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# RETAILING OF ELECTRICITY:
# A PARADIGM SHIFT FROM CUSTOMER TO CONSUMER

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***Abstract:***

*Electricity markets are being radically transformed throughout the world. Recently reforms have resulted in reduction of wholesale prices, the final outcome may be poor customer service for small and medium consumers, and regulations that disregard customer preferences in terms of price/quality ratio. There is a paradigm shift across the globe and the main features of the paradigm pushing reforms includes, Private Franchise Distribution Companies (these provide electricity to small and medium consumers), Electricity Traders (these works towards bringing both the types of customers at a single platform), etc. Sometimes, actual consumer choice is limited in the power sector because of social pressures for tight regulations and less consumer freedom.*

*Today, an electricity consumer have changed from Customer to Consumer. One can buy it from various DISCOMS at the same time the network of one can be used to source power through somebody else from different place of the country. Sometime the actual source may be known and sometime it cannot be known. There are options to buy it in pockets as well as one can fix the pocket size for years, may be upto 35 years. Like other commodities, electricity also have logistics issues, but one can always call a tender and there are lots of traders in between, who will get the same sourced to you at the best possible rates and will mitigate the various associated risks and formalities too.*

*Sometimes, Electricity Regulators are influenced by political agendas of FREE POWER and thus making the entire economics for business unviable. The relative merits of schemes for introducing consumer choice should be evaluated case by case and Open Access is required to be made a Truth in real sense, not only through regulatory mechanism but, also through commercial viability.*

**Keywords:** *DISCOM, Energy Exchange, Electricity Traders, Private Franchise Distribution System*

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**Introduction:**

During Late 1980s, Indian Government faced severe economic crisis and the funds from external agencies died up, and we had significant requirement of investment in the sector to meet our economic growth targeted. Thus, in 1990s, along with various other sectors, Electricity Sector was also restructured and private investment was allowed in various activities of this sector. Many players expressed interest entering into the sector, but, they asked for high tariffs and some credit banking mechanism, like escrow account and counter guarantees to get safeguarded from DISCOMs, which were already posing huge credit risks. Adding to this, there were delays in various clearances related to the projects. Thus, the sector witnessed exit of many players from the sector. The situation today is also somewhat same and thus, the sector is unable to invite any fresh investment from Indian and Foreign Players.

**Subsidies in Energy Sector:**

For making electricity available to every individual, energy have been historically subsidized in India to protect consumers from price volatility and to provide energy access to its citizens, especially that to the poors. International Energy Agency (IEA) have a widely accepted definition for Subsidies on Energy:

"*any government action that concerns primarily the energy sector that lowers the cost of energy production, raises the price received by energy producers or lowers the price paid by energy consumers.*"

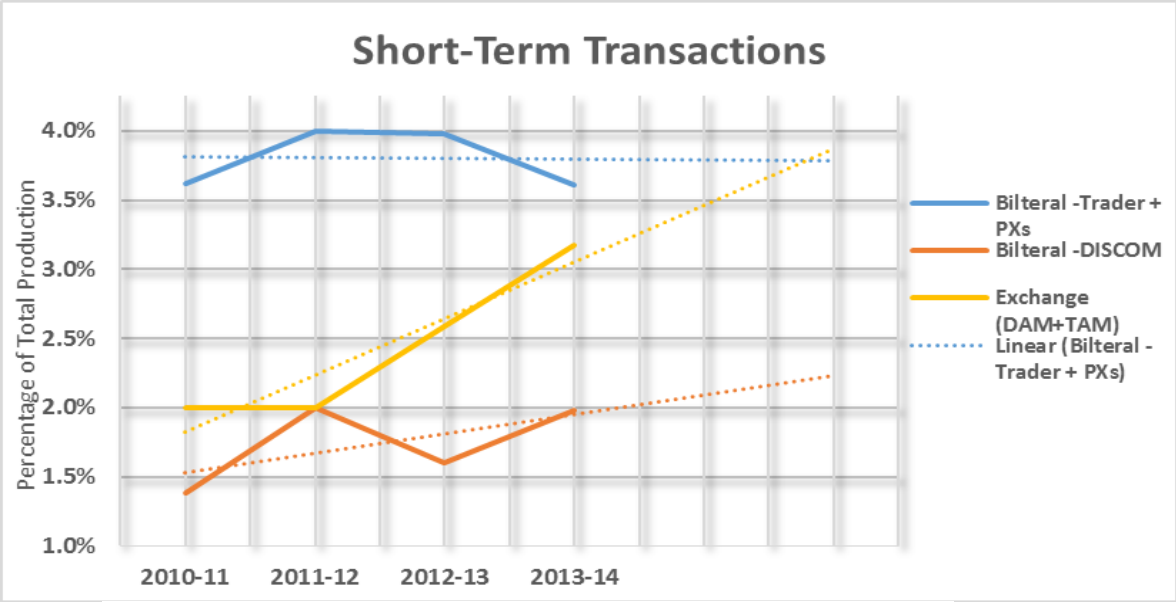
Subsidies can be broadly classified into Producer Subsidies and Consumer Subsidies for Energy. Producer Subsidies have been provided to various organizations to increase output and encourage investments. Consumer Subsidies are been provided to support/incentivise the consumption of energy by lowering the tariffs at which electricity is supplied to them. State governments not only provide subsidies on tariff rates by providing electricity to consumers at discounted rates, but also grant capital subsidies to the state utilities. But, in the

