

**TRENDS IN SHORT-TERM TRANSACTIONS OF ELECTRICITY
DURING AUGUST TO DECEMBER 2008**

Using the MMC monthly reports, a trend analysis on short-term transactions of electricity has been made for the period from August to December 2008. Here, the short-term transactions of electricity includes, the electricity transacted through trading licensees, directly by state utilities, through power exchanges and through Unscheduled Interchange (UI). The trend analysis is mainly to see the trends in the volume and price of short-term transactions of electricity during the period. The analysis shows monthly trends as well as trend growth during the period. A comparison of short-term transactions of electricity to total electricity generation in India is also made. The volume and price of electricity transacted by trading licensees covers the details of volume of electricity transacted by each licensee and the price of electricity transacted during Round the Clock (RTC), Peak and Off-peak periods.

The electricity demand and supply vary from season to season, therefore, it is not appropriate to compare this month's data with the data of the immediately preceding month or the following month. Hence, there is a need for seasonal adjustment. The present analysis is limited to the period of 5 months i.e. from August to December 2008 as under:

I: Trends in volume of short-term transactions of electricity:

The trends in volume of short-term transactions of electricity are shown in Table 1- and 2. It is observed from the tables that there is no constant increase/decrease in the volume of short-term transactions of electricity. This trend may be emerged due to demand and supply which vary from season to season. The volume of short-term transactions of electricity to total electricity is varying between 7% to 8.5% during the period.

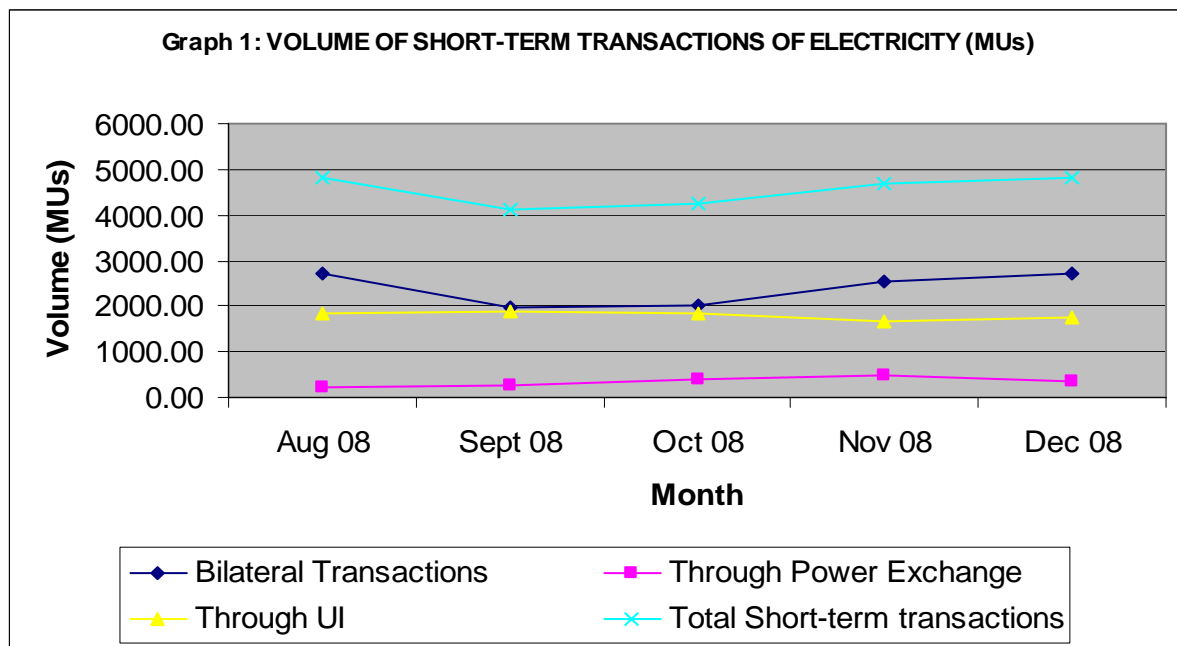
Table-1: VOLUME OF SHORT-TERM TRANSACTIONS OF ELECTRICITY					
Type of Transaction	Volume of short-term transactions (MUs)				
	Aug 08	Sept 08	Oct 08	Nov 08	Dec 08
1. Bilateral Transactions	2731.46	1970.45	2028.73	2547.24	2699.06
<i>(i) Through Traders</i>	2085.21	1604.40	1742.20	2182.46	2176.53
<i>(ii) Direct</i>	646.24	366.04	286.53	364.78	522.52
2. Power Exchange transactions	239.81	278.54	377.31	470.05	369.00
3. Transactions through UI	1860.48	1889.68	1826.14	1686.01	1765.08
Total Short-term transactions	4831.74	4138.67	4232.18	4703.29	4833.13
Total Electricity Generation in India	56379.77	59019.14	61966.84	58308.33	59635.41
% of short-term transactions to total electricity generation in India	8.57%	7.01%	6.83%	8.07%	8.10%

