Frequently Ask Questions (FAQs) !
Wholesale Market /CTBCM Model!

NEPRA

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What is CTBCM ?

- Competitive Trading Bilateral Contract Market (CTBCM) is a Competitive Wholesale Electricity Market wherein multiple buyers and sellers of electric power can participate by entering into bilateral contracts to purchase and sell electricity at wholesale level.

- The bilateral contracts can be entered into at mutually agreed rates between the bulk power consumers and competitive suppliers.

- The procurement of the XW-DISCOs (as Supplier of Last Resort) shall be on the least cost basis and tariff regulated by NEPRA.

What CTBCM will deliver? What is its impact on end consumer tariff?

- The main objective of CTBCM is to develop an efficient, liquid and transparent wholesale electricity market. In this regard, IT based systems and information publishing mechanisms are being put in place to ensure all market participants are aware of the market decisions and market results.

- Competition in the market both at the entry (auctions) and in the market (dispatch) will improve overall conditions, efficiency, transparency and predictability will lower the wholesale market prices for consumers.

- In the CTBCM, substantial price decrease is expected through measures such as (a) competitive bidding; (b) transparent economic dispatch; (c) forecast improvement resulting in least cost expansion planning; (d) procurement discipline (e) bilateral contracts etc.

Will CTBCM resolve the issue of Circular Debt and will it improve payment discipline?

- CTBCM ensure to develop and align the policy, regulatory framework and institutional institutional capacities, enhance transparency, contribute in improving wholesale market governance, bring in efficiencies, attract investments on risk sharing basis, encourage competition and put pressure on prices.

- In addition to CTBCM, other measures including privatization are also required to address directly the non-performance issues of DISCOs, low recoveries, electricity theft etc. which are the major issues behind Circular Debt.

- The CTBCM model is for the design and implementation of the wholesale electricity market in Pakistan; it is not, and does not pretend to be, a reform plan for the entire Power Sector.

What is the difference between Wholesale and Retail Market? When Retail Market will be introduced in Pakistan?

- Wholesale Electricity Market refers to the bulk purchase and sale of electricity by energy producers and suppliers. Other participants in the wholesale energy market include financial intermediaries, energy traders and large consumers. Whereas, Retail Market refers to sale and purchase of electricity between electricity suppliers and small end-consumers.

- Initially CTBCM will introduce completion in wholesale market only, by allowing large consumers, suppliers, traders and generators to negotiate bilateral contract of sale and purchase of electricity in bulk (> 1MW). As the market maturity and liquidity increases this threshold shall be gradually decreased by the regulator to open the retail market introduce competition at retail level where the end-consumers will have choice to select their own supplier. But this will take time and will not happen in the recent future.

Whether future procurement for regulated consumers in CTBCM will be secured by Sovereign Guarantees or not?

- In the initial stage of the market opening, the contracts will still be backed by the government guarantees but their volume will be reduced significantly in CTBCM and would be limited only to DISCOs having low creditworthiness.

- The procurement of generation capacity for creditworthy DISCOs will not be secured by Sovereign Guarantees, instead other credit risk mechanism like credit covers will be introduced. For low creditworthy DISCOs guarantees backed by the government will be provided.

- All future procurements shall be bilateral leading to more accountability and improving the creditworthiness.

What are the main differences between Service Providers and Market Participants?

- The Service Providers are companies that provide non-discriminatory services to all Market Participants, but do not buy or sell electricity in such market. These include System Operator, Market Operator, Transmission Network Operator (TNO), Distribution Network Operator (DNO/DISCO), Independent Auction Administrator (IAA) etc.
- The Market Participants are entities that have commercial interest in the market. In other words, the entities who perform trading of electricity by buying and / or selling electricity in the market are called Market Participants. They include Generators, Traders, Electric Power Supplier and Bulk Power Consumers.

What is the main difference between Trader and Supplier?

- Electric Power Traders will be licensed entities to buy and sell electricity to other Market Participants at wholesale level and can be involved in export or import activities, but it cannot sell electricity directly to end-consumer.

- Whereas, an Electric Power Supplier can sell directly to the end-consumers.