same time, as per the report of Power Finance Corporation (PFC), the subsidies are paid by the government very late and in a curtailed manner to the entitles.

**Short-Term Market:**

There is already an arrangement of multi-buyer and multi-seller, and the Electricity Act – 2003 facilitates Open Access too. Provisions of Open Access provided for indiscriminatory use of distribution and transmission facilities thus enabling power supplier/consumer to choose its buyer /seller other than the concerned distribution company of its area. Technically power flowing to any consumers is through the same network, but the commercial arrangement may vary with various permutations and combinations. Commercially, the power can be flowing through Short/Medium/Long Term Open Access, and can be from a generator from opposite part of the country or may be flowing from a pool or through some other mechanism too. The real sense of retailing of electricity is derived from the concept of Open Access. OPEN ACCESS ALLOWS A CUSTOMER TO BECOME A CONSUMER. There are few places (Mumbai, Jamshedpur, etc.) in the country, wherein there are more than one DISCOMs in the same control area giving consumers the power of change/shift, if one is not satisfied by any means (may be from service/rates/etc.).

To facilitate the concept of retailing of electricity, Energy Exchanges were first time introduced into the country in 2008. It have been able to create a pool of buyers and sellers at a common place, without knowing the actual buyer or seller and the transaction to take place through a very transparent and error free mechanism. Percentage share of energy exchanges have seen increase in total trading of power on short-term basis since inception. It facilitated the organizations to trade on Term-ahead basis (i.e. after 2 hours) and Day-Ahead basis (next day trade) for power supply from 15 minutes to 24 hours (future trading at energy exchange is yet to start in India). Share of various types of Short-Term transactions are as under:




Source: Author's compilation from Central Electricity Regulatory Commission

The graph above depicts that, the share of Energy Exchange have significatnly increased and is expected to increase in coming time. Also, bilatral contracts directly through DISCOMS have increased and is expected to further increase.

**Traders and Retailing:**

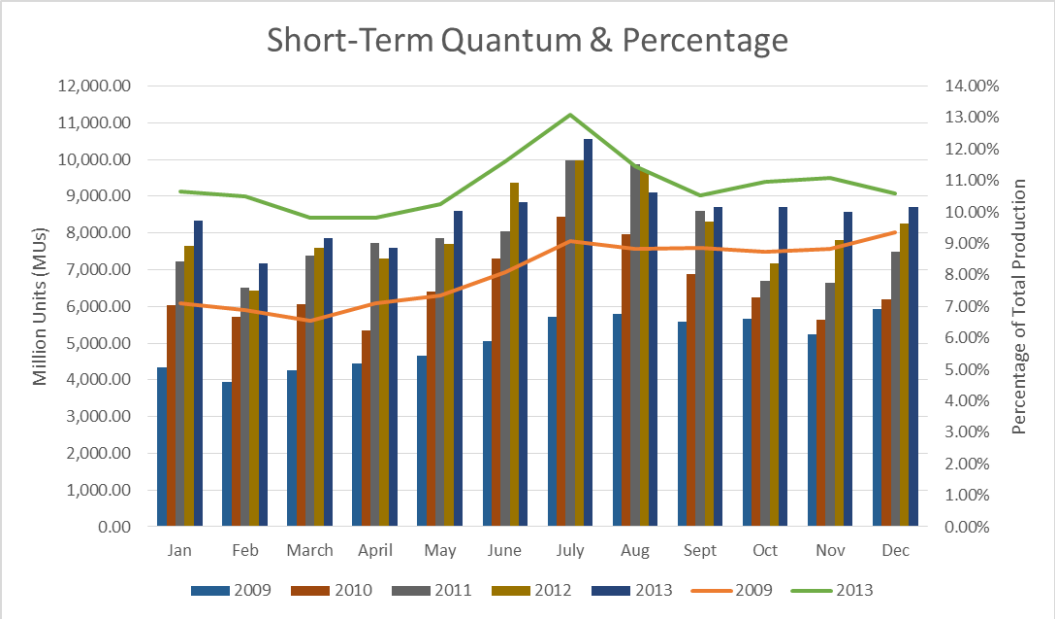
There are Power Traders (license being granted by CERC) who not only work for plain vanilla trading but have a active role of involvement with customers through portfolio management. They try to develop a customized product by combination of purchase/sale through bilateral and energy exchange. These traders sometimes do pooling of power, i.e. they have Power Purchase Agreements (PPAs) with various generators for duration upto 25 years and they sell that power to various buyers as per the requirement, through participating in bidding process, direct bilateral contracts, Banking of power, selling at energy exchanges, etc. on short/medium/long term basis.