Monthly growth as well as trend growth in the volume of short-term transactions of electricity is shown in Table- 2. It is observed from the table that there is a positive trend in the short-term transactions of electricity (1.29%) as well as in the total electricity generation (1.01%). With in the short-term transactions, there is a positive trend in the volume of

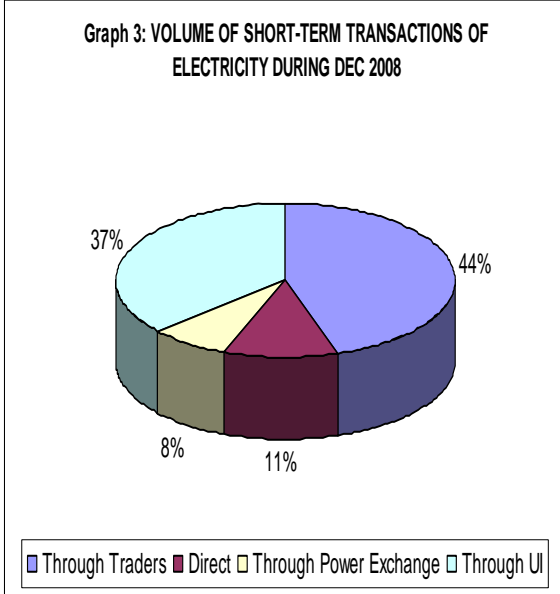
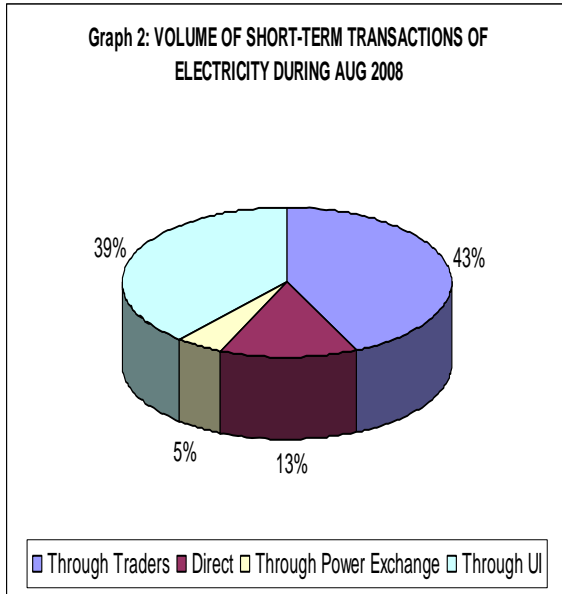
electricity transacted through power exchanges (14.86%) and trading licensees (4.01%) whereas there is a negative trend in the volume of electricity transacted by state utilities (4.19%) and through UI (2.17%).

Type of Transaction	Monthly Growth in short-term transactions (%)				Trend Growth (%) (Aug-Dec 08)
	Sept 08	Oct 08	Nov 08	Dec 08	
1. Bilateral Transactions	-27.86	2.96	25.56	5.96	2.36
(i) Through Traders	-23.06	8.59	25.27	-0.27	4.01
(ii) Direct	-43.36	-21.72	27.31	43.24	-4.19
2. Power Exchange transactions	16.15	35.46	24.58	-21.50	14.86
3. Transactions through UI	1.57	-3.36	-7.67	4.69	-2.17
Total Short-term transactions	-14.34	2.26	11.13	2.76	1.29
Total Electricity Generation	4.68	4.99	-5.90	2.28	1.01

The trends in volume of short-term transactions of electricity are also shown in Graph-1, 2 and 3. It is observed from Graph-1 that there is a similar trend in the volume of bilateral transactions of electricity (transactions undertaken by trading licenses and directly by the state utilities) and in the total volume of short-term transactions of electricity.



