



# **Transfer of Power Sector Reforms What worked in Western Countries How can a reform be carried out in the developing world !?**

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# Why is a restructure of the ESI on the agenda world wide ?

- The former experiments in Chile, Argentina, England & Wales, Norway etc. have all shown that the rationale for the big vertically integrated monopolies in the ESI have vanished
- The ESI can be split into two groups
  - Monopolies as transmission and distribution
  - Competition as generation and supply
- Well structured, managed and regulated a huge efficiency potential can be tapped
- Failures in California, Enron, crises in Argentina, Brazil etc. have shown that reforms are robust but shortcomings more evident – will one "seize" fit all ?

# Background and main target Western Countries

- Electrification completed many years ago !
- Generation – overcapacity
- Wires – "gold plating"
- Government ownership inefficient
- Privatization on the agenda – tool to be **more efficient**
- First phase successful, but big
- domestic companies become international and later global – sometimes very profitable - market power ?!
- Will competition work in the long run without active regulation of mergers ?

# Background and main target developing countries

- Electrification low- especially in rural areas
- Generation and wires need major expansion but barriers are many
- Management and financing need major improvement and reorganization
- Poverty big challenge - very few can pay marginal costs and difficult to finance new expansion
- Governance big issue – corruption and lack of skilled personnel
- Restructure and private ownership on the agenda, but future challenges underestimated

# Drivers of the restructure process

- Privatization ( England & Wales )
- Innovation and reconditioning ( Chile )
- Efficiency ( Scandinavia )
- A single energy market (EU)
- Financial arguments as selling assets to obtain a quick "big" income and get rid of future financial burden when expansion is needed (developing countries )
- Infrastructure development ( World Bank )

# How was restructure done in Europe

- England & Wales : Privatization and competition were the drivers. "Public is bad – private is good" Margaret Thatcher. The fully independent regulator !
- Scandinavia : Efficiency through efficient regulation and competition. **Government ownership** still important – privatization not on the agenda
- Restructure custom fit to **country specific terms and goals!**
- One size will **not** fit all !
- Very difficult to create the **EU** single market !

# Transfer lessons learned

## Is there a quick way to implement Competition in the Power Sector?

- Present success stories
  - The consultants knows the domestic system very well, but the challenges is that the recipient country environment is unknown to him
- The “recipe approach” example the World Bank, a team, selected by the Bank, will present “custom” fit success stories !
  - How can country specific issues be solved ?
- The generic approach, what is basic Regulation, mapping country specific terms and bridge consultants and local expertise !

# Case of Bolivia

- Advice : Gas-pipeline to Argentina
- Bolivia decided : Gas to Brazil
- Advice : Power sector reform the Bank model
- Bolivia decided : Support from S. America
- Advice : Privatize, future expansion secured
- Bolivia did : Major adjustments, stopped huge price increase to poor customers
- Country expertise and country specific terms important – new innovative solutions created



# How could Bolivia make such adjustments ?

- Courage to be different !?
- Some key people at the right place at the right time !
- Specialists abroad were transferred to Bolivia
- General Bank model may not work ?
- Financed consultants from S. America that could show good results in the S. American environment
- ESMAP did a full country review !?

# Necessary elements to introduce competition (Western Generic Model)

- “Many” generators to create competition and to avoid use of market power
- Well functioning whole -sale market (Power Exchange)
- Full regulated 3<sup>rd</sup> party access to all wires
- Transparent rules, conditions, tariffs and simple system to handle disputes ( Regulator )
- Simple and transparent system to select a supplier
- Simple metering and settlement at low transaction cost
- The customer must fully understand the energy bill

# Independent

- The critical feature is ***independence from political intervention***
- Protect consumers from big vertically integrated monopoly service providers
- Generators need to be confident that final consumers will pay the bills
- T & D companies want their costs to be covered

**All investors want to see an effective regulation independent of governments to protect their investments**

# Independent Regulator

- Who appoints the regulator ?
- Can he make decision on his own
  - or a board or an advisory board ?
- How long is his term - can he be re-appointed ?
- Who can change the duties or the function

# How much discretion?

- US law often vaguely defines standards as : “just and reasonable” and limiting powers only be a reference to broad public interest criteria
- The other end of spectrum : Regulation through tightly specified law or contracts that seek to eliminate discretion “Regulation by contracts” Adjustments will require renegotiations
- Most systems lie somewhat between these extremes

# The quest for independence

- Distinct legal mandate, free of ministerial control
- Professional criteria for appointment
- Fixed term and protection from arbitrary removal
- Staggering terms that do not coincide with election cycle
- Exempting from civil service salary rules
- The agency must have reliable source of funding, usually earmarked levies

# Regulatory Risks

- Who can change the rules of the game?
- What happens when a new government enters into force ?
- Revisions - open or closed process ?
- The next regulation period ?

# **The Accountability** ( Formal **legal** basis within which the regulator operates and informal **regulatory process**)

- Encourages debate and open process
- involves all relevant parties
- leads to justification by the regulator of decisions and methodologies; and
- generally leads to a clear understanding of the “rules of the game”.



# Appeals

- None - the Regulator is the King
- Courts - get yourself a good lawyer and pay his fees
- Commission - how are members selected, and what about lobbying ?
- DOE - will politicians interfere - Independent Regulator?

# Energy Regulation New Challenges

## Do we need a fully new team ?

- When a new energy law will come into force, both the the government, utility staff and the end-users will face a new unknown competitive environment
- The Regulator has got two options
  - ex-post (supervise and “approve tariffs)
  - ex-ante (pro-active incentive Regulation PBR Regulation)
- Issue licenses or concessions in an efficient way
- Face new actors “ENRON” case
- Demand for learning and institutional building is **huge** !!

# Conclusions

- Western world and the Bank must acknowledge that a full western model will not work in developing countries
- All stakeholders must be "re-educated" one model will not fit all !
- A new mix of : New governance, education, institutional building, new rules for private participation, "smart subsidies", more critical selection of consultancies are some important ingredients in a new "medicine" that is badly needed
- WB Energy Thrust Funded Programs – the new melting pot ?