

WEEKLY REPORTING OF OTC CONTRACTS: MONTHLY ANALYSIS (AUGUST 2010)

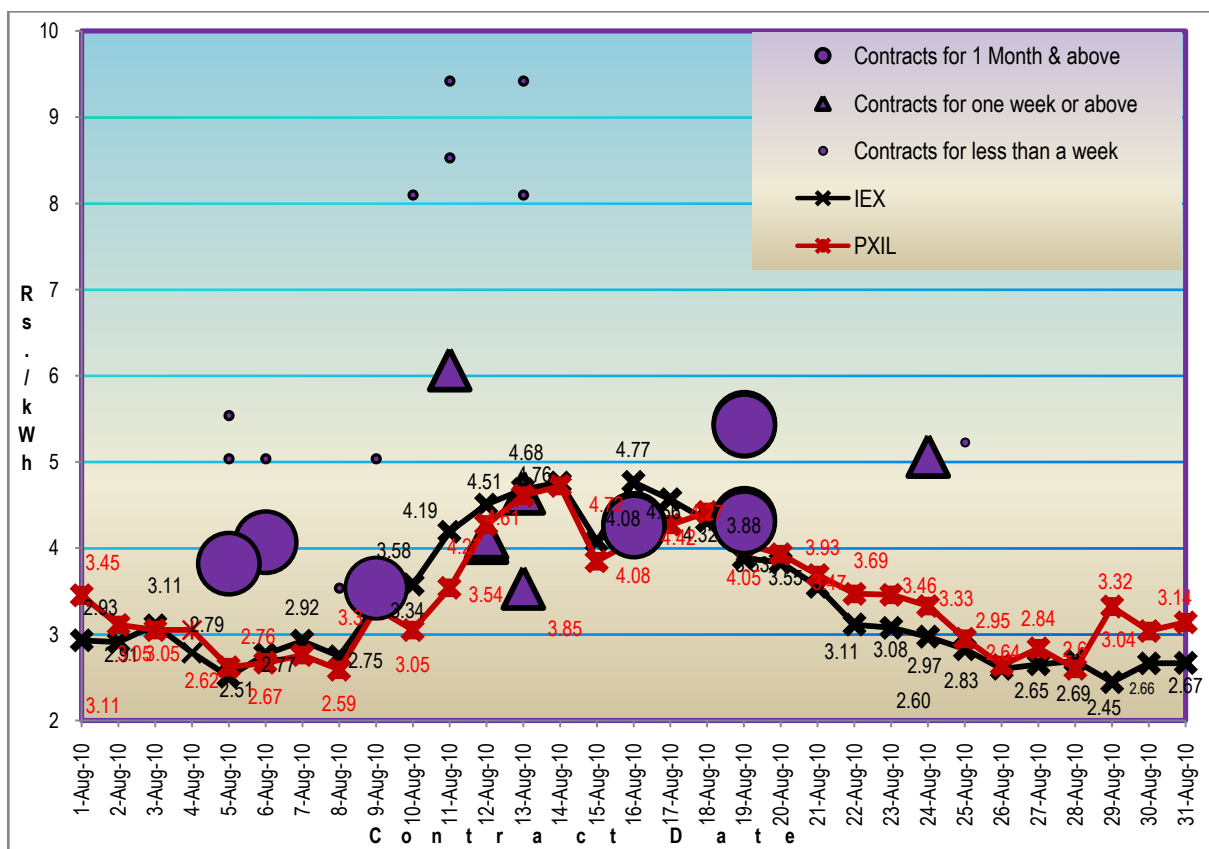
[An analysis of all weekly reports received from licensee-traders for the month of August 2010]

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I. Comparison Of prices of Short Term OTC contracts with Power Exchange Prices (on Contracted Date)

Process of Formulation: The scatter diagram represents the details of OTC contracts undertaken by traders between 1st August to 31st August for short-term (upto three months) transactions of electricity (Annexure I). Each data-point represents contract sale-price on a particular contract date.