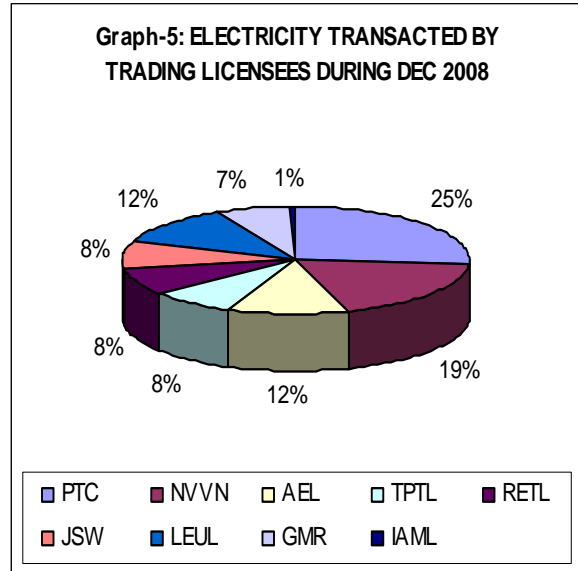
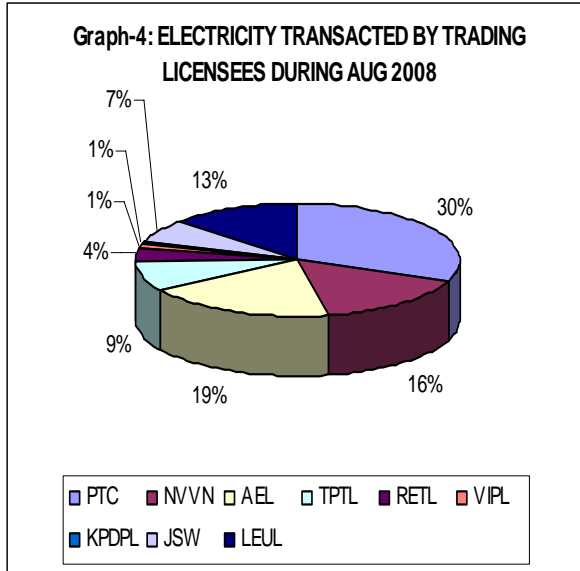
The percentage share of electricity transacted by trading licensees, directly by utilities, power exchanges and through UI is shown in Graph 2 and 3. It is observed from the graphs that there is no significant increase/decrease in the percentage share by various types of transactions in the total volume of short-term transactions of electricity and it is varying between 1-3% only.



The volume of electricity transacted by trading licensees is analysed in detail. The share of each trading licensee in total volume of electricity transacted by all the licensees is shown in Table-3 and Graph-4 & 5.

Table-3: SHARE OF ELECTRICITY TRANSACTED BY TRADING LICENSEES						
Sr.No	Name of the Trading Licensee	Share of electricity transacted by trading licensees (%)				
		Aug 08	Sept 08	Oct 08	Nov 08	Dec 08
1	PTC India Ltd	31.19	27.91	33.97	25.88	26.20
2	NTPC Vidyut Vyapar Nigam Ltd	15.82	21.80	15.67	19.21	18.70
3	Adani Enterprises Ltd	19.17	10.94	10.91	8.89	11.61
4	Tata Power Trading Company (P) Ltd	8.60	9.42	5.96	7.44	7.97
5	Reliance Energy Trading (P) Ltd	3.87	3.20	9.98	8.55	8.26
6	Vinergy International Private Ltd	0.77	1.00	0.03	0.00	0.00
7	Kalyani Power Development (P) Ltd	0.58	1.96	0.06	0.21	0.00
8	JSW Power Trading Company Ltd	7.32	8.76	9.36	8.72	8.16
9	Lanco Electric Utility Ltd	12.68	14.89	13.63	15.08	11.50
10	Karam Chand Thapar & Brothers Ltd	0.00	0.12	0.00	0.02	0.00
11	GMR Energy Trading Ltd	0.00	0.00	0.05	5.53	7.05
12	Instinct Advertisement & Marketing Ltd	0.00	0.00	0.38	0.47	0.55
	Total	100.00	100.00	100.00	100.00	100.00

It is observed from the above table that the share of PTC India Ltd and Adani Enterprises Ltd in total volume of electricity transacted by trading licensees declined from 31% to 26% and from 19% to 12% respectively, whereas the share of Reliance Energy Trading Ltd and NTPC Vidyut Vyapar Nigam Ltd increased from 4% to 8% and 16% to 19%, respectively, during the period.