What are stranded costs and cross subsidy charges?

- In electric power generation deregulation, stranded costs represent a public utility's existing infrastructure investments and legacy contractual costs that may become redundant after liberalization of market.

- Cross-subsidies in electricity tariff can be defined as a mechanism whereby some consumer groups are charged a higher tariff as compared to the cost of supplying power to them. The additional revenue generated from them is used to tide over the revenue shortfall from other consumer groups, who are charged lesser tariff as compared to the cost of supplying power to them.

What will be the role of PPIB/AEDB in CTBCM?

- PPIB and AEDB will act the role of (IAA), which will perform the auctioneer function for procuring generation capacity against the incremental demand, primarily for DISCOs. In order to undertake this function, PPIB/AEDB would need to get themselves registered with NEPRA as IAA.

How legacy PPAs will be dealt in CTBCM?

- The legacy PPAs will be allocated to all the DISCOs based on the allocation factors approved by NEPRA.

- There will be no impact of allocation on Rights and obligations established under the existing PPAs/EPAs. CPPA (Special Purpose Agent) will be dealing with legacy contracts in the same manner as today. These contracts will be protected and there will be no alteration of these agreements under CTBCM.

How future procurement for regulated consumers will be done in CTBCM?

- Future procurement for regulated consumers will be done through competitive auctions conducted by IAA, against the forecasted incremental demand of DISCOs.

- The detailed mechanism for power procurement under CTBCM shall be specified in the NEPRA (Electric Power Procurement) Regulations, 2022.

Does CTBCM apply only to Take or Pay contracts or on Take and Pay contracts as well?

- CTBCM will have no impact on the existing contracts which will be dealt with through CPPA in future as they are being treated today. All the future contracts will be bilateral contracts which will be flexible and market participants can decide on the terms and conditions of their contracts as per their requirements.

- Market Commercial Code provides four (04) types of standardized contracts for capacity and energy for market participants to choose from and if they wish to have any other type of contract then they can also do a customized contract.

How can captive generators sell power under the CTBCM and what will be the charges for use of transmission and distribution system charges (UoSC) they will be required to pay?

- Captive generators can obtain a supplier licence and enter into a bilateral contract with any BPCs for supply of electric power. Alternatively, captive generators can sell both their energy and capacity in the market without any bilateral contracts. In both cases, captive power plants will sign a market participation agreement with the Market Operator.

- UoSC will include the distribution margin, transmission charges, cross subsidy, losses allowed by the Regulator and stranded cost etc., and NEPRA Open Access Regulations address these issues;

Can a Generation Company sell power under CTBCM while holding a Licence for wheeling?

- The framework for wheeling i.e. wheeling regulations has been repealed with the commencement of the CTBCM.

- In order to sell electric power to a BPC under the CTBCM, a generation company will have to obtain the licence as an electric power supplier under NEPRA (Electric Power Supplier) Licence 2022.

- Further, it will have to enter into a market participation agreement with the market operator for participation in the balancing mechanism.

Can Capacity also be sold in addition to energy in CTBCM?

- Yes, within CTBCM two products Capacity and Energy are traded.

- The energy is traded at hourly marginal price and settled on monthly basis and capacity is settled on annual settlement basis.

How can legacy plants can participate under CTBCM?

Legacy plants have multiple options in CTBCM.

- They can sell to XW-DISCOs if they are selected on the principle of least cost under through IGCEP and power acquisition program of DISCOs.
- They can also sell to competitive suppliers under B2B arrangements.
- They can sell to BPCs after obtaining competitive supplier licence; and
- They can also sell in the market as merchant plants.

Can legacy power plants participate under CTBCM by offering lower tariffs in the market than NEPRA notified tariff?

- Legacy contracts having contract with CPPA on behalf of DISCOs are protected and will be dealt in same manner as they are being dealt today.

- However, if they terminate their contract with CPPA with mutual consent then they can participate in CTBCM market.

How can Power Plants will secure financing under CTBCM without sovereign guarantees?

