### MONTHLY REPORT ON SHORT-TERM TRANSACTIONS OF ELECTRICITY (February 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 January 2009 was prepared and posted on the website of CERC. This is the report for the month of February 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 February 2009, total electricity generation excluding generation from renewables and captive power plants in India was 57121.74 MUs (Table-1).

Of the total electricity generation, 3935.62 MUs (6.89%) transacted through shortterm i.e. 2148.94 MUs (3.76%) through Bilateral (through traders and direct between distribution companies), followed by 1569.11 MUs (2.75%) through Unscheduled Interchange (UI) and 217.57 MUs (0.38%) through Power Exchanges (IEX and PXIL) (Table-1).

Of the total short-term transactions, Bilateral constitute 54.60% (42.63% through traders and 11.97% direct between distribution companies) followed by 39.87% through UI and 5.53% through Power Exchanges (Table-1).

The volume of electricity transacted through IEX and PXIL was 180.80 MUs and 36.77 MUs respectively. The volume of total Buy bids and Sale bids was 437.82 MUs and 384.23 MUs respectively in IEX and 57.36 MUs and 88.50 MUs respectively in PXIL. The gap between the volume of buy bids and sale bids placed through power exchange shows that

there was more demand (1.14 times) when compared with the supply offered through IEX and it was less demand (0.65 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.6.58. 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.6.89, Rs.8.16 and Rs.6.19 respectively. Minimum and Maximum sale price was Rs.2.04 and Rs.9.04 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.10.00 and 6.85 respectively in IEX and Rs.0.00, Rs.10.00 and Rs.7.42 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.4.89 in the NEW Grid and Rs.7.68 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.0.24 and Rs.9.64 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 71.19% of the volume are Chattisgarh, Delhi, Punjab, West Bengal and Haryana and top 5 states purchasing 73.05% of the volume are Rajasthan, Andhara Pradesh, Maharashtra, Tamil Nadu and Madhya Pradesh (Table-6 & 7).

Of the total Power Exchange transactions, top 5 states selling 87.50% of the volume are Gujarat, West Bengal, Chattisgarh, Delhi and Assam and top 5 states purchasing 98.15% of the volume are Maharashtra, Andhra Pradesh, Tamil Nadu, Haryana and Rajasthan (Table-8 & 9).

Of the total UI transactions, top 5 states exporting 51.12% of the volume are Delhi, Gujarat, Chattisgarh, Uttar Pradesh and Tamil Nadu and top 5 states importing 59.81% of the volume are Rajasthan, Haryana, Karnataka, Andhra Pradesh and Maharashtra (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, Gujarat, West Bengal and Punjab and top 5 states those purchasing electricity are Rajasthan, Andhara Pradesh, Maharashtra, Karnataka and Tamil Nadu.

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

- The percentage of short-term transactions of electricity to total electricity generation was 6.89%.
- Of the total short-term transactions of electricity, 54.60% transacted through bilateral (through traders and directly by distribution companies) followed by 39.87% through UI and 5.53% 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.6.58 Rs.7.68 per KWh.
- The gap between the volume of buy bids and sale bids placed through power exchange shows that there was more demand (1.14 times) when compared with the supply offered through IEX and it was less demand (0.65 times) when compared with the supply offered through PXIL.
- Top 5 states those selling electricity are Chattisgarh, Delhi, Gujarat, West Bengal and Punjab and top 5 states those purchasing electricity are Rajasthan, Andhara Pradesh, Maharashtra, Karnataka and Tamil Nadu.