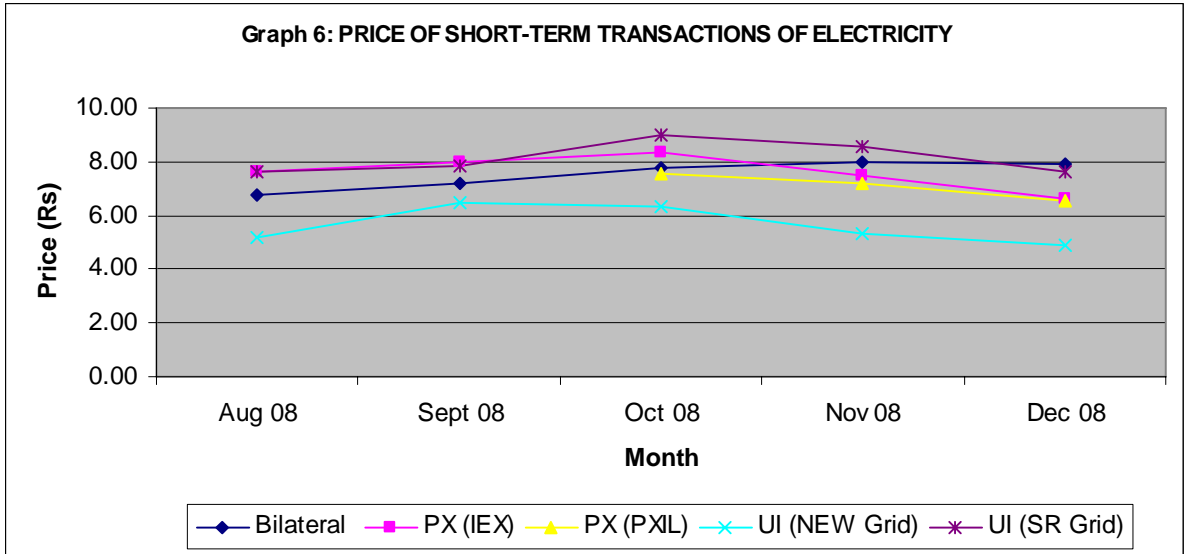
II: Trends in Price of short-term transactions of electricity:

The trends in price of short-term transactions of electricity are shown in Table-4. The price of bilateral transactions represents the price of electricity transacted through trading licensees. The trends in price of electricity transacted through trading licensees are studied separately for total transactions as well as the transactions undertaken during RTC, Peak and Off-peak periods.

