# MONTHLY REPORT ON SHORT-TERM TRANSACTIONS OF ELECTRICITY (January 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 to December 2008 was prepared and posted on the website of CERC. This is the report for the month of January 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 January 2009, total electricity generation excluding generation from renewables and captive power plants in India was 61193.77 MUs. (Table-1).

Of the total electricity generation, 4349.19 MUs (7.11%) transacted through short-term i.e. 2121.37 MUs (3.47%) through Bilateral (through traders and direct between distribution companies), followed by 1911.39 MUs (3.12%) through Unscheduled Interchange (UI) and 316.43 MUs (0.52%) through Power Exchanges (IEX and PXIL) (Table-1).

Of the total short-term transactions, Bilateral constitute 48.78% (39.44% through traders and 9.34% direct between distribution companies) followed by 43.95% through UI and 7.28% through Power Exchanges (Table-1).

The volume of electricity transacted through IEX and PXIL was 291.70 MUs and 24.73 MUs respectively. The volume of total Buy bids and Sale bids was 392.65 MUs and 831.66 MUs respectively in IEX and 32.99 MUs and 84.31 MUs respectively in PXIL. In both the exchanges, the volume of buy bids was less when compared with the volume of sale

bids (0.47 times in IEX and 0.39 times in PXIL). This shows that there was less demand for electricity than the supply offered through both the exchanges.

### **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.7.23. 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.7.43, Rs.8.55 and Rs.6.78 respectively. Minimum and Maximum sale price was Rs.1.04 and Rs.9.25 respectively (Table-2 and 3).
- (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.1.60, Rs.8.10 and 6.16 respectively in IEX and Rs.0.00, Rs.8.25 and Rs.6.86 respectively in PXIL (Table-4).
- (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.4.99 in the NEW Grid and Rs.7.61 in the SR Grid. The power deficit is more in the Southern Region when compared with other regions, therefore, the UI price was higher in the SR Grid when compared with the UI price in the NEW Grid. Minimum and Maximum price of UI was Rs.0.08 and Rs.10.00 respectively in the New Grid and Rs.0.00 and Rs.10.00 respectively in the SR Grid (Table-5).

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

Of the total bilateral transactions, top 5 states selling 77.09% of the volume are Delhi, Punjab, Chattisgarh, West Bengal and Tamil Nadu and top 5 states purchasing 72.22% of the volume are Rajasthan, Maharashtra, J&K, Andhara Pradesh and Madhya Pradesh (Table-6 & 7).

Of the total Power Exchange transactions, top 5 states selling 88.90% of the volume are Chattisgarh, West Bengal, Gujarat, Delhi and Himachal Pradesh and top 5 states purchasing 95.21% of the volume are Maharashtra, Tamil Nadu, Andhra Pradesh, Rajasthan and Karnataka (Table-8 & 9).

Of the total UI transactions, top 5 states exporting 52.20% of the volume are Chattisgarh, Gujarat, Delhi, Uttar Pradesh and Madhya Pradesh and top 5 states importing 61.24% of the volume are Rajasthan, Karnataka, Haryana, Andhra Pradesh and Punjab (Table-10 & 11).

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-12. Top 5 states those selling electricity are Chattisgarh, Delhi, West Bengal, Gujarat and Punjab and top 5 states those purchasing electricity are Rajasthan, Maharashtra, Andhara Pradesh, Karnataka and Haryana.

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

- The percentage of short-term transactions of electricity to total electricity generation was 7.11%.
- Of the total short-term transactions of electricity, 48.78% transacted through bilateral (through traders and directly by distribution companies) followed by 43.95% through UI and 7.28% through Power Exchanges.
- The price of electricity transacted through trading licensees is comparable with the price of electricity transacted through Power Exchanges and UI. The price range was between Rs.6.16 Rs.7.61 per KWh.
- The gap between the volume of buy bids and sale bids shows that there was less demand for electricity than the supply offered through power exchanges and it was 0.47 times in IEX and 0.39 times in PXIL.
- Top 5 states those selling electricity are Chattisgarh, Delhi, West Bengal, Gujarat and Punjab and top 5 states those purchasing electricity are Rajasthan, Maharashtra, Andhara Pradesh, Karnataka and Haryana.

