IN-DEPTH

Energy Regulation And Markets

MEXICO

LEXOLOGY

Energy Regulation and Markets

EDITION 13

Contributing Editors

Natasha Luther-Jones, **Andreas Gunst** and **Kenneth Wallace-Mueller**

DLA Piper

In-Depth: Energy Regulation and Markets (formerly The Energy Regulation and Markets Review) offers an insightful survey of the key features of energy regulatory regimes worldwide, along with analysis of their impact on commercial practice. Focusing on the most consequential recent developments in the electricity, oil, natural gas and renewable energy sectors, the review covers (among many other things) the major licensing requirements, market access restrictions, distribution regulations and regulatory enforcement activities.

Generated: May 24, 2024

Mexico

Jorge Cervantes Trejo and **Hernando Becerra**
Gonzalez Calvillo SC

Summary

Introduction

The open market in Mexico's energy sector, with its free competition and private participation in almost all activities, has been challenged since 2019 by the current administration under the discourse of 'energy sovereignty'. The governmental policies championed by President Andres Manuel Lopez Obrador (AMLO) tend to favour state-owned Pemex and Mexico's utility company, Comisión Federal de Electricidad (CFE), as preponderant players in oil, gas and power industries.

Actions taken by the AMLO administration include amendments to laws and regulations that were implemented between 2013 and 2016 to end state monopolies. The new or amended laws proposed by the AMLO administration have been largely challenged before federal courts and the Supreme Court of Justice, by private stakeholders and other public bodies (i.e., the Federal Antitrust Commission (COFECE) and some local governments). As a result, several of the new regulations issued to favour state preponderance in the energy sector have been fully suspended or declared unconstitutional. In 2022, the President even wanted to amend the Constitution in relation to the power sector and the predominance of CFE, a change that was not passed by Congress. Furthermore, in January 2024, the Mexican Supreme Court reversed the amendments to the Electric Industry Law (LIE) passed by Congress in 2021.

In addition, the covid-19 pandemic brought additional challenges. Regulatory agencies were shut down for almost three years, with very few regulations and permits or authorisations being granted, based on 'urgency' considerations that were not always clear.

Even though Mexico's investment doors and legal framework in the energy sector have been open for private participants since the 1990s, with a further broad opening in 2013, the political views of the current federal administration and the response given by the regulatory agencies since 2020, have certainly affected the attention of direct investment in energy projects, either from national or international players.

Regulation

i The regulators

The main governmental authorities and regulators with jurisdiction over the energy sector are:

1. the Ministry of Energy (SENER), in charge of public energy policy;
2. the National Hydrocarbons Commission (CNH), the agency in charge of regulating oil and gas upstream activities;
3. the Energy Regulatory Commission (CRE), primary regulator in the midstream and downstream oil and gas sectors and power-related activities, in charge of, among others, issuing permits to industry players, as well as secondary regulations;
4.

the National Energy Control Center (CENACE), who is (by law) the only ISO in Mexico and is in charge of the control and operation of the national grid as there are no regional transmission organisations in Mexico;

5. the National Agency for Industrial Safety and Environmental Protection of the Hydrocarbons Sector) responsible for regulating and supervising safety and environmental protection for the oil and gas industry; and
6. the Federal Antitrust Commission (COFECE), in charge of sanctioning anticompetitive practices, including those related to the energy sector.

According to the Mexican Constitution, the energy industry is regulated at the federal level, as local states lack jurisdiction to regulate energy matters. However, within the scope of their powers, local governments issue zoning regulations, local licences, collect taxes and other similar requirements that may impact the energy industry.

ii Regulated activities

With few exceptions (mostly in the upstream oil and gas sector), energy-related activities in Mexico are subject to a permit regime where all qualified interested parties are allowed to participate. More specifically, such activities are divided as follows.

Oil and gas sector

Upstream

Licences to explore and extract hydrocarbons (i.e., natural gas and crude oil) are tendered by the CNH and awarded to the highest bidder. Currently, 107 upstream contracts allow private entities and Pemex to perform onshore and offshore upstream activities throughout Mexico. However, calls for new tenders have been suspended since AMLO took office in 2018.

Midstream and downstream: These activities include:

1. crude oil treatment, gas processing, and refining for further transformation (including into petroleum products and petrochemicals for industrial uses);
2. storage, transportation and distribution of natural gas, refined products or petrochemicals for retail sale or final consumption; and
3. marketing (commercialisation), including the sale of hydrocarbons, refined products, or petrochemicals to users and end users, or the participation of the marketer as a broker of storage or distribution services. Marketing permits do not entail the ownership of the infrastructure or the provision of the corresponding regulated service.

