattisgarh	-662.62
* Total	net short-term transactions including power exchange and UI	

(-) indicates sale and (+) indicates purchase