Format-1

VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (ALL INDIA) (MUs)						1 Offinat-1
Month:	January 200		,,,			Total Electricity
Date	(Market Clearing Ui Volume)		Unscheduled Interchange (Over	Generation (MUs) as given at CEA Website*		
	Through Traders	Direct	IEX	PXI	Drawl+Under Generation)	
1	47.70	14.69	10.10	1.80	61.40	1974.16
2	48.13	12.92	14.37	1.84	57.89	1972.75
3	52.11	12.24	9.41	2.31	58.03	1972.39
4	53.66	12.47	6.46	1.50	65.36	1945.06
5	57.31	12.20	10.81	1.68	55.91	1981.43
6	61.93	12.64	10.13	1.16	51.96	1979.18
7	59.13	11.77	10.95	1.16	51.60	1965.88
8	61.52	11.56	11.65	0.00	54.87	1940.24
9	61.55	10.95	12.82	1.47	52.13	1943.45
10	58.73	12.49	11.72	0.55	55.82	1935.88
11	58.97	12.01	7.80	0.00	61.24	1925.16
12	55.42	12.86	5.79	0.00	54.29	1958.69
13	55.08	13.31	10.07	1.30	58.20	1965.48
14	54.47	13.43	5.89	3.05	69.36	1935.41
15	51.04	13.67	8.60	0.43	75.11	1935.86
16	50.71	12.96	8.21	1.62	71.13	1928.84
17	53.25	13.32	5.95	0.12	66.51	1937.05
18	51.77	13.27	5.29	0.00	76.19	1912.71
19	54.30	12.68	10.31	0.00	65.19	1974.16
20	52.23	13.77	11.52	0.00	60.20	1979.04
21	54.95	13.22	9.84	1.20	59.93	2000.88
22	55.48	13.82	9.43	0.00	59.81	2011.99
23	55.28	13.60	11.50	0.50	57.43	2008.30
24	52.24	13.37	13.44	0.81	57.28	2006.83
25	51.80	14.56	9.58	0.05	71.76	2001.46
26	55.80	13.12	4.48	0.00	76.58	1940.88
27	57.28	11.82	9.24	1.28	59.29	1989.48
28	56.69	14.24	10.09	0.00	56.12	2041.15
29	58.40	14.15	9.58	0.00	60.64	2037.19
30	59.45	12.67	8.32	0.72	65.85	2066.50
31	58.91	16.29	8.37	0.18	64.35	2026.290
Total	1715.29	406.08	291.70	24.73	1911.39	61193.77

