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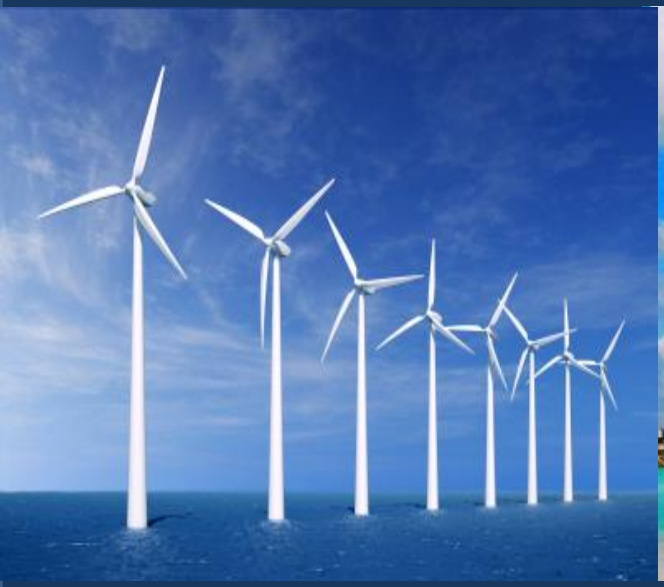
ROLE OF POLICIES AND REGULATIONS IN ENHANCING TRADE AND ATTRACTING INVESTMENT

1ST MEETING OF TASK FORCE 1 ON COORDINATION OF POLICY, LEGAL AND REGULATORY FRAMEWORK

SOUTH ASIA REGIONAL INITIATIVE FOR ENERGY INTEGRATION



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KEY WORDS

"POLICY"

📖Principle or rule, to guide decisions and achieve rational outcomes.

📖Intended effects of a policy vary widely according to the organisation and the context in which they are made.

📖Public Policy is made by government with regard to a class of issues in a manner consistent with law.

"REGULATION"

❖Process for enforcement of rules, based on and meant to carry out a specific piece of legislation.

❖Regulations are enforced usually by a regulatory agency formed or mandated to carry out the purpose or provisions of a legislation.

❖Regulations are delegated or subordinate legislation.

KEY WORDS

"TRADE"

- Transfer of ownership of goods from one person or entity to another by getting something in exchange from the buyer.
- Also loosely called commerce or financial transaction or barter.

"INVESTMENT"

- In general terms, it means use money hoping to make more money.
- Has different meanings in finance and business.
- In finance, investment means purchase of a financial product or other item of value with expectation of favourable future returns.
- In business, it means purchase by a producer of a physical good, such as durable equipment or inventory in the hope of improving future business.
- Putting money into something with a hope of short-term gain, with or without thorough analysis, is gambling or speculation.

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KEY WORDS

NEED FOR "POLICY" & "REGULATIONS" IN POWER SECTOR

- Economic growth of a country depends significantly on supply of energy ,electricity being one form.
- Electricity availability in developing countries is much less than demand.
- Urgent need to enhance generation capacity as well as transmission and sub transmission capacity.
- This requires huge investment in the sector.
- Designing appropriate policy framework and setting up independent regulatory authority crucial for attracting domestic as well as foreign investments.
- Private investors respond to risk return trade-offs.
- Policy environment and regulatory framework contribute significantly to investment environment, especially in power sector.

MAJOR POLICY INITIATIVES IN INDIAN POWER SECTOR

- Indian power sector opened up for private investment in 1990-91.
- Several policy initiatives taken to attract investment in power sector.
- Early phase of policy development aimed to improve policy climate for private investment.
- Subsequently, with policy of encouraging private sector participation and objective of distancing government from regulatory responsibilities, independent regulatory commissions set up in 1998.
- Enactment of Electricity Act in 2003 brought in major changes in the sector such as de-licensing of generation, freely permitting captive generation, grant of multiple distribution licenses, trading in electricity, open access, etc.

MAJOR POLICY INITIATIVES IN INDIAN POWER SECTOR

Major policies made by Indian government in power sector:

- Private Power Policy
- Mega Power Policy
- National Electricity Policy
- Tariff Policy
- National Policy for Hydro Power Development
- FDI

Salient features of above policies are brought out in subsequent slides

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PRIVATE POWER POLICY

- Electricity (Supply) Act, 1948 amended in 1991 allowing entry of private investors in generation and distribution.
- Tariff notification issued in 1992 providing for two-part tariff structure.
- Provided 16% ROE at 68.5% PLF for thermal plants and 90% availability for hydro plants.
- Liberal incentives at higher PLF/Availability.