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			ANSACTION (MUs)	S OF ELEC	TRICITY (ALL INDIA)			
Month:	Total Electricity							
Date		(Marke		Bilateral		Power Exchange (Market Clearing Volume) Unscheduled Interchange (Over		Generation (MUs) as given at CEA Website
	Through Traders	Direct	IEX	PXI	Drawl+Under Generation)			
1	48.51	18.42	9.03	0.35	56.55	2018.34		
2	49.35	17.27	7.70	1.10	57.41	2017.89		
3	52.92	17.24	5.81	1.10	61.01	2038.84		
4	52.33	18.04	6.86	1.40	58.35	2041.53		
5	56.36	17.34	8.51	1.95	51.97	2043.09		
6	55.99	17.21	5.44	2.08	62.35	2035.36		
7	58.23	17.57	7.14	2.17	59.38	2039.50		
8	57.56	19.05	8.37	2.06	70.74	1992.31		
9	58.17	17.75	6.64	0.64	57.58	2012.27		
10	58.94	17.80	6.15	0.72	64.99	2028.27		
11	56.09	17.92	6.71	1.23	64.78	2000.09		
12	57.23	17.10	6.31	1.87	55.60	2033.15		
13	57.78	17.60	8.38	1.96	50.83	2020.72		
14	60.54	17.30	8.59	1.81	59.71	2033.34		
15	60.83	17.05	10.44	1.30	65.28	1986.02		
16	62.86	15.59	6.73	0.60	59.53	2026.39		
17	65.49	15.69	7.66	1.13	50.39	2031.43		
18	67.70	15.66	4.88	1.40	54.20	2048.98		
19	67.11	15.40	4.80	1.43	53.28	2044.76		
20	64.29	15.26	4.24	0.29	53.62	2041.36		
21	67.23	16.71	2.47	1.50	58.56	2056.00		
22	60.72	15.56	4.69	0.46	59.73	2011.76		
23	60.01	14.76	5.25	0.96	52.74	2068.49		
24	62.04	16.25	8.34	1.56	45.19	2069.51		
25	64.36	16.52	5.55	0.87	41.79	2090.99		
26	65.89	16.58	5.87	0.85	40.28	2078.72		
27	64.12	16.16	3.71	1.70	48.17	2097.06		
28	65.27	16.21	4.52	2.30	55.08	2115.57		
Total	1677.94	471.00	180.80	36.77	1569.11	57121.74		

