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Towards competitive electricity market

Last week NEPRA approved the detailed design and implementation plan of Competitive Trading Bilateral Contract Market (CTBCM). This is a step towards market liberalization; and it's better than mere slogan of privatization. It's a comprehensive model and this space may not be enough to explain the intricacies of the plan. The whole objective is to reduce government's participation in market operations and limit its role to only system operations (network businesses). And that is how the world works. The important point is to develop the market using technology to do real-time trading. That is happening and it is a big deal.

WAPDA's 1992 strategic plan included (after the de-bundling) the transition of market structure from single buyer (government) to competitive wholesale market. Fast forward, in 2020, the plan is finally surfacing and the commercial operation of electricity market is envisaged in April 2022. By that time the competitive wholesale market is targeted to be functional, and by 2026, the retail competitive market could be operational too. This will be achieved by reducing the limit of eligible (bulk) buyer's definition from existing 1 MW. Once this limit approaches zero, a full-fledged retail competitive market would be functional.

It is imperative to note that CTBCM is not a magic wand. This will not eliminate the existing stock of circular debt; but will surely help in reducing the flow. The trading platform will include private suppliers and traders into the equation. This will improve transparency and predictability for better price discovery. This will also provide non-discriminatory open access to all the market participants with improved conditions to attract investment based on the credit cover provided by market participants and move away from sovereign guarantee. It will contribute in improving security of supply and efficiency arising from the "competition in the market and competition for the market".

The system-based automated merit order discharge will take place based on an hourly marginal price. Auctioning will start happening in a way that the legacy power procurement, which used to be under the unsolicited and upfront tariff regime, will

convert to solicited procurement against the market participants demand forecast. However, discos will continue to buy (most of) the power which is reflective of existing ecosystem.

Eventually, the plan is to move this to take and pay and multi-buyer/seller model. But this would take a number of years to happen, if things roll out as planned. It is pertinent to note that market development is a journey – countries like Denmark, Turkey and the UK took around 10 years to convert from monopoly to completely deregulated market. Whereas in India, the bilateral market was opened ten years ago and they are still stuck at the same level.

The government in Pakistan is planning in the first stage to separate bulk consumers (over 1 MW) from discos. The power generators can directly supply power to bulk consumers (eligible consumers). There are around 2,000 such industrial and commercial consumers having approximately 16 percent share in the energy sale. The remaining 84 percent or 26.6 million consumers will continue to get supply from discos.

The process is called direct wheeling where bulk consumers can bypass discos. One problem here is that in this process good consumers from discos can move to wheeling and the discos' AT&C losses could increase further. The problem is similar to exclusivity argument of KE. The challenge NEPRA has is to price the wheeling at the right spot to create a balance between market participants and discos. The real objective is to keep evolving market development leading to reliability and affordability.

By April 2022, this wheeling would be developed into a competitive wholesale market. For bulk consumers, there would be a layer of competitive suppliers and traders. While discos can compete with other suppliers too. The role of traders would be to deal on behalf of buyers and sellers.

The players in the market would be transmission network operator, system operators, market operators, auctioneers, service providers and suppliers. The roles of first two are assumed by NTDC and NPCC, respectively, today and will remain in the hands of these government bodies with some process of automation. In simple words, electrons would be handled by the network and system operators, and that monopoly will continue. This kind of network natural monopoly also exists in developed liberalized markets.

The role of the private sector is to develop competitive market in case of market operators, auctioneers and service providers and suppliers. The CPPA-G is to split into market operator (MO) and special purpose trader (SPT). The role of MO would be to determine market price, marginal price computation, clearance, settlement, registration and all. Whereas, SPT will work on legacy contracts and will eventually end functioning somewhere 2050s-60s. The role of MO would be regulated under the NEPRA Act and Regulations where automation-based merit order can be determined.

The real role of private sector can and should come in the areas of auctioneers, distributors and suppliers. However, the government is making PPIB and AEDB as independent auction administrators. Like in MO, here the government is not really willing to let go off this role into private hands. There is politics of power supply and the political economy would play the role in the fate of making the energy market free.

The market transition started by removing the vertical integration – started in the 1990s, yet the government is controlling each and every de-bundled operation. Now the next step is to move from single buyer market. Here the multi-buyer/seller model is coming in the wholesale (bulk consumers) market. The competitive supplier could be selling to bulk buyers at marginal prices. But for majority of consumers it would be supplied by discos at regulated tariffs.

That is a brief synopsis of CTBCM. The role of NEPRA is critical in implementation of the desired legal policy regulatory framework and blueprint in the stipulated time. There is no doubt on the market understanding of NEPRA chairman Tauseef Farooqi. All eyes are on him and team for making the dream come true.

There is nothing to talk about the role of discos in the short term. Around Rs250 billion losses per year are being contributed by discos. AT&C losses are too high. The bulk consumers are already better. In LESCO, FESCO and IESCO, lower loss is due to better concentration of bulk buyers. The real problem is small consumers. The question is how to deal with these. For that discos need to corporatize, privatize and defragmented.

This last mile improvement is of utmost importance and is a hard nut to crack. Here the role of newly-appointed SAPM Tabish Gauhar would be instrumental. He was heading KE and did a massive change management exercise. The proof of the pudding is in the eating – KE AT&C losses reduced from 43 percent in 2009 to 31 percent by 2015. Something similar is required for discos in the short- to medium-term as in the long term CTBCM envisages the sustainable solutions through market development.