Chart 1: Price of Electricity for OTC contracts and Transactions in Power Exchanges



The varied shapes are to depict contracts for different time-span, e.g. the largest circles are for contracts which have been made for one or upto three months ahead, the triangles are to represent contracts made for a week or more but for less than one month and smallest ones (like dots) are for one day or more but less than a week period of contracts. In this diagram, no distinction has been made among the traders. The black and red markers connected with lines show the spot prices at the two power exchanges, viz. the Indian Energy Exchange (IEX) and the Power Exchange of India Ltd. (PXIL) on the respective contract dates.

Weekly reporting of OTC Contracts: Monthly Analysis

The chart shows a comparative analysis of price movement in both the OTC and Power Exchange markets during the period. The following table shows the weighted average sale prices of all the contracts reported on a particular week and total contracted volume for the same. (weights are being the respective contracted volume).

Table 1: Price and Volume of OTC Contracts

Weeks	Range of Sale Price (Rs./ kWh)		Weighted Average of Sale Price (Rs./ kWh)	Total Volume (MU)
	Max	Min		
2 nd -8 th August	5.54	3.82	4.01	136.02
9 th -15 th August	9.42	3.54	4.00	113.66
16 th -22 nd August	5.46	4.25	4.48	241.91
23 rd -29 th August	5.07	5.23	5.23	3697.01
Total	—			4188.6

Source: Based on Traders' weekly reports

Table 2: Prices (Rs. / kWh) on Power Exchanges on OTC Contracts Dates

August												
Contract Dates (2010)	5 th	6 th	8 th	9 th	10 th	11 th	12 th	13 th	16 th	19 th	24 th	25 th
IEX	2.51	2.77	2.75	3.34	3.58	4.19	4.51	4.68	4.77	3.88	2.97	2.83
PXIL	2.62	2.67	2.59	3.3	3.05	3.54	4.27	4.61	4.08	4.05	3.33	2.95