- At the start of the market, sovereign guarantees will continue from federal government for future DISCOs procurement.
- However, in CTBCM contracts will be signed bilaterally between DISCOs and generator. Gradually sovereign guarantees will be withdrawn as DISCOs become credit worthy.
- Power plants selling power to under B2B arrangements through competitive suppliers will secure their investments and risks at their own

What is the criteria for Industrial Estates to get Licence under CTBCM? Do they need both distribution and Supply Licences? How can they contract with Power producers and under what License?

- If the industrial estate intends to provide distribution services to its consumers , it will require a distribution license from NEPRA.
- If an Industrial Estate aspires to supply to BPCs it will have to get a competitive supplier licence from NEPRA.
- However, the concerned XW-DISCO will remain the SOLR for the territory of the Industrial Estate.

Will IPPs provide services of constructing grids under CTBCM? Does Provincial Grid Company (PGC) has any role under CTBCM?

- The IPPs can finance and construct lines and later handover assets to respective transmission company/distribution company for the O&M.
- PGC can provide transmission expansion and interconnection services as per the approved TSEP and NEPRA determined tariff.
- PGC shall sign the Connection Agreement with connected parties.

How can NEPRA provide support to PGCs, (i). for determination of UoSC between PGC and NGC, (ii). for a contractual arrangement between PGC and NGC for sharing of open access charges and participation under CTBCM?

- PGC and NGC are licensed entities and their tariff is regulated and it will be always determined by NEPRA.

- While determining the said charges for the interconnection with the DISCO/NTDC/Generation company will be taken into consideration and accordingly all the technical and financial cost will be pass through.

- As mentioned above, NEPRA will give determination wherein all the matters will be covered including the connection agreement between PGC and NGC as per the standard approved template.

Has NEPRA determined Transmission and Distribution UoSC to be paid by BPCs under CTBCM?

- The UoSC have been already determined in various tariff determinations of the DISCOs, NTDC, MO fee etc.
- The in field decision of the Authority related to Stranded Cost and Cross-Subsidies is that no such charges will be paid,
- However, the Authority will review the same as afresh determination in light of NE Policy for efficient functioning of the market.

There will be no subsidy for BPCs like Industrial Support Package under CTBCM? How will CTBCM be competitive for BPCs then?

- Subsidies are provided by the Federal Government, it is upto the Federal Government to provide subsidies to consumers opting for competitive supplier.

- Once the FG decides to give subsidies to such consumers then the mechanism may be devised for this purpose.

BPCs with captive power generation have excess capacity to sell but such plants are based on fossil fuels? How will they compete on least cost basis?

- Captive power generation based on fossil fuels will only be dispatched when it qualify for merit order despatch. Such situations can occur as some of them are based on coal and bagasse as well.

- Fossil based generation can also be dispatched to alleviate congestion in some regions in which it might become feasible to run small captive generators for alleviation rather than large IPPs.

- Captives connected on 11kV will be on self-dispatch and will not be able to trade capacity. They can sell their energy in BME at marginal price or through bilateral contracts.

Will BPCs need to enter into two agreements for getting electric power from competitive supplier and to get remaining electric power from DISCO as SOLR?

- BPCs who opt to buy power from market competitive supplier will not be allowed to buy excess energy from SOLR on regulated tariff.

- They can only buy electricity through bilateral contracts and any imbalances arising out of it will be settled at marginal price through market operator.

What will be the opportunity for Captive Power Plants under CTBCM?

- Sale of power as merchant plant.
- Sale of power under B2B.

There should be one entity performing MO and SO functions for better coordination under the CTBCM. What's Panel's take on this?

- There are different models for restructuring of the power sector in competitive electricity markets around the world. In some markets, the SO and MO functions are combined under ISO models. Whereas, in other markets, the SO and MO function independent of each other.

- In Pakistan, MO and SO functions may be combined for better coordination and optimization, but it's not a prerequisite for start of the market. Eventually, these two functions can be combined under a unified company if requirement arises based on efficient functioning of the market.

If BPC leaves DISCO, what should be the minimum term of contract that BPCs will sign with competitive supplier?

- As per the Market Commercial Code approved by the Authority, the minimum contracts duration that a BPC will enter into is two (2) years.