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

Format-2 

		PI	RICE OF SHO	ORT-TER	MTRANS	SACTIONS O	F ELEC	RICITY	(Rs/KWh)			Format-2	
Month: Feb			(15)()	_						.,			
Market Segment	······································			Powe	Power Exchange (PXIL)			Under Drawl/Over Drawl from the Grid (UI)					
	Mini- mum MCP	Maxi- mum MCP	Weighted Average*	Mini- mum MCP	Maxi- mum MCP	Weighted Average*		NEW Gr	id		SR Grid		
Date							Mini- mum Price	Maxi- mum Price	Ave- rage Price**	Mini- mum Price	Maxi- mum Price	Ave- rage Price**	
1.2.2009	1.75	7.00	5.60	4.50	6.10	6.10	0.88	8.20	4.66	1.92	10.00	8.02	
2.2.2009	3.00	8.05	5.84	4.50	7.00	6.34	1.52	8.38	5.47	3.52	10.00	8.43	
3.2.2009	1.60	8.05	6.28	4.50	7.00	6.45	2.32	8.74	6.13	5.86	10.00	8.88	
4.2.2009	1.60	7.10	6.28	4.50	7.03	6.49	2.40	9.46	6.16	4.60	10.00	9.05	
5.2.2009	1.60	7.00	6.03	4.50	6.53	6.53	1.84	9.64	5.87	2.72	10.00	8.55	
6.2.2009	1.60	8.05	6.66	4.50	6.70	6.62	2.16	8.38	6.00	1.92	10.00	8.11	
7.2.2009	1.60	7.50	6.45	4.50	7.00	6.81	1.52	8.02	4.98	1.52	10.00	8.18	
8.2.2009	2.50	7.40	6.38	4.50	7.00	6.86	0.72	8.92	4.59	0.56	10.00	7.32	
9.2.2009	1.60	8.05	6.93	4.50	7.40	7.27	1.04	7.84	3.76	1.60	10.00	7.13	
10.2.2009	3.00	8.05	6.75	4.50	7.95	7.44	1.44	8.92	5.36	1.92	10.00	8.16	
11.2.2009	2.50	7.99	6.51	4.80	7.99	7.88	1.84	8.56	5.02	1.92	10.00	8.08	
12.2.2009	1.60	8.10	6.65	4.80	7.51	7.45	1.12	8.20	4.77	1.68	10.00	8.64	
13.2.2009	3.30	8.50	6.77	4.80	7.50	7.34	1.36	9.10	5.09	1.84	10.00	7.80	
14.2.2009	2.00	8.10	7.16	0.00	8.00	7.48	0.72	8.74	4.14	0.40	10.00	6.10	
15.2.2009	1.60	7.50	6.46	4.80	7.00	6.98	0.72	9.10	5.05	0.64	10.00	7.36	
16.2.2009	3.50	8.75	6.80	5.00	8.10	7.51	0.88	8.56	5.00	1.60	10.00	7.70	
17.2.2009	3.50	8.70	6.91	5.00	8.10	7.79	0.48	9.64	5.12	1.20	10.00	7.35	
18.2.2009	2.50	8.75	7.26	5.00	8.30	7.82	0.72	8.74	5.29	0.48	10.00	6.98	
19.2.2009	3.00	8.55	7.18	5.00	8.55	8.34	0.72	9.64	5.17	0.00	10.00	6.89	
20.2.2009	1.60	8.40	7.16	5.00	8.40	8.10	0.64	9.10	4.42	2.24	10.00	7.70	
21.2.2009	1.60	8.05	6.92	5.00	8.05	7.84	1.12	9.10	4.28	1.44	10.00	6.59	
22.2.2009	2.00	6.99	6.36	5.00	6.99	6.83	0.24	8.02	4.16	0.96	10.00	7.26	
23.2.2009	3.50	7.75	6.82	5.00	7.70	7.40	0.96	8.02	5.21	2.40	10.00	8.08	
24.2.2009	4.50	8.75	7.40	5.00	7.69	7.06	1.20	8.92	5.85	1.68	10.00	8.09	
25.2.2009	4.00	9.25	8.12	5.00	8.45	7.26	1.20	8.74	4.54	1.68	10.00	7.01	
26.2.2009	4.00	9.75	8.96	3.50	9.10	8.64	0.48	7.84	3.98	1.44	10.00	7.23	
27.2.2009	4.10	10.00	9.44	3.50	9.75	9.21	1.20	6.76	3.82	2.00	10.00	7.67	
28.2.2009	7.50	10.00	9.33	6.00	10.00	8.98	0.80	6.58	3.06	0.88	10.00	6.74	
	1.60\$	10.00#	6.85	0.00#	10.00#	7.42	0.24#	9.64#	4.89	0.00#	10.00#	7.68	

