Introducing Competition in Generation of Electricity

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Why Competition?

- Allows competing producers to access multiple buyers; eliminates shortages

- Creates a market that enables investment

- Competitive forces will yield:
  - the best allocation of economic resources
  - the lowest prices
  - the highest quality
  - the greatest material progress

Monopolies must end

- Monopolies violate fundamental rights; Electricity Act does not contemplate monopolies
- “Each type of freedom is not only an end in itself but also leads to other freedoms” – Amartya Sen
- Free and unfettered competition must be the rule of trade; conforms to democratic values
- Developed countries have eliminated monopoly in generation & supply; several developing countries have followed

Competition v. Regulation

- Competition in electricity industry implies
  - competition in production & supply
  - deregulation when choice is enabled (S.49)

- Transportation (T&D) functions
  - are natural monopolies;
  - uneconomic to create multiple networks
  - should be regulated;
  - must serve everyone: non-discriminatory
  - must be separated from competitive segments

Some Myths

- Electricity systems in India are dissimilar to developed countries
- Open access to consumers is not feasible
- Open access to distribution networks is more complex compared to transmission
- Regulations u/s 42(2) can wait for 5 yrs.
- Privatisation is more important than open access
- Privatisation will help introduce competition

Pre-requisites of Competition

- Competition in production presupposes
  - non-discriminatory open access to T&D networks
- Pre-requisites of Open access are
  - Separation of carriage (wires) from content (electricity)
  - Independent System Operator (RLDC/SLDC)
  - Regulated transmission/wheeling charges
  - Trading arrangements
  - Balancing arrangements; settlement mechanism
  - Efficient transmission arrangements
  - ToD metering

Limitations to Competition

- Competition pre-supposes adequate supply
- Competition amidst shortages can raise prices
- Committed supplies must continue undisturbed
- Introduce competition for additional supplies only
- Financing of competitive capacity requires a coherent framework;
- Flawed framework will lead to costly and inadequate capacity addition

The Legal Framework

- Freedom to produce or trade is a fundamental right under Article 19 (1) (g)
- Free flow of trade is a Constitutional guarantee under Art. 301
- Electricity Act mandates competition and choice
- Act creates an industry structure that enables competition
- Inadequate enforcement is of great concern

The Legal Framework: Generation

- Every Generating Company (Genco)
  - has access to all licensees across India: S. 10(2)
  - may access consumers under regulations: S. 42(2)
- Every Captive producer
  - can supply to constituents: S. 2(8), 2(49)
  - has a right to open access: S. 9(2)
  - pays no surcharge: S. 38(2), 39(2), 42(2)
- Developed countries provided open access for Utilities in 1970s; for bulk consumers in 1990s

Role of CERC

- Overarching role of CERC is necessary for
  - ensuring efficient transmission arrangements
  - preventing pan caking; enabling inter-state flows
  - ensuring competitive trading arrangements
  - establishing balancing/settlement mechanisms
  - facilitating Power Exchanges
- CERC has introduced Open Access for licensees: U/S 28(2), 38(2)(d), 62(1)(c), 79(1)(c)
- CERC must evolve a coherent national model for development of market: S. 66

Role of SERCs

- SERCs have a statutory duty to:
  - Issue State transmission licences (S. 16) and fix wheeling tariffs by June 10, 04 : S. 62(1)(c), 86(1)(a)
  - facilitate wheeling and inter-connection: S. 30
  - ensure independent system operation (SLDCs) by June 10, 04: S. 31(1), 32(2)(e); Adopt ABT
  - enable consumer choice established by S. 42(3): issue regulations u/s 42(2)
  - ensure that open access is non-discriminatory: S. 39(2)(d), 42(3), 86(1)(d)

Competition for existing Gencos

- All committed suppliers (NTPC, NHPC, SEBs, IPPs) must continue to supply at regulated tariffs
- Committed suppliers may access the market subject to
  - the terms of their PPA
  - price recovery not exceeding the regulated tariff
- Enable Gencos/Captives with surplus capacity to sell to Grid; provide inter-connection
- Entry of surplus capacity in the market will reduce tariffs/UI charges and shortages

Policy framework for Open Access

- Policy & Regulations should specify phased introduction of Open Access to bulk consumers

- All regions may be divided into four categories:
  - Unbundled States & cities with pop. of over 2m: Open Access by Dec. 04
  - States where SERCs in position for 2 years: Open Access by Dec. 05
  - Other States: Open Access by Dec. 06
  - Electrically backward States: Open Access by Dec. 07

Policy framework for Open Access (contd.)

- Excessive Surcharge can defeat Open Access
- Surcharge (incl. Addl. Surcharge) should not exceed:
  - HT tariff minus Marginal Cost of Supply (MCS)

    (Where MCS = marginal cost of procurement + average wheeling charge + average T&D loss for the Discom, subject to a minimum of 50 p per unit)
- Surcharge should decline by 10% every year
- Demand charge should be adjusted in surcharge
- Discoms to be default suppliers in lieu of surcharge

Policy framework for New Capacity

- New capacity may be divided into:
  - PPA based Plants of Public Sector Undertakings
  - PPA based Plants of Private sector
  - Merchant Plants
  - Differentiate between Base & Peak load stations
- Methodology & principles of tariff determination for generation are to be specified by CERC: S. 61(a)
- Govt. may specify the process of bidding to supplement CERC Regulations: S. 63

Policy framework for New Capacity (contd.)

- PSUs may set up PPA based capacity:
  - On ‘cost plus’ or benchmark tariffs set by CERC
  - Returns may be fixed at Bank Rate + 2% for 80% PLF
  - Freedom to sell in market beyond 80% PLF
  - SERCs must grant access to bulk consumers
  - Should be free to bid at par with Private Sector

Policy Framework for New Capacity (contd.)

- Private Sector may set up PPA based capacity:
  - tariff-based bidding for fixed & variable charges as sole criterion; no itemised tariff
  - Must sell a minimum 20% as merchant capacity, including 5% to bulk consumers;
  - Market access if contracting Discom fails to pay
  - exit/ renegotiate PPA after 10 years
- Other forms of bidding are contentious
- GOI guidelines forbid negotiated tariffs

Policy Framework for New Capacity (contd.)

- Merchant Plants:
  - May include plants with PPAs of 5 yrs. or less
  - Should sell to Discoms in the regulated market
  - Tariff for sale to Discoms to be regulated until full competition in place; deregulate thereafter
  - Should be enabled to sell through Power Exchanges subject to price cap
  - May sell freely to consumers: S.49

Road Ahead

- CERC to issue regulations for principles of tariff setting and for market development
- CERC to advise GOI on competition in the power sector
- GOI to notify policy u/s 3 to lay a coherent path and timeframe for introducing competition
- SERCs to issue the required regulations expeditiously and adhere to the national policy

Thank You