MCX Comments on CERC- Staff Paper on Power Market Pricing

Points for Discussion

3.3. How do we address the negative impact of price cap?

3.3.1. While imposition of price cap ensures that the market prices remain reasonable and within bounds, the generators with variable cost higher than the price cap tend to go out of market. In order to attract more supply volume different countries have proposed measures of segmenting the market. While in Europe a price cap for only infra-marginal technologies has been suggested, in India a proposal for introducing a separate High Price Market Segment within the existing day ahead market has been floated.

Comments / Views

1. **Impact on Demand – Supply Equilibrium:** Electricity may be considered as a flow commodity strongly characterized by its very limited storability and transportability. Prices at a point of time in Real Time market are strongly dependent on the electricity needs (demand) and their determinants in every precise moment. Capping the price would directly or indirectly affect the demand supply equilibrium. The cap somehow imbalances the demand – supply fundamentals. The cap is generally introduced to put a check on the rising prices and control inflation. However what actually happens is that on demand side, with reduction in prices, demand increases. On supply side, certain generators may not be able to operate at their efficiency with the rising prices of fossil fuels like coal or gas, thus reducing the supply in the system. The generators still have to buy coal or gas at the wholesale price but can't pass through the cost to consumers.

2. **Hindrance for Derivative Markets:** A well-developed spot market where price discovery is transparent and price is derived taking into consideration supply and demand factors, is an efficient underlying for developing derivative contracts. Efficient market act as a pricing signal for market to hedge their future price in volatile conditions. Capping the spot market prices tend to fail the purpose of derivatives contracts.

3. **Long term impact on integration of physical and derivative markets:** The futures market is used mainly for managing price risk and thus maintain the budgeted costs and profitability margins of the value chain participants. Capping spot market will have a long term effect on the efficiency and development of the derivative markets.

The established power markets globally, have a significant feature, which showcases that the development of a power market needs to be concentrated more on near and short term market, as it ensures that market is liquid and robust. This in turn has led to stronger integration between the physical power market for electricity and the derivatives market, which also serve the need of mid to longer term power.

In in the context of Indian power sector, since 2008, a steady and gradual shift is being observed from long term to short term transactions and further more and more short-term transactions are being enabled through power exchanges. Over last decade, the share of short-term market in total consumption has increased from around 6% to nearly 14%. In addition, within short term the share of Power Spot Exchanges has increased from 19% in FY 2009 to 54.5% in FY 2021. **This is a major progressive step indicating the need for a healthy spot exchange to meet the short term delivery needs and a derivatives exchange for meeting the hedge requirements of value chain participants.**

4. **Varied Energy Mix in India's Power Sector:** India's energy mix is vastly differently from other countries, owing its diverse terrain, and availability of fuel as resources (fossil fuels and renewables). Capping spot prices would have a negative impact on generators having fossil fuels as source of generation of electricity, since prices of fossil fuels are on rise post pandemic and the Ukraine invasion.

   Coal plays an important role in the country's energy mix, with natural gas occupying only a marginal portion in the total energy mix, due to lower production and reliance on imports heavily. Moreover, with a growing population and the country on the verge of next phase of growth and development, it is rather more vital to keep relying on its main fuel resource, coal. This may actually reduce supply in the system as certain generators won't be able to operate at their efficiency.

5. **Price cap does not drill down to End Consumers:** High prices may contribute to huge profits being made by some big energy firms – when there are supply shortages, those involved in extracting and trading fossil fuels can increase profits simply by securing a high price for their gas (and oil) on global markets. Crucially, the price cap does not apply at this stage of the supply chain, and there is no requirement to "share the gain" along with the costs. As such effectively the 'price cap' impact does not drill down to the end consumer including the commercial, industrial and household sector.

6. **H-DAM:** Fragmentation of the market in a separate High Price Market Segment (H-DAM) within the existing day ahead market will not be beneficial, as it would further split the liquidity and participation and thus hinder the process of efficient and transparent price discovery within the realms of economic demand – supply factors.

7. **Need for Electricity Derivatives in India**: In most large global power markets, there is a well-developed liquid and competitive power market comprising physical contracts and financial derivatives for electricity to help the various physical value chain market participants as well as traders to sell and buy power at competitive rates. Having a derivatives market for electricity often tends to help in lowering price volatility over time and having a strong and liquid derivatives market for electricity allows for better price discovery and transparency. If efficient market determined price discovery on the basis of demand – supply economics is not freely permitted in the spot market, development of a derivative market is of grave concern especially impacting the liquidity, participation and efficient & transparent price discovery. Hence ultimately the value chain may not really have a good and useful derivative contract for electricity price risk management.

8. Based on **global best practices, surveillance measures** in terms of Daily Price limits is a better methodology of maintaining efficiency of prices. Price limits are the maximum price range permitted for a futures contract in each trading session. These price limits are measured in ticks and vary from product to product. When markets hit the price limit, different actions occur depending on the product being traded. Some markets may temporarily halt until price limits can be expanded.

9. **Global Perspective:** Citing example from the discussion in place in Europe under current energy crisis situation: The European Commission do at least appear to have recognised that there could be significant downsides to the temporary price cap. Article 23 of the proposed directive on the Market Correction Mechanism says any cap is 'without prejudice to over-the-counter trades'. Plus 'that it will not affect the stability and orderly functioning of energy derivative market'. However, if OTC trades are 'exempt' and the energy derivative markets are to be in part protected, then it begs the question of how effective any price cap may be.

   It is further notable, that above discussion is in context of gas which is still a storable product. On the other hand, electricity is not a storable product and introduction of price cap may not really be effective in medium to longer term.