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

# Maximum/Minimum in the month

	VOLUME (	OF SHORT-	TERM TRA	NSACTIO	NS OF ELE	ECTRICITY	(STATE-W	'ISE) (MUs)		
Month: February 200	)9									
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	272.31	4.71	-267.60	0.00	0.00	0.00	61.91	81.87	19.96	-247.63
Haryana	130.04	0.52	-129.52	0.00	13.42	13.42	18.01	165.19	147.17	31.07
Rajasthan	68.20	462.33	394.13	6.00	8.45	2.45	1.76	341.96	340.20	736.79
Delhi	317.70	11.57	-306.13	22.49	0.09	-22.40	169.48	7.97	-161.51	-490.04
Uttar Pradesh	8.38	57.43	49.06	0.00	0.00	0.00	91.05	87.31	-3.73	45.33
Uttarakhand	0.00	122.08	122.08	0.00	0.00	0.00	18.39	25.06	6.67	128.74
Himachal Pradesh	4.71	148.15	143.44	7.64	0.00	-7.64	26.62	10.01	-16.61	119.19
J & K	0.00	97.08	97.08	0.00	0.00	0.00	53.85	16.36	-37.49	59.59
UT Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	10.24	3.28	-6.95	-6.95
MP	71.91	164.83	92.92	0.00	0.00	0.00	46.95	70.66	23.71	116.63
Maharashtra	67.32	388.25	320.93	1.66	88.89	87.24	36.01	95.53	59.52	467.68
Gujarat	87.04	0.00	-87.04	101.68	0.00	-101.68	145.00	34.80	-110.19	-298.91
Chattisgarh	411.41	0.00	-411.41	27.47	0.00	-27.47	131.05	18.96	-112.09	-550.97
Daman and Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.01	20.47	20.47	20.47
Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.24	62.77	62.54	62.54
Andhra Pradesh	0.00	397.36	397.36	0.00	69.18	69.18	22.43	133.27	110.84	577.39
Karnataka	0.00	90.15	90.15	0.00	2.04	2.04	2.88	153.21	150.34	242.53
Kerala	99.96	8.48	-91.48	0.00	0.25	0.25	32.69	3.00	-29.70	-120.92
Tamilnadu	16.80	230.15	213.35	0.00	33.58	33.58	90.92	37.08	-53.84	193.09
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	18.89	0.31	-18.58	-18.58
West Bengal	182.14	0.43	-181.71	29.46	0.00	-29.46	60.99	12.16	-48.83	-260.00
Orissa	28.81	0.16	-28.64	0.00	0.00	0.00	21.96	24.90	2.95	-25.70
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	22.38	9.65	-12.73	-12.73
Jharkhand	0.00	0.00	0.00	0.00	0.00	0.00	28.33	12.92	-15.42	-15.42
Sikkim	23.80	0.00	-23.80	0.00	0.00	0.00	1.11	11.47	10.35	-13.45
DVC	41.44	0.00	-41.44	0.00	0.00	0.00	37.12	22.31	-14.82	-56.26
Arunachal Pradesh	0.84	0.00	-0.84	0.00	0.00	0.00	1.06	2.60	1.54	0.70
Assam	0.00	57.12	57.12	9.04	0.00	-9.04	42.24	1.95	-40.29	7.79
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	4.27	3.54	-0.72	-0.72
Meghalaya	0.00	7.56	7.56	0.00	0.00	0.00	4.61	2.02	-2.59	4.97
Mizoram	0.00	0.00	0.00	0.00	1.65	1.65	0.46	3.77	3.31	4.96
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	1.98	2.45	0.47	0.47
Tripura	5.02	0.00	-5.02	5.01	0.00	-5.01	6.51	0.44	-6.07	-16.11
Goa Source: NI DC	7.39	0.57	-6.82	6.86	0.00	-6.86	16.05	7.29	-8.75	-22.44

Source: NLDC

 $^{\ast}$  (-) indicates sale and (+) indicates purchase

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

Tabl	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	2148.94	54.60%	3.76%		
	(i) Through Traders	1677.94	42.63%	2.94%		
	(ii) Direct	471.00	11.97%	0.82%		
2	Through Power Exchange	217.57	5.53%	0.38%		
3	Through UI	1569.11	39.87%	2.75%		
	Total	3935.62	100.00%	6.89%		
	Total Generation	57121.74				

Source: NLDC

Table-	Table-2: PRICE OF POWER TRANSACTED THROUGH TRADERS					
Sr.No	Period of Trade	Weighted Average Sale Price (Rs)				
1	RTC	6.89				
2	PEAK	8.16				
3	3 OFF PEAK 6.19					
	Total	6.58				

Source: Information submitted by trading licensees

Table-3: PRICE OF POWER TRANSACTED THROUGH TRADERS					
Sr.No Sale Price (Rs/KWh)					
1	Minimum	2.04			
2	Maximum	9.04			
3	3 Weighted Average 6.58				

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	10.00	10.00				
3	3 Weighted Average 6.85 7.42						

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	0.24	0.00		
2	Maximum	9.64	10.00		
3	Average	4.89	7.68		