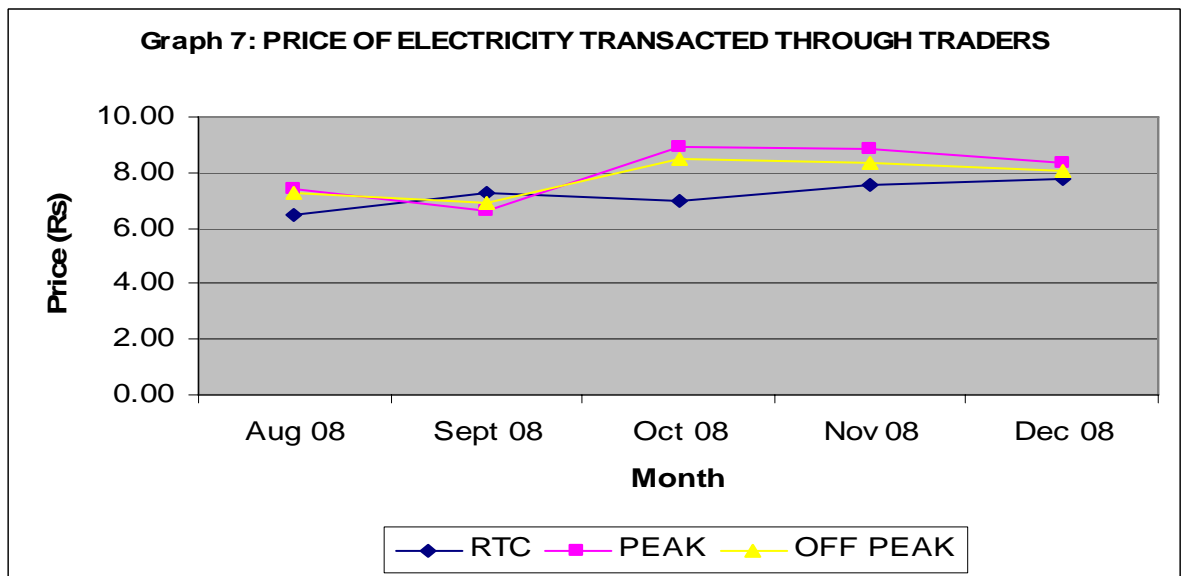
As observed in the volume of short-term transactions of electricity, there is no constant increase/decrease in the price of short-term transactions of electricity during the period. There is a positive trend in the price of electricity transacted by trading licensees (4.19%) whereas there is a negative trend in the price of electricity transacted by power exchanges (-3.29 in IEX) and UI (NEW Grid)(-3.04).

Table-4: PRICE OF SHORT-TERM TRANSACTIONS OF ELECTRICITY (Rs/KWh)							
Sr. No	Type of Transaction	Price of short-term transactions of electricity (Rs)					Trend Growth (%)
		Aug 08	Sept 08	Oct 08	Nov 08	Dec 08	
1	Bilateral through traders	6.78	7.17	7.78	7.98	7.89	4.19
	RTC	6.51	7.27	6.99	7.56	7.77	4.00
	PEAK	7.43	6.60	8.90	8.82	8.37	5.41
	OFF PEAK	7.29	6.90	8.51	8.35	8.04	3.95
2	Power Exchange						
	PX (IEX)	7.61	7.95	8.32	7.47	6.64	-3.29
	PX (PXIL)			7.57	7.22	6.58	-6.77
3	UI						
	UI (NEW Grid)	5.17	6.50	6.32	5.33	4.89	-3.04
	UI (SR Grid)	7.64	7.87	8.97	8.55	7.66	0.87

It is observed from Graph-6 that there is an increasing trend from August 2008 to October 2008 and then declining trend from October 2008 to December 2008 in the price of short-term transactions of electricity. The price of UI transactions in the NEW Grid is always lower when compared with the price of UI in the SR Grid.



The trends in price of electricity transacted by trading licensees during RTC, Peak and Off-peak periods are shown in Graph-7. The price of electricity transacted during RTC was lower when compared with the price of electricity transacted during Peak and Off-peak periods except in the month of September 2008. The price of electricity transacted during RTC, Peak and Off-peak are comparable during September 2008 and December 2008.



III: Key Findings/Observations

1. The volume of short-term transactions of electricity to total electricity generation is varying between 7.0% to 8.5% during the period from August to December 2008.
2. There is a positive growth in the volume of short-term transactions of electricity (1.29%) as well as in the total electricity generation (1.01%).
3. There is a positive growth in the volume of electricity transacted through Power Exchanges (14.86%) and trading licensees (4.01%) whereas there is a negative growth in the volume of electricity transacted through state utilities (-4.19%) and UI (-2.17%).
4. The share of PTC India Ltd and Adani Enterprises Ltd in total volume of electricity transacted by trading licensees declined from 31% to 26% and from 19% to 12%, respectively, whereas the share of Reliance Energy Trading Ltd and NTPC Vidyut Vyapar Nigam Ltd increased from 4% to 8% and from 16% to 19%, respectively.
5. The price of short-term transactions of electricity is varying between Rs.7 to Rs.8 per/kwh.
6. There is an increasing trend in the price of electricity transacted through trading licensees (4.19%) whereas there is a declining trend in the price of electricity transacted through power exchanges (-3.29% in IEX) and UI (-3.04% in New Grid).
7. Except in September 2008, the price of electricity transacted during peak is high when compared with the price of electricity transacted during RTC and off-peak. `