MEGA POWER POLICY

- Issued in 1995 and revised in 1998.
- Applicable for generation projects of 1000 MW and above capacity supplying electricity to more than one state.
- Import of capital equipment exempted from custom duty
- Income tax holiday for 10 years.
- Payment security mechanism such as LoC, recourse to state government's share of central plan allocation in case of default.
- In view of poor financial health of SEBs, investors risk addressed by setting up of PTC to purchase power from identified sources and sell to identified SEBs.
- Initially 19 projects – 14 in public sector and 5 in private sector – declared as mega power projects.
- Setting up of independent regulatory commission in the state one of the pre-requisites for availing power from mega projects.

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NATIONAL ELECTRICITY POLICY

A key instrument for

- ❖ Providing policy guidance to Electricity Regulatory Commissions in discharge of their functions.
- ❖Guidance to Central Electricity Authority for preparation of National electricity Plan.

Policy aims at

- ❖Accelerated development of power sector.
- ❖Providing supply of electricity to all areas.
- ❖Protecting interests of consumers and other stakeholders.

NATIONAL ELECTRICITY POLICY

Objectives of Policy are

- ❖Access of Electricity for all households in next five years.
- ❖Power Demand to be fully met by 2012. Energy and peaking shortages to be overcome and spinning reserve made available.
- ❖Supply of Reliable and Quality Power in an efficient manner and at reasonable rates.
- ❖Per capita availability of electricity to be increased to over 1000 units by 2012.
- ❖Minimum lifeline consumption of 1 unit/household/day.
- ❖Financial Turnaround and Commercial Viability of Electricity Sector.
- ❖Protection of consumers interests

TARIFF POLICY

Key objectives

- ❖Ensure availability of electricity to consumers at reasonable and competitive rates.
- ❖Ensure financial viability of the sector and attract investments.
- ❖Promote transparency, consistency and predictability in regulatory approaches and minimise regulatory risks.
- ❖Promote competition, efficiency in operations and improvement in quality of supply.

TARIFF POLICY

Various aspects covered are

- ❖Tariff fixation framework for cost of service regulations
- ❖Procurement of power under competitive bidding route
- ❖Harnessing captive generation
- ❖Promoting generation from non-conventional sources of energy
- ❖Transmission pricing
- ❖Approach to transmission loss allocation
- ❖Multiyear tariff framework in distribution
- ❖Framework for revenue requirement and costs
- ❖Tariff design - linkage with cost to serve
- ❖Cross subsidy surcharge and additional surcharge for open access
- ❖Trading margin

HYDRO POWER POLICY

Policy aims at

- ❖Accelerating pace of hydro power development
- ❖Exploiting vast hydroelectric potential at a faster pace
- ❖Promoting small and mini Hydel projects
- ❖Strengthening role of PSU/SEBs for taking up new Hydel projects.
- ❖Increasing private investment

HYDRO POWER POLICY

Provides for various steps and measures to achieve above objectives such as

- ❖Funding
- ❖Creation of Power Development fund
- ❖Basin-wise development of hydro potential
- ❖Inter- state projects
- ❖Simplified procedure for transfer of clearances
- ❖Rationalisation of hydro tariff
- ❖Promoting hydel projects with joint ventures

FDI IN INDIA

- Developing countries, emerging economies and countries in transition see FDI as a source of economic development, income growth and employment.

- Flow of private capital from developed to developing economies is influenced by higher expected returns and growth potential of developing markets.

- Factors affecting investor's choice :
  - Country specific factors
  - Sector specific factors
  - Project specific factors

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FDI IN INDIA

- Countries have liberalised their FDI regimes and pursued other policies to attract investments.
- India also encourages FDI in various sectors of economy and has reviewed FDI limits from time to time.
- In 2012, FDI relaxed in various sectors such as multi brand retail, singe brand retail, commodity exchanges, power exchanges, broadcasting, NBFCs, asset reconstruction companies.
- Recently FDI limit was hiked from 74% to 100% in telecom, from 26% to 49% in insurance, 49% in petroleum and natural gas refining (automatic route), in singe brand retail up to 49% under automatic route (FIPB approval beyond 49%). In defence production, FDI up to 26% allowed for first time.
- India received FDI worth US$ 31 billion during April-Jan 2012-13.
- Indian economy is capable of absorbing US$ 50 billion FDI per year.