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

Format-2

	Format-2 PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (Rs/KWh)												
Month: Jan	uary 20	09											
Market Segment			nge (IEX)	Powe	r Exchar	nge (PXIL)	Under Drawl/Over Drawl from the Grid (UI)						
	Mini-	Maxi-	Weighted	Mini-	Maxi-	Weighted		NEW Gri	d		SR Grid		
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**	
1.1.2009	1.65	8.05	7.01	3.75	7.97	7.32	0.40	8.92	4.42	0.96	10.00	7.42	
2.1.2009	4.00	8.10	7.29	0.00	7.97	7.11	0.08	8.56	4.95	0.72	10.00	7.57	
3.1.2009	4.00	8.00	6.60	0.00	8.05	7.49	1.28	9.10	5.48	0.88	10.00	7.87	
4.1.2009	3.00	7.00	5.76	4.00	7.00	7.00	0.80	7.84	4.72	2.00	10.00	7.37	
5.1.2009	3.40	7.90	6.95	4.00	7.90	7.90	0.72	9.64	5.47	1.52	10.00	7.98	
6.1.2009	3.30	7.40	6.67	4.00	7.50	7.50	1.76	9.82	6.55	2.24	10.00	8.75	
7.1.2009	3.50	7.50	7.05	4.00	7.50	7.50	2.48	10.00	7.27	2.64	10.00	8.93	
8.1.2009	3.25	7.95	6.88	0.00	0.00	0.00	2.32	10.00	6.57	4.42	10.00	8.84	
9.1.2009	3.50	8.00	7.27	0.00	7.50	7.43	2.48	10.00	7.64	2.98	10.00	8.99	
10.1.2009	3.50	8.05	7.35	0.00	8.25	7.71	2.64	10.00	7.40	1.84	10.00	8.39	
11.1.2009	3.50	7.00	6.49	0.00	0.00	0.00	1.04	8.92	4.78	2.08	10.00	7.73	
12.1.2009	3.50	8.00	7.07	0.00	0.00	0.00	0.80	8.92	4.74	1.04	10.00	7.51	
13.1.2009	2.50	8.05	6.95	4.50	7.93	7.83	0.64	8.56	4.03	1.20	10.00	7.04	
14.1.2009	2.29	7.50	5.96	4.50	6.40	6.39	0.48	6.94	2.93	0.72	9.82	4.67	
15.1.2009	2.80	6.00	5.66	0.00	6.00	6.00	0.40	6.04	2.77	0.00	10.00	4.75	
16.1.2009	2.04	5.50	5.22	2.45	6.00	5.98	0.72	8.20	4.02	0.56	10.00	6.29	
17.1.2009	1.75	5.00	4.76	2.45	4.05	3.92	0.56	7.30	3.84	0.88	10.00	6.89	
18.1.2009	2.01	5.00	4.48	0.00	0.00	0.00	0.96	6.94	3.57	1.84	9.64	6.50	
19.1.2009	3.00	6.00	5.25	0.00	0.00	0.00	0.56	6.94	3.73	1.60	10.00	6.88	
20.1.2009	3.00	6.00	5.53	0.00	0.00	0.00	0.96	8.74	4.80	2.24	10.00	7.84	
21.1.2009	3.00	5.50	5.11	4.50	6.00	6.00	1.36	8.92	5.51	2.72	10.00	8.17	
22.1.2009	3.00	7.00	5.35	0.00	0.00	0.00	0.88	8.20	4.67	2.16	10.00	7.88	
23.1.2009	3.00	7.00	5.79	4.50	6.13	6.03	1.52	9.10	5.05	1.84	10.00	8.20	
24.1.2009	1.60	7.10	5.73	2.99	6.05	6.01	1.28	8.74	5.26	1.44	10.00	7.85	
25.1.2009	1.90	6.00	5.02	2.49	6.00	2.49	1.60	7.12	4.05	1.68	9.82	7.10	
26.1.2009	1.65	5.50	4.36	0.00	0.00	0.00	1.44	8.38	3.64	1.44	9.82	7.04	
27.1.2009	1.65	8.05	6.16	0.00	6.10	5.97	0.40	8.92	4.96	1.76	10.00	8.02	
28.1.2009	1.65	7.00	5.70	0.00	0.00	0.00	2.00	8.74	5.82	2.80	10.00	8.40	
29.1.2009	1.65	7.00	6.20	0.00	0.00	0.00	1.92	9.64	5.69	2.16	10.00	8.16	
30.1.2009	2.98	6.50	6.00	3.00	6.70	4.78	2.24	8.74	5.02	2.72	10.00	8.44	
31.1.2009	1.75	7.00	5.91	5.00	7.15	6.39	1.92	8.92	5.38	2.40	10.00	8.48	
	1.60#	8.10#	6.16	0.00#	8.25#	6.86	0.08#	10.00#	4.99	0.00#	10.00#	7.61	