Source: NLDC

THROUGH BILATERAL				
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume		
Chattisgarh	411.41	22.30%		
Delhi	317.70	17.22%		
Punjab	272.31	14.76%		
West Bengal	182.14	9.87%		
Haryana	130.04	7.05%		
Kerala	99.96	5.42%		
Gujarat	87.04	4.72%		
MP	71.91	3.90%		
Rajasthan	68.20	3.70%		
Maharashtra	67.32	3.65%		
DVC	41.44	2.25%		
Orissa	28.81	1.56%		
Sikkim	23.80	1.29%		
Tamilnadu	16.80	0.91%		
Uttar Pradesh	8.38	0.45%		
Goa	7.39	0.40%		
Tripura	5.02	0.27%		
Himachal Pradesh	4.71	0.26%		
Arunachal Pradesh	0.84	0.05%		
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%		
Andhra Pradesh	0.00	0.00%		
Karnataka	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%		
Nagaland	0.00	0.00%		
Total	1845.21	100.00%		
Volume of sale by top 5 States	1313.60	71.19%		

# Table-6: VOLUME OF ELECTRICITY SALE BY STATES THROUGH BILATERAL

	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	462.33	20.56%			
Andhra Pradesh	397.36	17.67%			
Maharashtra	388.25	17.26%			
Tamilnadu	230.15	10.23%			
MP	164.83	7.33%			
Himachal Pradesh	148.15	6.59%			
Uttarakhand	122.08	5.43%			
J&K	97.08	4.32%			
Karnataka	90.15	4.01%			
Uttar Pradesh	57.43	2.55%			
Assam	57.12	2.54%			
Delhi	11.57	0.51%			
Kerala	8.48	0.38%			
Meghalaya	7.56	0.34%			
Punjab	4.71	0.21%			
Goa	0.57	0.03%			
Haryana	0.52	0.02%			
West Bengal	0.43	0.02%			
Orissa	0.16	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%			
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%			
Total	2248.93	100.00%			
Volume of purchase by top 5 States	1642.91	73.05%			

# Table-7: VOLUME OF ELECTRICITY PURCHASE BY

THROUGH POWER EXCHANGE				
Name of the State/UT/Other Regional Entity	Volume of Sale (MUs)	% of Volume		
Gujarat	101.68	46.79%		
West Bengal	29.46	13.56%		
Chattisgarh	27.47	12.64%		
Delhi	22.49	10.35%		
Assam	9.04	4.16%		
Himachal Pradesh	7.64	3.51%		
Goa	6.86	3.16%		
Rajasthan	6.00	2.76%		
Tripura	5.01	2.31%		
Maharashtra	1.66	0.76%		
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	217.31	100.00%		
Volume of sale by top 5 States	190.14	87.50%		

### Table-8: VOLUME OF ELECTRICITY SALE BY STATES THROUGH POWER EXCHANGE

STATES THROUGH POWER EXCHANGE				
Name of the State/UT/Other Regional Entity	Volume of Purchase (MUs)	% of Volume		
Maharashtra	88.89	40.86%		
Andhra Pradesh	69.18	31.80%		
Tamilnadu	33.58	15.44%		
Haryana	13.42	6.17%		
Rajasthan	8.45	3.88%		
Karnataka	2.04	0.94%		
Mizoram	1.65	0.76%		
Kerala	0.25	0.11%		
Delhi	0.09	0.04%		
Punjab	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%		
Nagaland	0.00	0.00%		
Tripura	0.00	0.00%		
Goa	0.00	0.00%		
Total	217.57	100.00%		
Volume of purchase by top 5 States	213.53	98.15%		