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FDI POWER SECTOR

- Power sector in India has grown significantly in last 10years.
- Investment potential in power continues to be huge due to market size and attractive return on investments.
- 100% FDI is allowed in power sector (except nuclear).
- Power sector attracted US$ 7.83 billion in FDI since Apr 2000 to Feb 2013.
- Investment up to US$ 400 billion required up to end March 2017.

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REGULATORY SCENARIO IN INDIAN POWER SECTOR

- Electricity being in concurrent list of Constitution of India, Union Government as well as State Governments have jurisdiction in power sector.
- Electricity Regulatory Commission Act of 1998 paved way for setting up of regulatory commissions in centre and in states.
- Central Electricity Regulatory Commission carries out functions listed in Section 79 of Electricity Act, 2003.
- 26 State Electricity Regulatory Commissions perform functions given in Section 86 of the Act.
- Two Joint Electricity Regulatory Commissions, one for states of Manipur and Mizoram and other for Union Territories and Goa also set up.
- Consistent with Electricity Act 2003 and various policies of central as well as state governments, regulatory commissions issue regulations.
- Section 178 of the Act gives a list of matters on which CERC to frame regulations. Corresponding list for state commissions given in Section 181.

CENTRAL ELECTRICITY REGLATORY COMMISSION (CERC)

- CERC emerged over the years as catalyser of reforms in Power Sector in India.
- Entrusted with enormous responsibility of promoting market development in Power Sector.
- Mandated to regulate Inter-state transmission with due regard to emerging needs of competition and multiple player regime in the sector.
- CERC takes proactive action by periodically reviewing/amending its regulations keeping in view developments and requirements of power sector.
- Some of path breaking measures taken by CERC
  - Enforcement of Availability Based Tariff in 2003
  - Grant of Open Access in inter-state transmission in 2004
  - Regulations for Grant of Trading License in 2004
  - Indian Electricity Grid Code, 2009
  - Guidelines for grant of permission for setting up and operation of power exchanges in 2007
  - Grant of approval in 2008 to setup power exchange to
    - ✓Indian Energy Exchange Limited (IEXL)
    - ✓Power Exchange India Limited (PXIL)

MAJOR REGULATIONS NOTIFIED BY CERC

- Rates, Charges and Terms & Conditions for use of intervening Transmission Facilities
- Sharing of Inter-state Transmission charges and losses
- Fixation of Trading Margin
- Indian Electricity Grid Code Regulations
- Power Market Regulations
- Terms & Conditions of Tariff Regulations
- Procedure, Terms & Conditions for grant of Transmission License and other related matters
- Terms and Conditions for Tariff determination from Renewal Energy sources
- Open Access in Transmission
- Trading License
- Measures to relieve congestion in real time operation
- Renewable Energy Certificates

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TRADE FOR TRADING

- Original form of trade was barter i.e. direct exchange of goods and services
- Modern trade generally negotiated through a medium of exchange, such as money
- Trade between two traders called bilateral trade while more than two traders called multilateral trade
- Trade could be retail or wholesale
- Network that allows trade is termed “market”

TRADING OF ELECTRICITY

- According to Electricity Act, 2003 "trading" means purchase of electricity for resale thereof and the expression "trade" shall be construed accordingly
- "Electricity trader" is defined as a person who has been granted a license to undertake trading in electricity.
- Act has recognized trading as distinct activity in addition to generation, transmission, distribution and supply.
- It is recognized as licensed activity, however, a distribution licensee does not require license for trading.
- For inter-state trading, CERC is appropriate commission for grant of trading license whereas for intra-state trading, it is SERC of that state.
- A person granted license for inter-state trading does not require a separate license for intra-state trading

TRADING REGULATIONS

- Regulations for grant of trading license was first issued in 2004 .
- Replaced by “Central Electricity Regulatory Commission (Procedure, terms & conditions for grant of trading license and other related matters) Regulations, 2009”.
- Regulations provide for four categories of trading license depending on traded volume of electricity

TRADING REGULATIONS

Category of Licence	Volume of electricity proposed to be traded in a year	Net Worth (Rs. in Crs)
Category I	No limit	50.00
Category II	Not more than 1500 MUs	15.00
Category III	Not more than 500 MUs	5.00
Category IV	Not more than 100 MUs	1.00

TRADING REGULATIONS

- SERCs issued regulations for intra-state trading.
- Till March 2011, 48 applicants awarded trading license by CERC.
- In order to provide for cross border trading of electricity, CERC amended definition of inter-state trading on 11th October 2012 as

'Inter State trading' means purchase of electricity from one State for re sale in another State and includes electricity imported from any other country for re-sale within India or exported to any other country subject to compliance with applicable laws and clearance by appropriate authorities.

