

Critical Elements for the Restructuring of Electricity Sector: Issues and Lessons

International Energy Agency Conference on Electric Restructuring
Beijing, China
November 2, 2004

Ashley Brown

Executive Director, Harvard Electricity Policy Group
John F. Kennedy School of Government
Harvard University

Of Counsel, LeBoeuf, Lamb, Greene and MacRae, LLP

Critical Decisions on Electric Sector Restructuring

- Privatization or Incremental Private Investment
- Monopoly or Competition
- Regulatory Framework and Rules
- Market Structure and Rules
- Pricing Arrangements

Privatization or Incremental Private Investment

- Will Existing Assets Be Privatized?
- All Assets or Some Assets to be Privatized (e.g., Monopoly or Competitive)?
- Will Only New Assets Be Private?
- Will State Remain a Sector Investor?

Monopoly or Competition

- Vertical Integration or Unbundled
- Distribution
 - Wires Business
 - Supply Business
- Transmission
 - Monopoly Bottleneck or Contestable Response to Demand
 - Dispatch and System Operations
 - Pricing Issues – Market Implications
- Generation
 - How Many Players Needed for Viable Competition?
 - Resource Mix Issues (e.g., Hydro, Security, Environment)
 - Reliability Issues (e.g., Planning and “Must Run” Units)

Three Caveats

1. Confusing Means and Ends
2. Confusing Competition and Deregulation
3. Institutions Matter

Sequence of Decisions

- Regulatory Regime
- Market Structure and Rules
- Entry of Private Capital/Privatization

Regulatory Framework and Rules

- Economic Efficiency and Social Considerations
 - Environmental Impact
 - Universal Service
 - Economic Development
- Discretionary or Contract Regulation
- Centralized Regulation or Decentralized Regulation
- Rate of Return or Price Cap or Revenue Cap Pricing for Monopolies
- Anti-Trust and Competition Promotion

Market Structure and Rules

- Full Competition (Core and/or Non-Core)
- Wholesale Competition (Energy)
- Capacity Auctions (Monopsony or Non-Monopsony)
- Vertical Monopoly

International Experience/Lessons to Be Learned

- Privatize First (e.g., Brazil and India – Contrast with Argentina and Chile)
- Maximize Revenues or Optimize Sector (e.g., Brazil – Contrast with Argentina)
- Flawed Market Design/Politics and Ideology Over Substance (e.g., California)
- Macroeconomic Collapse Trumps Successful Restructuring (e.g., Argentina)

International Experience/Lessons to Be Learned, continued

- Lack of Transparency/External Discipline (e.g., India, Indonesia and Ukraine)
- Failure to Internalize Externalities (e.g., Brazil – Bahia)
- Socializing Risk (e.g., Brazil, Zambia and India)
- Lack of Information Symmetry (e.g., England and Wales)
- Failure to Fully Commercialize (e.g., Dominican Republic and Ukraine)
- Ill-Defined Regulatory Arrangements (e.g., Colombia, Brazil and USA)
- Externalities (e.g., Brazil and USA)