

ELECTRICITY MARKET PROFESSIONAL PROGRAM

INSTITUTIONAL ROLES IN POWER SECTOR REFORMS



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EMP @ LUMS
July 17-22, 2018

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The Electricity Market

- A trading environment where multiple sellers trade with multiple buyers market products under specific rules. Why they have arise in many countries?
- Service providers. What do they do?. Restrictions?
- Competition may apply in certain segments of the market. Which ones? Why?
- Why regulation still is necessary?
- Different market arrangements discussed in another presentation
- This presentation deals with institutional roles only with regard of the market. Why?

Role of Policy Makers

- In other words, the Government (with political objectives)
- Regarding Competitive Electricity Wholesale Market development:
 - normally the political decision translates into policies the policy made by policy makers
 - Include the market development as part of the national electricity policies (what also involve different jurisdictional power, e.g provinces)
 - Issue specific policies related to the market development, such as privatizations, energy matrix, etc.
 - Promote the promulgation of laws to shape legally the political decisions

Role of the Regulator

- It is a professional body not subject to political interests
- Regulate according to the law and other binding documents
- Regarding Competitive Electricity Wholesale Market development:
 - Approve the rules; codes, procedures, etc. Which will regulate the functioning of the market. In the end, approves the market model that responds to the policies and the laws
 - Monitor and supervise the functioning of the market (particularly the risk of market power abuse)
 - May implement independent market surveillance measures
 - Amend; adjust, create new, etc. rules, regulations, etc as needed (usually through consultation)

Roles of Market Operator

- MO must be an independent body, without any commercial interest in the market – non profit entity
- Strict transparency and accountability rules
- Governance to balance conflict of interest
- Regarding Competitive Electricity Wholesale Market development:
 - Usually is well positioned to propose features of this market
 - The definition of a market model requires many pragmatic considerations (known by whom are close to the market)
 - Well suited to prepare and propose rules, regulations and procedures for approval of the competent authority
 - Monitor the settlement role cycle: metering, collection, validation, calculation, publication
 - Market contracts registry (necessary for settlement)
 - Market participants registration
 - Credit cover administration

Roles of the System Operator

- MO must be an independent body, without any commercial or technical interest in the market – non profit
- Strict transparency and accountability rules
- Governance to balance conflict of interest
- Regarding Competitive Electricity Wholesale Market development:
 - Propose Grid Code amendment according to the market design (for approval)
 - Prepare the security constrained economic dispatch according to the Grid Code (security and optimization)
 - Operational planning, day ahead, unit commitment, etc
 - In some cases expansion planning (indicative or not) for approval

Roles of DISCOs

- Discos in fact play two roles:
 - Network services
 - Retail services

} Integrated in one company or not
- The retail side is market participant (sells and buy)
- There could be more than one retailer per jurisdiction
- Retailer for regulated customers and for BPCs
- Regarding Competitive Electricity Wholesale Market development:
 - Balancing mechanism participant
 - Responsible for demand forecast (long, medium, short)
 - Credit cover

Retail Competition

- It is not just to split retail from network services
- It refers to when a customer can choose his/her supplier
- There must be more than one supplier
- Competition arises when prices and other conditions are negotiated between the parties (no regulated tariffs)
- Service providers
- The supplier of last resource
- Metering, invoicing
- Gradual implementation

Roles of Transmission Companies

- Not a market participant. Regulated function. It could be a for profit company. No rights to sell and buy
- It may or not have obligations to decide expansions
- Regarding Competitive Electricity Wholesale Market development:
 - Transmission system operation. Dispatch may or not
 - Expansion planning
 - Open access. Connection agreements
 - Regulated rates – Losses depending
 - Availability obligations – system operation may or not be in it
 - Penalties for non compliance – Public ownership dilemma

THE CASE OF PAKISTAN

MRC

NEPRA Act 2018 - Clauses

“ Whereas ” declares the creation of competitive market	The recitals declare the intention of regulators to create a market
2(viia) : market operator is responsible for the organization and administration of trade in electricity	The MO is responsible for the design and then for the operation, subject to the Authority approval
7(2)(ac); (ia) : NEPRA has to ensure ... efficient market design; promote development of a market	NEPRA, while approving and monitoring, must follow efficiency and promotion criteria
14A: FGoP : .. prescribe a national electricity policy for development of the power markets	Now that the market creation is fixed by a law, the Act imposes the FGoP to produce it and the plan every 5 years
14B: generation facility connected to 220 kV and above (and 132 kV)	Subject to economic dispatch by SO (secur. constrained econom. dispatch)

NEPRA Act 2018 - Clauses

14D: generating companies may supply to Discos, Traders and Suppliers	This is multiple seller and multiple buyers trading environment, i.e. the market
21(2)(a): generation company can sell to BPCs	Again part of the concept of multiple sellers and buyers
23A&B: Market Operator License	The MO is a typical entity in a market, responsible for the settlement of the transactions and the BME and BMC
23 C&D: electric power trader	Market participant that buys and sell from and to other market participants
23 E&F: electric power supplier	Market participant that buys in the market and sells to non market participants (regulated customers)

NEPRA Act 2018 - Clauses

23G&H: System Operator License	The SO is a key component for competition, operating the system according to the Grid Code and maximum transparency
32: Investment and power acquisition plans	Even in an open market, the Act maintains regulatory oversight on activities related to regulated customers

A few minutes ...

- Questions
- Opinions
- Different views
- Others open

Thank you very much