General Overview and perspectives of the Mexican Energy Industry Regulatory Framework

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* The paper, statements and/or final remarks do not represent an official position of the Commission.

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1. Introduction


- Due to the recent history of regulation in Mexico, there is no regulatory culture and therefore the regulatory entities face important challenges to enforce the regulatory framework.

- Since our energy industry is integrated by two vertical and horizontal monopolies, Pemex and CFE, it is necessary to provide to CRE with enough authority to regulate them in an economic manner (rather than administrative) both State-own utilities.
2. Energy Industry structure

- The legal and regulatory framework applied to the natural gas and electricity industries are asymmetric.

- In the natural gas industry, exploration and production are an exclusive responsibility to the Federal Government through Pemex. Private participation is limited mainly to transport and distribution activities.

- On the other side, in the electricity the private participation is limited to some generation schemes, meanwhile transmission, distribution and supply activities for public service are reserved to the Federal Government through CFE and *Luz y Fuerza del Centro* (LFC).

- As a result of this asymmetry, the regulation in both industries are not comparable and must be analyze separately.
2.1 Oil and gas industry

- At the beginning of XX Century, the oil and gas industries were developed by private and public companies. However, in 1938 the oil and gas industries were nationalized.

- Since then, this industry has been an exclusive monopoly in oil and gas exploration and production, construction and operation of refinaries, petrochemical facilities, oil, natural gas and L.P. gas pipelines.

- However, in 1995 Congress approved several amendments to the Regulatory Act of Constitutional Article 27 on Petroleum, paving the way to private investment. Exploration, production and “First Hand Sales” were reserve to the Federal Government while natural gas transport, storage, distribution and trading activities were left to be developed by either the private sector or public sector through Pemex.
2.1 Oil and gas industry

- **SUPPLY**
  - PEMEX
  - Gas

- **TRANSPORT**
  - TRANSCO
  - STORAGE

- **DISTRIBUTION**
  - LDC
  - TRADING

- **DEMAND**
  - SMALL USERS
    - Industrial
    - Commercial
    - Residencial
  - LARGE USERS
    - CFE
    - PEMEX Petroquímica
    - Industriales
  - Other fuels competence

- **IMPORTS**
- **EXPORTS**
2.2 Electricity industry

- In 1960, the electricity industry was nationalized, and it was established that the provision of the electricity public service is an exclusive activity for the Government.

- In 1992, the Public Electricity Service Act was amended to broaden the nature of cogeneration and self-supply schemes and to create other private generation schemes, such as small scale production, imports, exports and independent power production.
  
  ✔ These schemes are not to be considered as public service and therefore are suitable for private investment.

- Despite these reforms, due to constitutional provisions, the State through CFE and LFC is the sole responsible for the provision of electricity public service.
### 2.2 Electricity industry

<table>
<thead>
<tr>
<th>Generation</th>
<th>Transmission</th>
<th>Distribution</th>
<th>Final User</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFE</td>
<td>CFE</td>
<td>PEMEX</td>
<td>Self supply &amp; cogeneration</td>
</tr>
<tr>
<td>88.8%</td>
<td>98.0%</td>
<td>79.0%</td>
<td></td>
</tr>
<tr>
<td>PEMEX</td>
<td>LFC</td>
<td>Private sector</td>
<td></td>
</tr>
<tr>
<td>2.0%</td>
<td>2.0%</td>
<td>21.0%</td>
<td></td>
</tr>
<tr>
<td>4.2%</td>
<td></td>
<td>5.0%</td>
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</table>
In October 1995, the Energy Regulatory Commission Act approved by Congress transformed CRE from an advisory body on electricity issues (as set out in its 1993 creation decree) into an autonomous agency in charge of regulating and promoting the efficient development of the electricity and natural gas industries.
3.1 Natural gas industry regulatory framework

The regulatory framework in natural gas establishes five key elements:

a. First Hand Sales and the operation of the National Gas Pipelines are exclusive activities of Pemex

b. Natural gas transport companies will construct, operate and own new pipelines and might also participate in trading activities

c. Natural gas storage companies will construct, operate and own storage facilities, such as LNG terminals and might also participate in trading activities

d. Local Distribution Companies (LDC) will construct, operate, own distribution pipelines and supply natural gas in a specific region set in the distribution permit. LDC will be the exclusive distributor for the first twelve years in new natural gas distribution zone

e. Trading companies will offer aggregated services to natural gas end users and will be an intermediate with transport, storage and distribution services. This is a non-regulated activity and can be carried out by any sector
3.2 Electricity industry regulatory framework

- The regulation confers the CRE the following mandates:
  - Participate in the setting of electricity public service tariff structure.
  - Verify that State-owned utilities acquire energy for public service at the lowest price for the utility.
  - Approval methodologies for the acquisition of permit holders’ surplus generation.
  - Approval methodologies for the provision of wheeling services.
  - Granting permits for regulated activities.
  - Approval agreements and contracts for the provision of services offered by State-owned utilities.
  - Regulate the costs that private parties requesting electricity public service must meet when extension or modification of CFE/LFC’s facilities is required.
4. Regulatory trends

- In the last two decades, regulatory frameworks and agencies have become a major subject of study and research. Although all regulatory frameworks differ from each other, the objectives might be considered as universal
  a. Increase social welfare by better balancing social and economic policies
  b. Boosting economic development and consumer welfare by encouraging new market participants, technological development and competition
  c. Control regulatory costs with the aim of improving productivity efficiency
4.1 Regulation new era drivers

- There has been very valuable experience regarding the implementation of regulatory frameworks. The lessons learned from this experience might be consider as drivers for an evolution of the regulatory framework and agencies
  
  a. Regulatory agencies role
  
  b. Consultation process
  
  c. Institutional development
  
  d. Insufficient focus on monitoring
4.2 Regulatory trends

As a result of the international experience lessons learned, energy authorities have decided to modify some aspects of the regulatory and the institutional framework

- Reduce regulatory complexity
- Outsourcing” regulatory functions
- Strength regulatory entities and broadening their scope
- Specialized surveillance bodies
5. Regulatory challenges (Natural gas)

Although there has been important accomplishments, the CRE will face important challenges in the near future, taking into consideration the lessons learned in other industries:

- Enforcement of the LNG regulation.
- Development of transport, storage and distribution infrastructure.
- Undertake the 17 Fifth year LDC and transport companies review processes.
- Publish of First Hand Sales permanent regulation.
- Enact complementary regulations and update existing processes.
- Update Natural Gas price methodology to better reflect market conditions.
5. Regulatory challenges (Electricity)

- In the electricity industry, the Federal Government is currently working with Congress in a proposal to amend the legal and regulatory frameworks to set the stage for a structural change to guarantee a reliable, high quality and competitively priced supply for the long term.

- It is important to note that one of the points of agreement is the necessity to strengthen the CRE’s mandates and establish a new and modern regulatory framework to comply with its objectives.

  ✓ To approve terms and conditions for the provision of electric energy transmission, distribution and supply services, as well as setting regulation for these activities.

  ✓ To approve the operation procedures for the National Electric System and rules for the generation dispatch.

  ✓ To approve terms and conditions for the services provided by the system operator.

  ✓ To approve terms and conditions for bidding process of new generation capacity called by CFE.

  ✓ To establish administrative penalties, considered in the legal framework.