CTBCM: Will it promote competition?

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Competitive wholesale and retail markets are aimed at encouraging power supplies and investments and bring prices down. National Electric Power Authority (Nepra) has approved CTBCM-Competitive Trading Bilateral Contract Market. In the present and foreseeable future, it is a framework that has everything but competition. Is this just a lip service and no practical strategy to bring in competition? As it has happened to earlier pronouncements that competitive bidding would take place for renewable projects, while Nepra continues to issue cost-plus Take or Pay determinations to this date. Similarly, Wheeling has been discussed for almost a decade now and nothing seems to be near implementation for one reason or the other.

In five years, there will be 50,000 MW of generation capacity contracted for thirty years under Take or Pay contracts. So where will the supplier of electricity come from? We are under capacity-surplus, giving rise to increase in capacity charges and circular debt. Will new capacity be created under CTBCM contracts? In that case, one may be thinking of 2035 or later.

Obviously, current installed capacity would have to be somehow converted wholly or partly to the proposed market mechanism which may not be easy. We would like to explore some possible strategies to achieve this. In the advanced countries, there used to be Take or Pay contracts as well which were converted into a market mechanism. Power generator Independent Power Producers (IPPs) had to be paid off for their investments or projected income. We are already suffering under Reko Diq-type issues and cannot afford to create more issues. An acceptable policy framework has to be brought about by consultation with the existing contract holders.

There are five types of contract holders or venues to enlist power sellers: 1. Contracts which are under implementation varying from Private Power and Infrastructure Board (PPIB) approvals to under-construction ones. There are about 10,000 MW of such contracts; 2. Contract capacity contract, which is under its debt payment stage; 3.Contract capacity which has retired its debt and has Return on Equity (RoE) obligations only which may have a value of 20% of the capacity charge; 4. Contract capacity which is near completion of 25-30 years many of which are trying to get some extension; a few have already managed to do so through KE framework. 5. There is WAPDA and GENCO capacity as well. GoP has done well to adjust WAPDA RoE to 12 % matching its agreement with IPPs, creating an example by action. 6. In a power deficit environment, buyers may organize a hybrid market and may be inclined to buy excess power from existing Power

Purchase Agreements (PPAs) to meet the excess demand. In current circumstances of power surplus, this avenue does not apply at all.

Are public sector projects (Category-5) the best candidates for bringing into market? There should be no impediments, as the bureaucracy and employees would be able to continue with their jobs. Net advantage? Market process can be initiated. Category 4 would be and should be very happy to get a contract under the Take and Pay market mechanism. Category 3 would be more than happy; having retired debt and RoE income being due, they will earn more money under market mechanism which would reflect full capacity cost, including debt cost. In this case, Central Power Purchasing Agency - Guaranteed (CPPA-G) would be a loser having paid the debt cost already. Some formula has to be worked out in this case.

Category 1 and 2 are the most difficult. Banks and financing agencies would be involved. These are the most lucrative expensive contracts with a guaranteed tenure of 25-30 years. Who would like to let such contracts go? It is not yet certain if the recent IPP agreement terms would also be applicable on these. Quite a few are Chinese CPEC and non-CPEC contracts. It may be the last one to be brought in the competitive market regime. There may be a complicated formula; buying off the revenue liability as it is and adjusting it against the proceeds of competitive market. This is not to suggest nationalization but a mere financial mechanism. The risk, profit or loss, goes to CPPA-G. Captive power may be added as a sixth category which is actually free and immediately available. Captive power owners are the ones who are trying to sell their surplus output bilaterally or in a future market set-up.

Another issue is of cost-based or bid-based model. CTBCM is based on cost-based. There are many examples of both in the market economies and even in Russia. Under Take and Pay contracts as opposed to Take or Pay contracts that we have, Cost-based models may be workable. Under Take or Pay, we already have the same system except that instead of monthly merit-order, they will be generating an hourly merit order - cynically speaking - issuing monthly merit order in hourly instalments? Nepra has taken a serious note of the misuse of the merit order as being practiced. What would happen in an hourly exercise? In the current form, CTBCM is meaningless; just new wine in old bottles. No competition but complication would be created.

Apart from the market economies, there are a few countries like Turkey, the Philippines and Malaysia which have established competitive electricity markets. India has established two voluntary electricity exchanges but market share has varied around 6-11% only. In 2019, electricity prices at these exchanges have been around IRs 3.1-3.4 while in India it came down to IRs 2.3-2.90. Untied surplus electricity is traded in these exchanges. There is provision of inter-state trade whereby states trade their surplus electricity quota to those who have deficits at various points in time. Why hasn't India been able to switch to a full competitive electricity market is a difficult question that may include some of the difficulties as we have mentioned in the foregoing.

India has, however, succeeded in establishing a viable competitive bidding regime in the renewable sector. Earlier, India did go for competitive bidding in case of high capacity coal power projects (5000 MW each). If nothing happens, voluntary market exchange may be an option that may be practiced by Pakistan. CTBCM does provide for competitive bidding under the name of capacity auction and has entrusted it to NEPRA, although even in the current dispensation, there is a provision of solicited projects. Perhaps, this is the part of CTBCM that can be put into practice without much ado. PPIB may have to prepare projects identifying locations, if not sites, and fuels. A beginning should be made with Solar and Wind which are much easier than fossil ones. It was not done earlier but may be enforced now.

The degree of complications can be measured by lack of progress on a viable wheeling charge formula which is concerned with distribution cost element only. DISCOs have presented a big bill as high as Rs.8.50; reportedly, half of which may be fixed component. Add a typical generation cost of Rs 8-10 per unit, the total comes out to be Rs 16.50-18.50; goodbye to wheeling. There are serious arguments on both the sides.

There are complicated issues. NEPRA would have been well advised to have the CTBM evaluated by a third party. Third party evaluation of consultant's report is a norm. Too much is at stake. NEPRA may still do that. It has earlier made mistakes of accepting high tariff projects under pressure and not involving third party advice. There should be no hesitation for such skills are not available in the country and very complicated issues are involved. We hope that it will be done this time. The alternative is that nothing competitive would happen practically in the present form of the CTBCM framework and we will continue to be haunted under a Take or Pay regime.