# Table-9: VOLUME OF ELECTRICITY PURCHASE BY STATES THROUGH POWER EXCHANGE

Table-10: VOLUME OF ELECTRICITY EXPORT BY STATES THROUGH UI			
Name of the State/UT/Other Regional Entity	Volume of Export (MUs)	% of Volume	
Delhi	169.48	13.81%	
Gujarat	145.00	11.81%	
Chattisgarh	131.05	10.68%	
Uttar Pradesh	91.05	7.42%	
Tamilnadu	90.92	7.41%	
Punjab	61.91	5.04%	
West Bengal	60.99	4.97%	
J&K	53.85	4.39%	
MP	46.95	3.82%	
Assam	42.24	3.44%	
DVC	37.12	3.02%	
Maharashtra	36.01	2.93%	
Kerala	32.69	2.66%	
Jharkhand	28.33	2.31%	
Himachal Pradesh	26.62	2.17%	
Andhra Pradesh	22.43	1.83%	
Bihar	22.38	1.82%	
Orissa	21.96	1.79%	
Pondicherry	18.89	1.54%	
Uttarakhand	18.39	1.50%	
Haryana	18.01	1.47%	
Goa	16.05	1.31%	
UT Chandigarh	10.24	0.83%	
Tripura	6.51	0.53%	
Meghalaya	4.61	0.38%	
Manipur	4.27	0.35%	
Karnataka	2.88	0.23%	
Nagaland	1.98	0.16%	
Rajasthan	1.76	0.14%	
Sikkim	1.11	0.09%	
Arunachal Pradesh	1.06	0.09%	
Mizoram	0.46	0.04%	
Dadra & Nagar Haveli	0.24	0.02%	
Daman and Diu	0.01	0.00%	
Total	1227.44	100.00%	
Volume of Export by top 5 States	627.49	51.12%	

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	341.96	23.00%	
Haryana	165.19	11.11%	
Karnataka	153.21	10.31%	
Andhra Pradesh	133.27	8.97%	
Maharashtra	95.53	6.43%	
Uttar Pradesh	87.31	5.87%	
Punjab	81.87	5.51%	
MP	70.66	4.75%	
Dadra & Nagar Haveli	62.77	4.22%	
Tamilnadu	37.08	2.49%	
Gujarat	34.80	2.34%	
Uttarakhand	25.06	1.69%	
Orissa	24.90	1.68%	
DVC	22.31	1.50%	
Daman and Diu	20.47	1.38%	
Chattisgarh	18.96	1.28%	
J&K	16.36	1.10%	
Jharkhand	12.92	0.87%	
West Bengal	12.16	0.82%	
Sikkim	11.47	0.77%	
Himachal Pradesh	10.01	0.67%	
Bihar	9.65	0.65%	
Delhi	7.97	0.54%	
Goa	7.29	0.49%	
Mizoram	3.77	0.25%	
Manipur	3.54	0.24%	
UT Chandigarh	3.28	0.22%	
Kerala	3.00	0.20%	
Arunachal Pradesh	2.60	0.17%	
Nagaland	2.45	0.16%	
Meghalaya	2.02	0.14%	
Assam	1.95	0.13%	
Tripura	0.44	0.03%	
Pondicherry	0.31	0.02%	
Total	1486.57	100.00%	
Volume of Export by top 5			
States	889.17	59.81%	

Sr.No	Name of the State/UT/Other Regional Entity	Total short-term transactions*
1	Rajasthan	736.79
2	Andhra Pradesh	577.39
3	Maharashtra	467.68
4	Karnataka	242.53
5	Tamilnadu	193.09
6	Uttarakhand	128.74
7	Himachal Pradesh	119.19
8	MP	116.63
9	Dadra & Nagar Haveli	62.54
10	J&K	59.59
11	Uttar Pradesh	45.33
12	Haryana	31.07
13	Daman and Diu	20.47
14	Assam	7.79
15	Meghalaya	4.97
16	Mizoram	4.96
17	Arunachal Pradesh	0.70
18	Nagaland	0.47
19	Manipur	-0.72
20	UT Chandigarh	-6.95
21	Bihar	-12.73
22	Sikkim	-13.45
23	Jharkhand	-15.42
24	Tripura	-16.11
25	Pondicherry	-18.58
26	Goa	-22.44
27	Orissa	-25.70
28	DVC	-56.26
29	Kerala	-120.92
30	Punjab	-247.63
31	West Bengal	-260.00
32	Gujarat	-298.91
33	Delhi	-490.04
34	Chattisgarh	-550.97
	net short-term transactions include I, power exchange and UI	
(-) indic	ates sale and (+) indicates purcha	ase