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

Format-3

	Format-3 VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (STATE-WISE) (MUs)									
Month: January 2009		JF SHUK I-	IERWI IRA	INSACTIO	NS OF ELE	CIRICIII	(STATE-W	ISE) (IVIUS)		
Name of the State/UT/Other	Through Bilateral			Through	Through Power Exchange		Through UI with Regional Grid			
Regional Entity	Sale	Pur- chase	Net*	Sale	Pur- chase	Net*	Export (Under Drawl)	Import (Over Drawl)	Net*	Total Net**
Punjab	317.18	112.17	-205.01	0.00	0.00	0.00	69.03	124.14	55.11	-149.90
Haryana	10.48	27.22	16.74	0.00	0.00	0.00	6.14	237.63	231.48	248.22
Rajasthan	1.19	505.78	504.59	8.34	30.84	22.51	9.19	341.20	332.01	859.10
Delhi	318.02	12.76	-305.26	30.63	0.12	-30.50	145.40	37.58	-107.82	-443.59
Uttar Pradesh	1.08	16.27	15.20	0.00	0.00	0.00	101.44	72.03	-29.41	-14.22
Uttarakhand	0.00	139.28	139.28	0.00	0.00	0.00	14.46	25.10	10.63	149.91
Himachal Pradesh	13.02	110.78	97.76	12.84	0.00	-12.84	42.78	8.95	-33.84	51.09
J & K	0.00	226.98	226.98	0.00	0.00	0.00	63.97	25.71	-38.27	188.72
UT Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	8.55	7.78	-0.77	-0.77
MP	37.07	180.75	143.67	0.00	0.00	0.00	92.22	83.23	-8.99	134.68
Maharashtra	74.10	415.29	341.18	1.36	146.76	145.40	49.59	102.86	53.27	539.85
Gujarat	39.09	0.00	-39.09	33.24	0.00	-33.24	161.63	38.58	-123.05	-195.38
Chattisgarh	235.00	0.00	-235.00	133.83	0.00	-133.83	303.02	11.65	-291.37	-660.19
Daman and Diu	0.00	0.00	0.00	0.00	0.00	0.00	2.41	7.85	5.44	5.44
Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.26	39.17	38.92	38.92
Andhra Pradesh	39.14	203.31	164.18	0.00	45.83	45.83	47.15	137.78	90.63	300.63
Karnataka	11.42	1.79	-9.63	0.00	19.27	19.27	5.24	274.42	269.18	278.82
Kerala	0.00	14.18	14.18	0.00	15.02	15.02	19.49	15.76	-3.74	25.46
Tamilnadu	87.89	112.94	25.05	0.00	58.53	58.53	75.92	68.87	-7.05	76.53
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	31.40	0.27	-31.13	-31.13
West Bengal	186.28	0.00	-186.28	65.16	0.00	-65.16	73.73	19.23	-54.50	-305.94
Orissa	31.01	0.00	-31.01	0.00	0.00	0.00	23.37	29.29	5.92	-25.09
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	18.28	16.92	-1.36	-1.36
Jharkhand	0.00	0.00	0.00	0.00	0.00	0.00	32.35	10.05	-22.30	-22.30
Sikkim	26.35	0.00	-26.35	0.00	0.00	0.00	0.80	11.06	10.26	-16.09
DVC	50.93	0.00	-50.93	0.00	0.00	0.00	32.80	44.03	11.24	-39.70
Arunachal Pradesh	3.02	0.00	-3.02	0.00	0.00	0.00	1.45	6.38	4.93	1.91
Assam	0.00	39.12	39.12	5.60	0.00	-5.60	46.19	2.10	-44.09	-10.57
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	4.90	4.84	-0.07	-0.07
Meghalaya	0.00	0.25	0.25	0.00	0.00	0.00	5.55	6.30	0.75	1.00
Mizoram	0.00	0.11	0.11	0.00	0.00	0.00	0.38	4.32	3.95	4.06
Nagaland	1.80	0.00	-1.80	0.00	0.00	0.00	0.78	4.07	3.29	1.49
Tripura	0.38	0.00	-0.38	8.93	0.00	-8.93	14.24	0.74	-13.50	-22.81
Goa	0.00	2.39	2.39	10.19	0.00	-10.19	35.56	1.07	-34.49	-42.29

Source: NLDC

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

 $<sup>^{\</sup>star\star}$  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- term transactions	% to Total Generation		
1	Bilateral	2121.37	48.78%	3.47%		
	(i) Through Traders	1715.29	39.44%	2.80%		
	(ii) Direct	406.08	9.34%	0.66%		
2	Through Power Exchange	316.43	7.28%	0.52%		
3	Through UI	1911.39	43.95%	3.12%		
	Total	4349.19	100.00%	7.11%		
	Total Generation	61193.77				

Source: NLDC

Table-2: PRICE OF POWER TRANSACTED THROUGH TRADERS					
Sr.No	Period of Trade	Weighted Average Sale Price (Rs)			
1	RTC	7.43			
2	PEAK	8.55			
3	OFF PEAK	6.78			
	Total	7.23			

Source: Information submitted by trading licensees

Table-3: PRICE OF POWER TRANSACTED THROUGH TRADERS					
Sr.No Sale Price (Rs/KWh)					
1	Minimum	1.04			
2	Maximum	9.25			
3	Weighted Average	7.23			

Source: Information submitted by trading licensees

Table-4: PRICE OF POWER TRANSACTED THROUGH POWER EXCHANGE (Rs/KWh)						
Sr.No	MCP IEX PXIL					
1	Minimum	1.60	0.00			
2	Maximum	8.10	8.25			
3	Weighted Average	6.16	6.86			

Source: Information submitted by IEX and PXIL

Table-5: PRICE OF POWER TRANSACTED THROUGH UI (Rs/KWh)					
Sr.No		NEW Grid	SR Grid		
1	Minimum	0.08	0.00		
2	Maximum	10.00	10.00		
3	Average	4.99	7.61		