Source: Indian Energy Exchange & Power Exchange of India Ltd. Websites

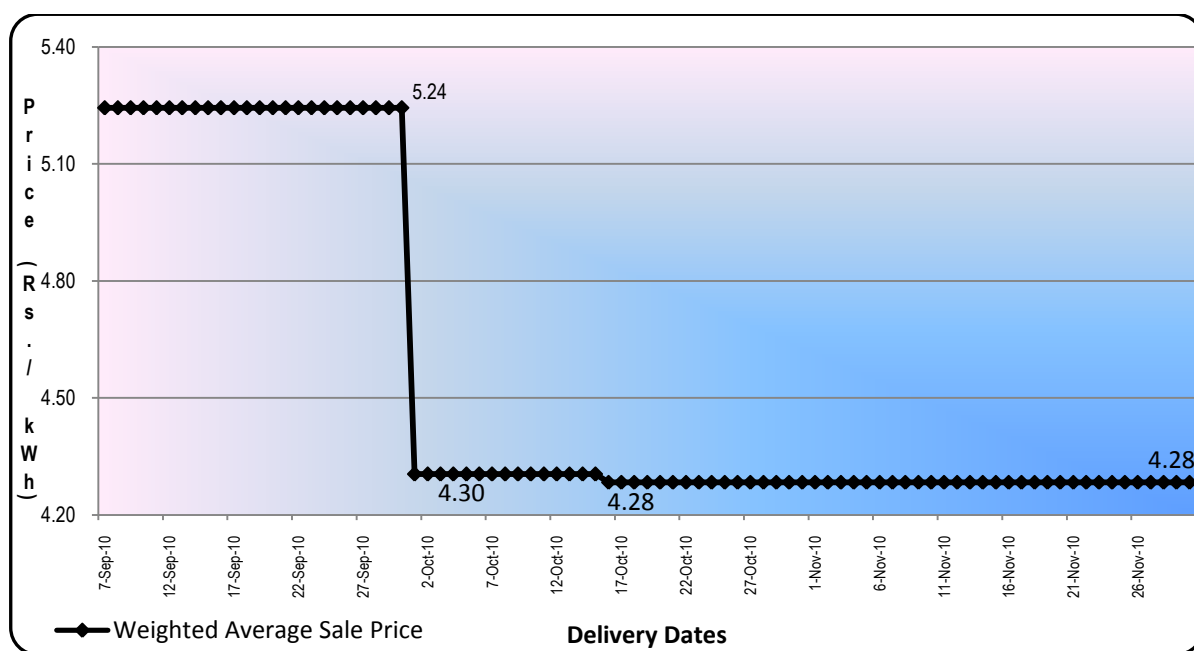
Observations

1. Most of the contracts in the OTC market are at higher prices than the prices prevailing in the exchanges. Even when the price in exchange came down to as low as Rs. 2.45/ kWh (IEX, 29-August-2010), in the OTC market most of the electricity has been contracted at prices in the range of Rs. 3.54/ kWh to Rs. 9.42/ kWh, which is higher compared to the exchange price. The average price in OTC market was Rs. 5.32 /kWh and in exchange, it was Rs. 3.37/ kWh.
2. It can be observed from Chart-1 that some contracts have been executed at a high price range of Rs. 8.10/kWh to Rs. 9.42/kWh. The contracts were for a period of one day and the total volume was 0.6 MU.

3. In August, OTC contracts mostly are for a few days but less than a week and the scheduling of these contracts is generally happening one to two days after contract date.
4. Three contracts have been done by a trader for eleven months (from 16th August 2010 to June 2011) and two contracts have been done by another trader for five months of power supply (from October 2010 to February 2011).
5. In August, the cumulative volume traded above Rs. 4/kWh was 4085.39 MUs which is 97.5% of total OTC contracts for August 2010.

II. Three-Month Forward Curve of Electricity Prices in OTC Market

Chart 2: Forward Curve for OTC Market, September-November 2010



A forward curve reflects expectation of prices for a future period. Accordingly a forward curve has been drawn based on prices of contracts executed for supply of power in months of September, October and November 2010.

Process of Formulation

The forward curve has been made based on OTC sale prices reported every week by the traders. For a contract of a full month, the average monthly contract price is considered discretely as the price for each day. Finally, the average daily price for the

forward curve is the weighted average daily price for all contracts existing in these days . (Weights being the respective contracted daily volume)

Observations

1. The forward curve made for the next three months, i.e. September to November is in backwardation (downward sloping). During the month of September, the OTC sale price is Rs. 5.24/kWh which decreases to Rs. 4.30/ kWh in October and remains at that level till 15th October. On 16th October it drops further to Rs. 4.28/kWh and remains at this level till November end.
2. It may be worthwhile to note here that the Forward curve made in June for the future three-month period (July-September) was in contango (upward sloping) whereas the Forward curve made in August is in backwardation (downward sloping). The stark contrast in the shape of the two graphs can be seen as follows:

Chart 2.1: Forward Curve in June for OTC Market, July-September 2010

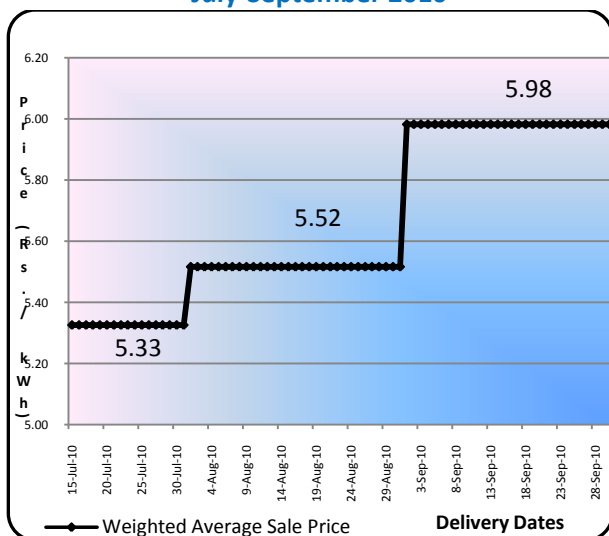
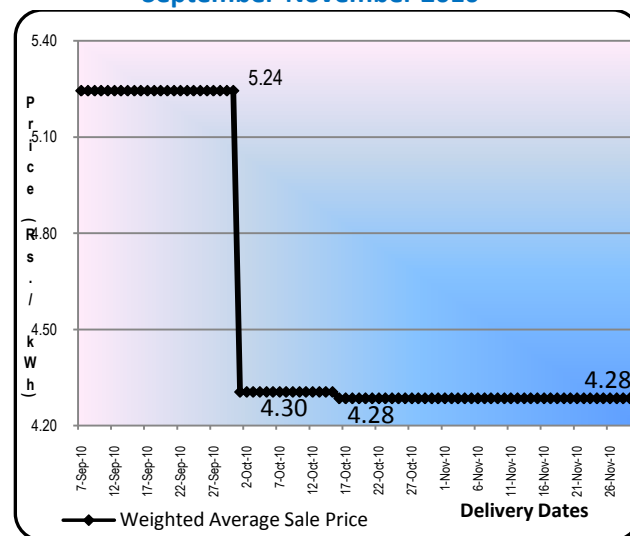


Chart 2: Forward Curve in August for OTC Market, September-November 2010



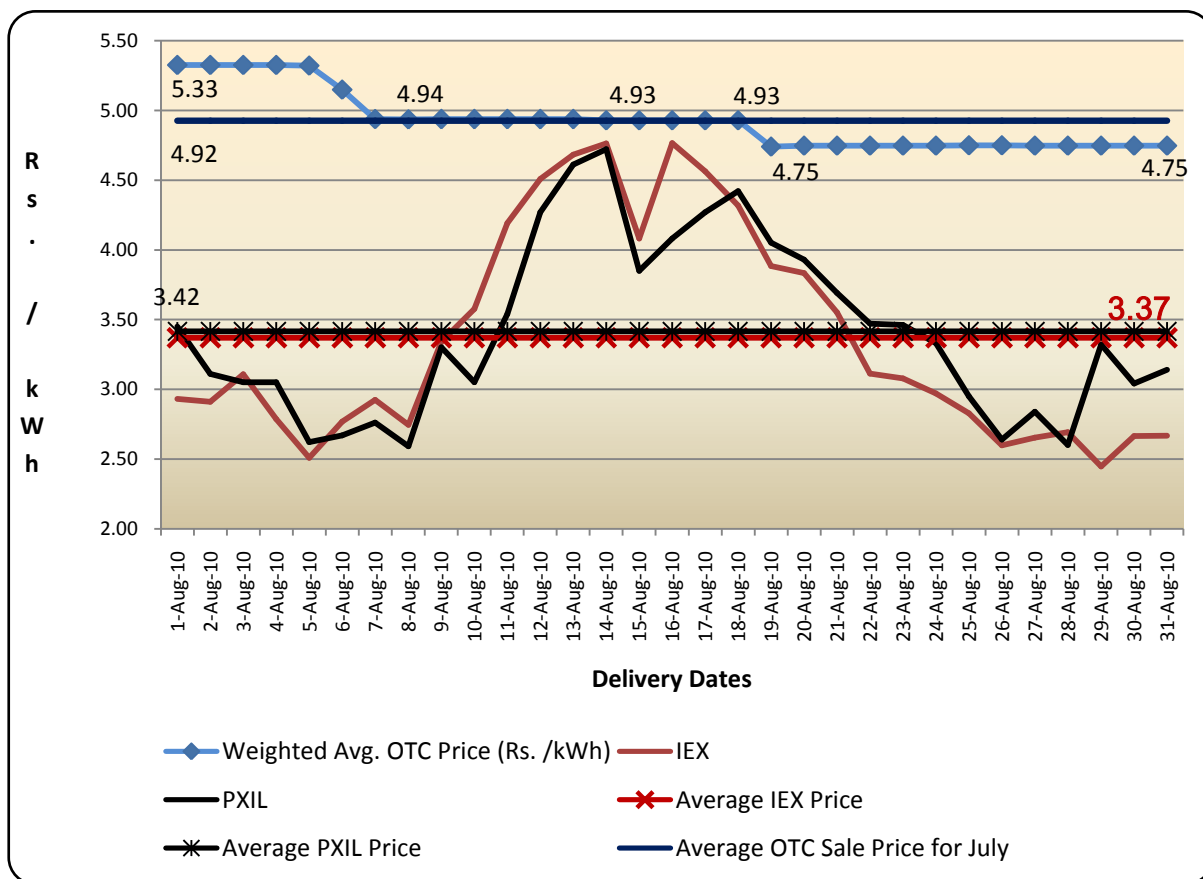
III. Post-facto Comparison of Prices in OTC Contracts and Power Exchanges (on Power Delivery Dates)

