

***Structural Issues to
Resolve in Mexico in
Support of Electric
Industry Reform***

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Structural Reform: The Foundation



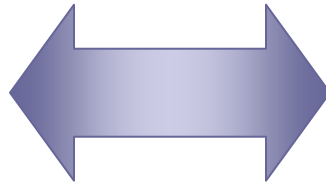
- Without a solid foundation, a building will likely fail to meet expectations
- Building an electric market without the appropriate institutional foundation is no different
- The foundation comes before the building

Checklist for structural integrity

- Institutional challenges
- Competition
- Technological obstacles
- Reducing long-term barriers to competition
- Financial issues
- Social and environmental barriers

Mexico's motives for electric reform

Lower Rates



Less Spending

Customers see:

- Lower tariffs
- Adequate investment in infrastructure
- Improved service quality

Government sees:

- Reduced subsidies
- Reduced infrastructure expenditures
- Eliminate need for backstop guarantees

Sensitive issues

- Electricity is heavily and unevenly subsidized
- “Privatization” in energy industry continues to be a political non-starter
- Labour unions are a large benefactor in current model; oppose meaningful reform

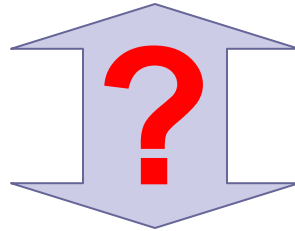
Structural change can be beneficial with or without electric market reform

- Institutional challenges
 - Mexican Constitutional conflict
 - Congressional accountability and maturity
 - Regulatory independence and transparency
- Competition
 - PEMEX: exercising market power in natural gas
- Technological obstacles
- Reducing long-term barriers to competition
- Financial issues
 - State utility accountability, solvency and budget uncertainty
 - Labour law, trade unions
- Social and environmental barriers
 - Subsidies

Constitutional Question

Mexican Constitution

“The nation will have exclusive responsibility to generate, deliver, transform, distribute and supply electric energy that has the objective of **providing public service**. . . .”



NAFTA

An enterprise of another Party may acquire, establish, and/or operate [self generation], [co-generation] and [Independent Power that sells to the CFE].

Mexican Electricity Law

Self generation, co-generation, and Independent Power that is sold to the CFE . . . are **not considered public service**.

Congress

- Two houses: Deputies and Senators
 - Structural flaws and immaturity are showing up
 - Members accountable to their respective party, not to the people
- No attempt to clarify ongoing Constitutional conflict
- Rather, they are creating new conflicts
 - Challenge to the Supreme Auditor of the Federation
 - Regulation requiring PEMEX to construct and operate cogeneration at its refineries

- Resulting issues:
 - Current conflicts will likely not have a material impact on any specific foreign investment in electricity; but
 - *Would one want to invest in Mexico? Is it worth the aggravation?*

Regulatory capacity, independence and transparency

- Federal Energy Regulator (FERC); and Federal Competition Commission (FCC)
- Structures of FERC and FCC are generally favourable
 - are designed to allow for independence
 - some signs of immaturity
 - one limitation: their budgets are approved by Congress, subject to year to year funding restrictions
- Transparency
 - processes are very transparent
 - content of, and reasons for, decisions are not transparent
- Opportunity:
 - *FERC could be given the responsibility to approve electricity tariffs*
 - *Content transparency would have to be improved*

PEMEX: market power in natural gas

- Natural gas is the fuel source for over 30% of the electricity produced
- PEMEX has control over:
 - all natural gas production in Mexico;
 - most of the pipeline system;
 - most of the wholesale gas marketing; and
 - consumes nearly 50% of Mexico's gas production
- It has demonstrated its willingness to exercise market power
- Resulting issue:
 - *Would CFE operate any differently if it were placed in a similar position?*
 - *CFE will not be able to get out of being IPP project counterparty and guarantor until a workable solution to market power is implemented*

CFE and LyFC financial issues

- Operate under strict and uncertain budgets that are approved by Congress
 - CFE: gross revenue just covers operating costs
 - LyFC: gross revenue is 50% of operating costs
- CFE's S&P BBB- foreign currency rating is driven by its relationship with the federal government
- Almost 90% of LyFC gross revenue is needed to cover its labour obligations
- Subsidies are funnelled through the utilities to customers
- Financial transparency is lacking

- Opportunity:
 - *Make each company clearly and publicly accountable for costs and revenues*
 - *Create Business Units within each company*
 - *Move tariff setting process from the Congress to the CRE*

Subsidy = Cost - Price

- Rarely do electric reforms work where the government hasn't first dealt with excessive subsidies.
 - To the general public, reform success will be measured by "lower rates"
- Electric prices in Mexico are heavily subsidized
 - Average electricity subsidy in Mexico is 30%
 - Residential subsidies greater than 50%
- High energy prices are hurting the competitive position of Mexican industries
- Issue:
 - *Efficiency/productivity of the electric industry needs to improve; but*
 - *Alone, productivity can't overcome cost of the subsidies*

Potential Structural Reforms with or without electric market reform

- Modify the Constitution
 - Bring it in line with the Law and NAFTA
- Place CFE and LyFC under CRE regulation
 - De-politicize tariff-setting and regulatory processes
- Commercialize the CFE and LyFC
 - Government will have to be ready to forgive some of the debt it is owed by CFE and LyFC
- Strengthen CFC competence and reaction speed in energy market surveillance
- Limit subsidies, shift payment responsibility from utility to government
 - Subsidies should only go to the most needy

Structural Reform



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