Source: NLDC

Table-6: VOLUME OF ELECTRICITY SALE BY STATES THROUGH BILATERAL				
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume		
Delhi	318.02	21.42%		
Punjab	317.18	21.37%		
Chattisgarh	235.00	15.83%		
West Bengal	186.28	12.55%		
Tamilnadu	87.89	5.92%		
Maharashtra	74.10	4.99%		
DVC	50.93	3.43%		
Andhra Pradesh	39.14	2.64%		
Gujarat	39.09	2.63%		
MP	37.07	2.50%		
Orissa	31.01	2.09%		
Sikkim	26.35	1.78%		
Himachal Pradesh	13.02	0.88%		
Karnataka	11.42	0.77%		
Haryana	10.48	0.71%		
Arunachal Pradesh	3.02	0.20%		
Nagaland	1.80	0.12%		
Rajasthan	1.19	0.08%		
Uttar Pradesh	1.08	0.07%		
Tripura	0.38	0.03%		
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%		
Pondicherry	0.00	0.00%		
Bihar	0.00	0.00%		
Jharkhand	0.00	0.00%		
Assam	0.00	0.00%		
Manipur	0.00	0.00%		
Meghalaya	0.00	0.00%		
Mizoram	0.00	0.00%		
Goa	0.00	0.00%		
Total	1484.45	100.00%		
Volume of sale by top 5 States	1144.37	77.09%		

	Table-7: VOLUME OF ELECTRICITY PURCHASE BY STATES THROUGH BILATERAL				
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume			
Rajasthan	505.78	23.84%			
Maharashtra	415.29	19.58%			
J&K	226.98	10.70%			
Andhra Pradesh	203.31	9.58%			
MP	180.75	8.52%			
Uttarakhand	139.28	6.57%			
Tamilnadu	112.94	5.32%			
Punjab	112.17	5.29%			
Himachal Pradesh	110.78	5.22%			
Assam	39.12	1.84%			
Haryana	27.22	1.28%			
Uttar Pradesh	16.27	0.77%			
Kerala	14.18	0.67%			
Delhi	12.76	0.60%			
Goa	2.39	0.11%			
Karnataka	1.79	0.08%			
Meghalaya	0.25	0.01%			
Mizoram	0.11	0.01%			
UT Chandigarh	0.00	0.00%			
Gujarat	0.00	0.00%			
Chattisgarh	0.00	0.00%			
Daman and Diu	0.00	0.00%			
Dadra & Nagar Haveli	0.00	0.00%			
Pondicherry	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%			
Nagaland	0.00	0.00%			
Tripura	0.00	0.00%			
Total	2121.37	100.00%			
Volume of purchase by top 5 States	1532.11	72.22%			

Table-8: VOLUME OF ELECTRICITY SALE BY STATES THROUGH POWER EXCHANGE			
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume	
Chattisgarh	133.83	43.16%	
West Bengal	65.16	21.01%	
Gujarat	33.24	10.72%	
Delhi	30.63	9.88%	
Himachal Pradesh	12.84	4.14%	
Goa	10.19	3.28%	
Tripura	8.93	2.88%	
Rajasthan	8.34	2.69%	
Assam	5.60	1.80%	
Maharashtra	1.36	0.44%	
Punjab	0.00	0.00%	
Haryana	0.00	0.00%	
Uttar Pradesh	0.00	0.00%	
Uttarakhand	0.00	0.00%	
J&K	0.00	0.00%	
UT Chandigarh	0.00	0.00%	
MP	0.00	0.00%	
Daman and Diu	0.00	0.00%	
Dadra & Nagar Haveli	0.00	0.00%	
Andhra Pradesh	0.00	0.00%	
Karnataka	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%	
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%	
Total	310.10	100.00%	
Volume of sale by top 5 States	275.69	88.90%	

Table-9: VOLUME OF E STATES THROUG	LECTRICITY PURC	
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume
Maharashtra	146.76	46.39%
Tamilnadu	58.53	18.50%
Andhra Pradesh	45.83	14.49%
Rajasthan	30.84	9.75%
Karnataka	19.27	6.09%
Kerala	15.02	4.75%
Delhi	0.12	0.04%
Punjab	0.00	0.00%
Haryana	0.00	0.00%
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%
Gujarat	0.00	0.00%
Chattisgarh	0.00	0.00%
Daman and Diu	0.00	0.00%
Dadra & Nagar Haveli	0.00	0.00%
Pondicherry	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%
Assam	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%
Total	316.37	100.00%
Volume of purchase by top 5 States	301.22	95.21%