Power sector

Transmission and distribution

Despite most power-related activities being opened to private investment with the 2013 Energy Reform, power transmission and distribution activities were kept as a public monopoly. These activities may only be provided through CFE's subsidiary companies, namely CFE Transmisión and CFE Distribución. However, private entities can participate as partners of CFE in the construction, improvement, and expansion of any portion of the grid through public-private partnership (PPP) structures.

Power generation

Any entity interested in generating power in Mexico above 0.5MW requires a power generation permit issued by CRE. Power generation activities are subject to a permitting framework, not a concession regime. Therefore, any interested party meeting the required criteria may apply for a power generation permit. However, obtaining a power generation permit from the CRE does not guarantee interconnection availability at the grid or compliance with corresponding zoning, environmental or social requirements.

Power supply

The Mexican power market is operated through a Wholesale Electricity Market (WEM) administered by CENACE, the sole ISO in Mexico. With a few exceptions, any entity interested in buying or selling power must be registered as a market participant with CENACE and obtain a relevant power supply permit from CRE. Requirements for a power supply permit are similar to those for power generation permits, but without the need to describe infrastructure, as there would be none associated with the power supply activity. Power supply for large consumers (i.e., final users with power consumption above 1MW, known as Qualified Supply) is not subject to tariff regulation, while power supply to smaller (mostly household) consumers (known as Basic Supply) is subject to tariff approvals. Currently, CFE (through its basic supply branch) remains the sole Basic Supply provider in Mexico, although private entities are allowed to participate as basic suppliers if interested in such a market.

iii Ownership and market access restrictions

In Mexico, restrictions on foreign investment in the energy sector only apply to the supply of aviation fuels into-plane, which are limited to 49 per cent direct foreign participation. However, limitations to foreign investment could change over time, so it is advisable to perform an updated review before making an investment decision.

There are some restrictions applicable to the change of control or change of corporate structure of energy-related permit holders, depending on the specific activity they are providing. Prior authorisation from CNH (for upstream activities) or CRE (for pipeline transportation activities) is normally required, although this needs to be analysed on a case-by-case basis as different conditions may apply to different permit holders, mostly based on the wording of the corresponding permit title or license.

Despite the applicability (or not) of a change of control or change of corporate structure approval from CRE or CNH, any transaction surpassing certain economic thresholds provided for under the Antitrust Law (AL) may be subject to pre-merger review approvals from COFECE. Moreover, if the underlying activity performed by the permit holder experiencing a change of control or change of corporate structure is subject to open-access regulations (such as transportation and storage activities for oil and gas), a cross-ownership authorisation from CRE (with COFECE's previous opinion) may be necessary if, as a result of such change of control or change of corporate structure, two or more permits regarding open-access infrastructure become held by the same corporate group (at any level).

Transmission/transportation & distribution services

i Vertical integration and unbundling

The 2013 Energy Reform initially restricted vertical integration for both Pemex and CFE (as incumbents), resulting in open access rights for any third parties interested in using transmission and distribution facilities or receiving unbundled retail of power and petroleum products offered by these state-owned companies.

CFE was required to assign transmission and distribution activities to individual subsidiaries (still managed by CFE but somewhat isolated from other activities performed by CFE), while the operation of the national grid was transferred to CENACE, a new entity no longer under CFE's administration.

For natural gas transportation systems, Pemex had to transfer the ownership of almost all of its natural gas transportation pipelines to the Integrated National Natural Gas Transportation and Storage System (SISTRANGAS), a nationwide system of natural gas pipelines. SISTRANGAS is managed by the Centro Nacional de Control de Gas Natural (CENAGAS), a government agency in charge of operating and administering access to such pipelines. As a result of the creation of SISTRANGAS, any interested party may apply for any available capacity in these pipelines.

However, private entities are still allowed to operate private pipelines that may or may not be interconnected to SISTRANGAS.

ii Transmission/transportation and distribution access

Although transmission and distribution activities are reserved for state-owned companies, services provided by these companies are, in all cases, subject to open access obligations, including non-discriminatory access to third parties. (See Section II.ii.)

In the oil and gas sector, transportation activities of natural gas or petroleum products are not restricted to Pemex and are open to any third party interested in investing in and operating a pipeline transportation service. However, such pipeline transportation facilities must obtain a transportation permit issued by CRE and are subject to open access obligations.

It is important to note that Pemex's storage terminals and associated transportation facilities for petroleum products are also theoretically subject to open access obligations. However, due to the limited capacity available at Pemex's terminals, only a few open seasons have been performed by Pemex so far (mostly for its maritime terminals located in the northern region of Mexico), resulting in very few contracts being awarded to private entities.

iii Rates

Rates for regulated energy services are determined as follows.