Power trading is no more an opportunity of buying and selling, but an inherent part of power supply system. Low entry barriers is encouraging and posing a damage to the trading market in long-term. Since 2010, licenses of approximately

15 traders have got revoked, another 5 companies surrendered their licensees and few traders have willingly defaulted in payments leading to license revocation by the regulator. These traders should not be evaluated on margins, but on the market sense they deliver.

**Impact of retailing**

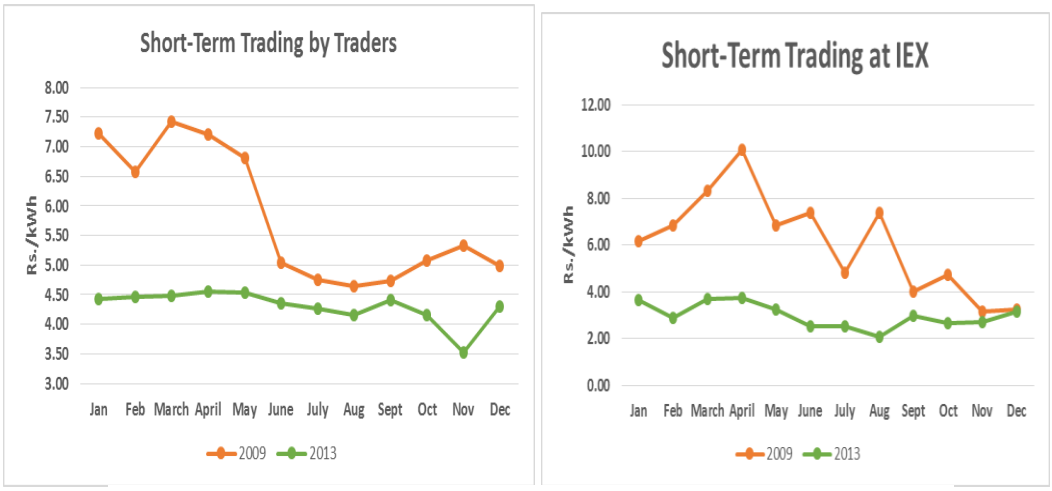
State Electricity Regulatory Commission are there to facilitate with any concern in retailing and keep coming with amendments/orders/notifications/etc. for making things in harmony with each other. Total share of short-term power sale arrangements in total power generation is as under:




Source: Author's compilation from Central Electricity Regulatory Commission

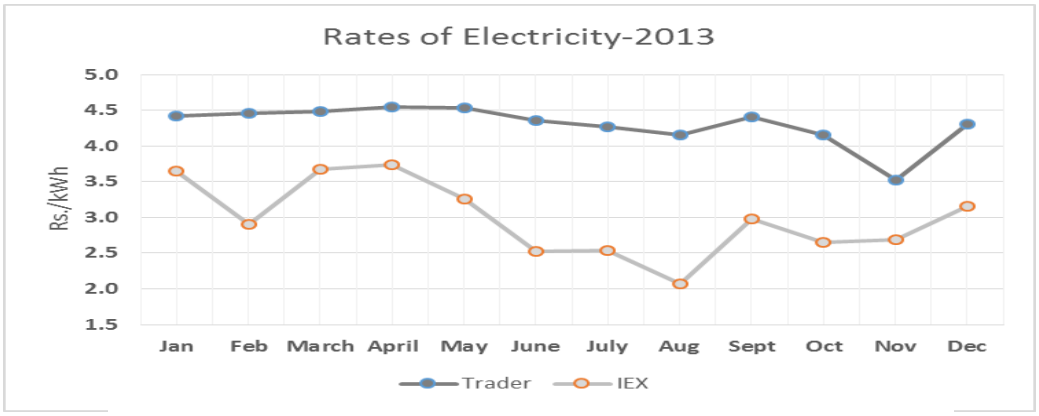
We must say that retailing of electricity is taking a growth in India, which can be understood from the above graph, the total share of electricity sale in Short-Term market have been increasing Y-O-Y basis and it have increased from about 8% in 2009 have reached to about 11% in 2013 of the total electricity generated.