TRADING MARGINS

- Trading margins initially fixed in 2004
- Revised regulations titled “Central Electricity Regulatory Commission (Fixation of Trading Margin) Regulations, 2010” issued on11th January 2010.
- Trading margin not exceeding seven (7.0) paise/kWh in case sale price exceeding Rupees three (3.0)/kWh and four (4.0) paise/kWh where sale price less than or equal to Rupees three (3.0)/kWh.
- This margin includes all charges, except charges for scheduled energy, open access and transmission losses.
- Trading margin is charged on scheduled quantity of electricity.

VOLUME OF ELECTRICITY TRADED

- Short term trading transactions are performed in following manner
  - ✓Direct between buyer and seller
  - ✓Through electricity traders
  - ✓Term ahead contract on power exchanges
  - ✓Day ahead contract on power exchanges
  - ✓Through unscheduled interchange
- Roughly, 10% of total generation is transacted through short term trading mechanism
  - ✓Out of above, approximately 5% falls under first 3 categories, 3% in day ahead though exchanges and balance through UI mechanism

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ELECTRICITY EXCHANGE

- Trading of electricity through power exchanges not a new concept.
- Nord Pool (Nordic countries), Amsterdam Power Exchange (Holland), Power Max (France) exist for long time in developed countries. In USA, power is traded on multi commodity exchanges.
- In India, two power exchanges currently in operation:
  - ✓Indian Energy Exchange Limited (IEXL)
  - ✓Power Exchange of India Limited (PXIL)
- These Power Exchanges allow trade in following segments:
  - ✓Intraday contract / contingency contract
  - ✓Day ahead contract
  - ✓Term ahead contract
  - ✓Renewable Energy Certificate trading

ELECTRICITY EXCHANGE

- "Day ahead contract" means contracts where transaction occurs on day (T) and delivery of power is on the next day (T+1).

- "Term Ahead market" means a market where physical delivery of electricity occurs on a date more than one day (T + 2 or more) ahead from the date of transaction (T) and the contracts in such market can be transacted weekly / monthly / yearly or more in advance and have a defined delivery period on expiry of contract.

- "Intraday Contract / Contingency Contract" means contracts where transaction occurs on day (T) after the closure of day ahead transaction window and the delivery of power is on the same day (T) or next day (T+1).

- Power Exchanges are regulated in terms of Central Electricity Regulatory Commission (Power Market) Regulations, 2010.

OPEN ACCESS

- This is a game changer measure introduced through Electricity Act, 2003.
- Open access has brought about a paradigm shift to introduce competition in power sector.
- Open access means non-discriminatory use of transmission lines or distribution system by any licensee or a consumer or a person engaged in generation.
- All consumers with load of 1 MW and above are eligible for open access of distribution network. Such consumers need not buy electricity from distribution licensee of his area. He is free to source his requirement from any generator or a trader.
- CERC has issued regulations on open access in inter-state transmission. SERCs have done so for intra-state transmission and distribution.

OPEN ACCESS

Open access could be for long term, medium term or short term:

- Long-term access – period exceeding 12 years but not exceeding 25 years.
- Medium-term open access -period exceeding 3 months but not exceeding 3 years.
- Short-term open access - period up to one (1) month at one time.

SHARE OF PRIVATE SECTOR IN GENERATING CAPACITY

- Share of private sector has increased significantly after it was opened up for private participation in 1990-91.
- Against 15.4% in 2009 (23150 MW), share increased to 20.7% (35280 MW) in Jan 2011 and 29.5% (62460MW) by Jan 2013.
- For 12th Plan period (2012-17) out of target of 88000MW addition, a major share (52%) envisaged from private sector.
- CPP GENERATING CAPACITY

After liberalisation of generation from CPP in 2003, it has seen major growth as seen from data below:

By March 2002	17145 MW
By March 2007	22335 MW
By March 2011	32900 MW

NON-CONVENTIONAL AND RENEWABLE ENERGY SOURCES

- Various policy initiatives by central and state governments coupled with appropriate tariff regulations and other measures by regulatory commissions to promote generation from these sources resulted in quantum jump in capacity addition.

- Capacity more than doubled in four years – from 13242 MW in June 2009 to 27543 MW in May 2013.

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