Process of Formulation

The post facto graph shows the average OTC price vis-à-vis power exchanges prices for July month's power deliveries .There is a visible difference in between the two prices and

generally OTC prices remained at a level higher than the exchange prices. During the month of August, the average OTC price was at Rs. 4.94/ kWh and the same was at Rs. 3.37/ kWh in IEX and Rs. 3.42/kWh in PXIL.

Chart 3: OTC and Power Exchange Prices during August 2010



Overall Comparative View with last month (July)

1. Number of monthly contracts was higher in July (16) compared to August (10).
2. In July, most of the OTC monthly contracts prices have been in the range of Rs. 3.0/ kWh to Rs. 6.5/ kWh, whereas in August, the price range was quite dispersed from Rs. 3.54/ kWh to Rs. 9.42/kWh.

3. A comparative table to represent maximum and minimum prices at both the exchanges vis-à-vis OTC contracts prices.

	Rs/ kWh (Dates)			
	July		August	
	Maximum	Minimum	Maximum	Minimum
IEX	4.59 (19 th)	2.86 (29 th)	4.77 (16 th)	2.45 (29 th)
PXIL	4.14 (31 st)	3.00 (12 th)	4.72 (14 th)	2.59 (8 th)
OTC Contracts	6.27 (19 th)	2.57 (30 th)	9.42 (11 th)	3.82 (6 th)

Inferences

1. In general, from the two types of price analysis (Chart 1 & Chart 3), it is evident that the OTC market prices of electricity during the month of August were at a higher level as compared to the prices of power exchanges. However it needs to be noted that OTC prices are for monthly, customized contracts whereas power exchange price are for spot standardized contracts .
2. The forward curve for the future three-month period i.e. September to November 2010 is in backwardation and shows a downward trend in prices for the future period.

Limitation: The report has been prepared based only on information received from traders.

Annexure-I

Table 3: List of Trading-Licensees who have undertaken Contracts in August 2010*

	Name of Licensee	2nd-8th Aug	9th-15th Aug	16th-22nd Aug	23rd-29th Aug
1	PTC	Y(1)	Y(3)	Y(3)	Y(2)
2	NVVN	Y(12)	Y(13)	NR	NR
3	Lanco	NIL	Y(9)	NR	NR
4	RPG	Y(1)	NIL	NIL	NIL
5	GMR	Y(1)	NIL	NIL	NR
6	JSW	NR	Y(2)	NIL	NIL
7	RELIANCE ENERGY	NIL	NIL	Y(5)	NR
8	Shree Cement Ltd.	NR	Y(4)	NR	NR
Total No. of Contracts		15	31	8	2

Note 1: NR: Not Reported

NIL: No Contracts was made during the week

Y (): Contracts had been struck (Number of Contracts)

*Note 2: There are traders who have reported but did not undertake any contracts.