Whether the trading is through a trader or at IEX, various market evolving factors have led to the downfall of tariffs in short-term power market. The same can be seen by evaluating the comparison of tariffs in 2009 and in 2013.




Source: Author's compilation from Central Electricity Regulatory Commission

Prices discovered at Energy Exhange are sometimes abnormally low and does not even cover the generating cost. This fall in the prices at exhcnages have shaken the investors confidence in the sector and they are unable to bear this situation and may lead to disastorus outcomes. Comparison of tariff at IEX and through Trader is shown below, although the tariff seen in transactions though traders is much higher, but, exchange day ahead an dterm ahead market are residual and incremental market and can not reflect the holistic pricing for electricity in reall sense.




Source: Author's compilation from Central Electricity Regulatory Commission

Dispite of all these, total share of power sale other than in long-term contracts is hovering near 10% of the total generation. Although, E. Act-2003 and Natioanal

Tariff Policy talks about Open Access of power to everybody, but, still because of various commercial and technical issues, the Open Access have been just a myth to many of the generators/consumers. Various technical/commercial/etc. variables makes lot of friction into the system making the ECONOMICS FAILS INFRONT OF THE REGULATIONS. At the one end, DISCOMs allow Open Access, but at the same time levying of various types of incidental charges (Cross Subsidy Surcharge, etc.) makes it unviable to change the option of opting the same power commercially from somebody else.

We can say that retailing of electricity is a success in India to some extent, because, any buyer/generator is allowed to trade electricity from anywhere at any point of time for any duration of time (varying from 15 minutes to 35 years). Regulations allows anybody technically fulfilling the conditions to get membership at energy exchanges, but again the economics make the things unviable and the result is that, maximum of the organizations are deprived of its benefit.

The respective State Electricity Regulatory Commissions give approval for the tariff rates applicable to various categories of consumers. This markdown is done with the aim of meeting social and development objectives for different consuming categories. But, Cherry-picking customers in various retail competition States leads to the loss of DISCOM/Franchise's most profitable customers and an increase in uncollectible accounts, impacts the earnings volatility and effect the cross subsidy mechanism to overcome the losses. These bulk or HT consumers are the real cash cows for the DISCOMs, since their tariffs are higher as compared to the other categories of customers and they also provide good collection efficiency for the DISCOMs. Cross Subsidy Surcharge levied by the State Electricity Regulatory Commissions (SERCs) makes the option of purchase of electricity through Open Access a costly affair and because of these/some external factors open Access becomes unviable to these consumers. Although, SERCs works on a transparent manner while calculating these charges,

but interference of political factor/ promises into the sector, have ruined the economics of many States in India.

Unlike other Sectors, logistics (i.e. Transmission & Distribution) is a concern in Electricity sector too. Many a times, transaction cannot take place in actual sense because of lack of corridor & congestion in the network. In order to make it in a better shape in the country, private players have been invited into the areas of Transmission and Distribution. Private players into the business of transmission is a failure till date whereas we have success stories of private players in the business of Distribution (like, Reliance, Tata, Torrent, etc.).

**Conclusion:**

Lower tariff Realization, poor financial health of the DISCOMs, delays in clearances, unstable regulatory aspects, etc. is causing exit of many players from the sector and the sector is unable to invite any fresh investment from Indian and Foreign Players. So, there is requirement of proper regulatory mechanism to be made effective for various concerns, so that not only fresh investment can be coming into the sector, but proper realization can be realized for the investment made. Until this is made effective, a healthy ad competitive market cannot be expected, which is very much required for proper retailing of electricity.

We need to learn from various matured and experienced markets across the globe and have to create a better environment for making the market more competitive and making Retailing of Electricity a success.

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