In the power sector, transmission tariffs are determined by CRE pursuant to the calculation guidelines provided under the LIE. These tariffs are determined annually and reflect operational and capital expenses of the transporter, expected demand for the year (transmission offer/demand), required voltage (i.e., high v medium or low voltage), plus a reasonable profit for the transporter and other adjustments. Similarly, distribution service tariffs are also determined annually by CRE under the LIE and are primarily based on the operational and capital expenses of the distributor, plus a reasonable profit.

For pipeline transportation services provided through SISTRANGAS, tariffs are determined by CRE, pursuant to the guidelines provided under the Hydrocarbons Law. These tariffs should consider reasonable maintenance costs, taxes, expected demand, depreciation, and a reasonable return on investment for all transportation pipelines comprising SISTRANGAS.

Regarding private pipeline transportation (i.e., not performed through SISTRANGAS), tariffs may only be determined by CRE in cases where the pipeline would have a relevant impact on the region. In these exceptional cases, CRE may approve the applicable tariffs, taking into consideration factors such as opportunity cost, prevailing market conditions, return on invested capital, cost of financing, inherent risks of the project, and a reasonable profit.

However, such tariff regulation determination by CRE may be reversed if COFECE finds that there are market conditions to consider in the relevant region.

iv Security and technology restrictions

Energy activities in Mexico are considered to be of public interest, and therefore, the performance of all permit holders is constantly reviewed and monitored by the Mexican government through different governmental entities.

In the power sector, the Mexican government may expropriate any energy power-related assets for national security reasons or to guarantee the continuity of services. Such expropriation shall result in the payment to the permit holder of the real value of the asset or, if the owner of the infrastructure disagrees, the value determined by expert witnesses appointed by the parties.

In the oil and gas sector, the Mexican government may also intervene (i.e., take temporary possession) of any oil and gas infrastructure for national security reasons. During such intervention, the facilities would be operated and maintained by any entity appointed by the government, including CFE or Pemex.

The AMLO administration has also made evident its intention to fight organised crime in fuel theft (commonly referred to as *huachicol*). Regulatory agencies, accompanied by national security forces, have performed inspections of refined products' terminals and transloading facilities to verify the origin of the fuel kept at those installations. Although those inspections resulted in the closing of private terminals for formalistic omissions, federal judges who reviewed these cases generally assumed the underlying motivation to be rightful.

Energy markets

i Development of energy markets

There are no natural gas markets in Mexico, as wholesale natural gas is privately traded with no market visibility.

However, the WEM has been operating since 2016 as the only market where power purchase transactions can occur. The WEM is disaggregated into different sub-markets, as follows.

Power markets

Clean Energy Certificates Market

In this market, participants may submit offers to buy or sell clean energy certificates at any target price. CENACE reviews those offers and prepares a 'balanced price' considering all individual prices offered. CENACE will clear all buy and sell offers considering the balanced price. This market must be operated by CENACE at least once a year.

Spot markets

The Day-Ahead Market. As it names indicate, this market focus on energy-sale for the following day.

The Real-Time Market. Participants submit hourly offers to sell and buy energy for the same day, which will result in the physical delivery or receipt of energy on the same day.

The One Hour Ahead Market. Participants may submit one-hour ahead hourly offers for the sale and purchase of energy. All offers will be binding and will be cleared once the target hour is reached. This market is not operative yet, as it will only be implemented during the second phase of the WEM (to be determined).

Long-term market

CENACE may, at its discretion, call for tenders for long-term power purchase agreements with a term ranging from three to 20 years. Rules for these types of auctions will be published by CENACE on a case-by-case basis.

Regardless of the specific market where the energy transaction occurs, the LIE provides that power should be dispatched based on efficiency principles, where the cleaner and cheaper energy should be dispatched before the energy generated from older and less efficient technologies.

Capacity market

The capacity market should be operated by CENACE once a year (during the first quarter of the following year), once the 100 critical hours of the previous year are determined by CENACE. In this market, entities with surplus capacity may sell such capacity to users that were unable to meet their capacity demand, as required by CRE.