Table-10: VOLUME OF ELECTRICITY EXPORT BY STATES THROUGH UI		
Name of the State/UT/Other Regional Entity	Volume of Export (MUs)	% of Volume
Chattisgarh	303.02	19.68%
Gujarat	161.63	10.50%
Delhi	145.40	9.44%
Uttar Pradesh	101.44	6.59%
MP	92.22	5.99%
Tamilnadu	75.92	4.93%
West Bengal	73.73	4.79%
Punjab	69.03	4.48%
J&K	63.97	4.15%
Maharashtra	49.59	3.22%
Andhra Pradesh	47.15	3.06%
Assam	46.19	3.00%
Himachal Pradesh	42.78	2.78%
Goa	35.56	2.31%
DVC	32.80	2.13%
Jharkhand	32.35	2.10%
Pondicherry	31.40	2.04%
Orissa	23.37	1.52%
Kerala	19.49	1.27%
Bihar	18.28	1.19%
Uttarakhand	14.46	0.94%
Tripura	14.24	0.92%
Rajasthan	9.19	0.60%
UT Chandigarh	8.55	0.56%
Haryana	6.14	0.40%
Meghalaya	5.55	0.36%
Karnataka	5.24	0.34%
Manipur	4.90	0.32%
Daman and Diu	2.41	0.16%
Arunachal Pradesh	1.45	0.09%
Sikkim	0.80	0.05%
Nagaland	0.78	0.05%
Mizoram	0.38	0.02%
Dadra & Nagar Haveli	0.26	0.02%
Total	1539.67	100.00%
Volume of Export by top 5 States	803.71	52.20%

Table-11: VOLUME OF ELECTRICITY IMPORT BY STATES THROUGH UI		
Name of the State/UT/Other Regional Entity	Volume of Import (MUs)	% of Volume
Rajasthan	341.20	18.74%
Karnataka	274.42	15.07%
Haryana	237.63	13.05%
Andhra Pradesh	137.78	7.57%
Punjab	124.14	6.82%
Maharashtra	102.86	5.65%
MP	83.23	4.57%
Uttar Pradesh	72.03	3.96%
Tamilnadu	68.87	3.78%
DVC	44.03	2.42%
Dadra & Nagar Haveli	39.17	2.15%
Gujarat	38.58	2.12%
Delhi	37.58	2.06%
Orissa	29.29	1.61%
J&K	25.71	1.41%
Uttarakhand	25.10	1.38%
West Bengal	19.23	1.06%
Bihar	16.92	0.93%
Kerala	15.76	0.87%
Chattisgarh	11.65	0.64%
Sikkim	11.06	0.61%
Jharkhand	10.05	0.55%
Himachal Pradesh	8.95	0.49%
Daman and Diu	7.85	0.43%
UT Chandigarh	7.78	0.43%
Arunachal Pradesh	6.38	0.35%
Meghalaya	6.30	0.35%
Manipur	4.84	0.27%
Mizoram	4.32	0.24%
Nagaland	4.07	0.22%
Assam	2.10	0.12%
Goa	1.07	0.06%
Tripura	0.74	0.04%
Pondicherry	0.27	0.01%
Total	1820.93	100.00%
Volume of Export by top 5 States	1115.16	61.24%

Sr.No	Name of the State/UT/Other Regional Entity	Total short-term transactions*
1	Rajasthan	859.10
2	Maharashtra	539.85
3	Andhra Pradesh	300.63
4	Karnataka	278.82
5	Haryana	248.22
6	J&K	188.72
7	Uttarakhand	149.91
8	MP	134.68
9	Tamilnadu	76.53
10	Himachal Pradesh	51.09
11	Dadra & Nagar Haveli	38.92
12	Kerala	25.46
13	Daman and Diu	5.44
14	Mizoram	4.06
15	Arunachal Pradesh	1.91
16	Nagaland	1.49
17	Meghalaya	1.00
18	Manipur	-0.07
19	UT Chandigarh	-0.77
20	Bihar	-1.36
21	Assam	-10.57
22	Uttar Pradesh	-14.22
23	Sikkim	-16.09
24	Jharkhand	-22.30
25	Tripura	-22.81
26	Orissa	-25.09
27	Pondicherry	-31.13
28	DVC	-39.70
29	Goa	-42.29
30	Punjab	-149.90
31	Gujarat	-195.38
32	West Bengal	-305.94
33	Delhi	-443.59
34	Chattisgarh	-660.19
* Total	net short-term transactions included, power exchange and UI	