Associated products market

Under the WEM, associated products and services are necessary to guarantee the quality, reliability, continuity, and safety of the power system. Such products and services include spinning, operating and supplementary reserves. Once the One Hour Ahead Market is implemented, this market will also trade secondary regulation reserves. Pricing for these products and services shall be determined by CRE.

ii Energy market rules and regulation

As mentioned above, there is no natural gas open market in Mexico. However, regarding power transactions, the WEM operates as a heavily regulated market operated by CENACE and is mostly governed by the Market Rules issued by CRE on 8 September 2015. These rules provide for, among other things, the procedure for registration of market participants, dispatch of the grid, clearance of bids, liquidation and reliquidation of bids, and the allocation of capacity to existing power generation facilities.

iii Contracts for sale of energy

Under Mexican law, it is possible to register bilateral individual contracts (PPAs) in the WEM reflecting mutually agreed prices and rates that are not affected by market prices determined by CENACE under the WEM. Such bilateral contracts tend to be more common in projects where the generator has a take-or-pay agreement with any given user or supplier and pursuant to which energy prices are determined considering financing and operating costs of the power plant, rather than actual market prices. However, bilateral contracts appear to be less and less common as the current market leans towards the spot markets at the WEM.

iv Market developments

Given AMLO's willingness to favour non-open market rules and policies so that Pemex and CFE can effectively exercise market power, we do not anticipate any new developments at the WEM nor the creation of a natural gas market that may further enhance the ability to freely trade energy between participants. However, we have no basis to assume that the existing rules governing WEM may be repealed, as the current legal framework resulting from the 2013 Reform requires the existence of the WEM and its operation under open-market principles.

Renewable energy and conservation

i Development of renewable energy

During previous administrations, Mexico committed to reducing its greenhouse gas production by 50 per cent by 2050. This commitment has been ratified by Mexico through the execution of various international treaties and protocols, including the Vienna Convention for the Protection of the Ozone Layer (1987), the Montreal Protocol on Substances that Deplete the Ozone Layer (1990), the United Nations Convention on Climate Change (1993), the Kyoto Protocol (2000), and the Paris Agreement (2015).

However, AMLO's administration has orchestrated a frontal attack against renewables, arguing alleged reliability and disruption issues of the national grid (resulting from the intermittent nature of renewables), as well as economic losses suffered by CFE from participating in power auctions called by CENACE for the power supply to CFE (as the basic supplier).

Considering this shift in public policy, some aspects of the renewable power market in Mexico have been materially affected by, among others:

1. New restrictions imposed by CENACE on interconnecting and reaching commercial operation for renewable projects (both existing and under construction);
2. cancellation of ongoing and future long-term power and CEL auctions called by CENACE;
3. changes by SENER in the power generation dispatch order, substantially increasing the curtailment risk for renewable projects;
4. renegotiation of existing take-or-pay agreements entered into by CFE; and
5. allocation of clean energy certificates to CFE and other grandfathered projects in contravention of existing policies.

To mitigate the effects of these governmental actions, industry players, NGOs, COFECE and state governors have filed several constitutional claims before the Federal Supreme Court and federal courts (as applicable) against some of these actions. To date, many of the actions taken by the Mexican government (through different agencies) have been stopped, judicially reversed, or had their effects suspended as a result of judicial injunctions.

ii Energy efficiency and conservation

Given the recent opening of the Mexican energy market, there have been few attempts to adopt energy efficiency and conservation measures in both the oil and gas and the power sector. However, the Mexican government has traditionally granted economic subsidies or incentives to certain users, including:

1. subsidies (via rate discounts) to small power consumers below certain average monthly consumptions; and

2. tax incentives to electric or hybrid vehicle owners.

iii Technological developments

There have been very few technological developments in Mexico directly linked to renewable energy. However, in recent years, the National Institute for Electricity and Clean Energies (INEEL) has been recognised by international players, such as the Inter-American Development Bank, as a key player in the energy transition in Mexico and Latin America. For the past 50 years, INEEL has actively participated in the development of more than 350 renewable projects. Among its many achievements, INEEL facilitated the development of a wind project in 2022 in Mexico using technology designed and manufactured exclusively in Mexico, demonstrating that all components of a wind turbine (including the foundation, tower, blades, etc.) can be fully manufactured in Mexico.

Year in review

As mentioned earlier, the energy markets in Mexico have substantially changed and been challenging during the past few years. Starting with the 2013 Energy Reform, the 75-year monopoly held by the Mexican government came to an end, and most of the activities comprising the power and oil and gas industries were finally opened to private participation. Field-levelling measures were enacted to allow newcomers to effectively compete against CFE and Pemex (which still hold massive market shares), and open access regulations were adopted to ensure that both state-owned companies and private entities grant non-discriminatory access to their infrastructure.

However, not long after the opening of the market, AMLO took office in late 2018, and the governmental policy started to materially drift away from the open market principles outlined in the Mexican Constitution (as amended by the 2013 Energy Reform) to favour State monopolies held by CFE and Pemex. The first actions championed by AMLO included the cancellation of power and upstream tenders called by the Mexican government and the enactment of new secondary regulations by the regulatory agencies (i.e., SENER, CRE and CENACE), restricting open access principles.

As such actions were constantly reversed by Mexican courts, in March 2021, AMLO submitted an amendment proposal before Congress to amend the Mexican Constitution to try to validate governmental actions taken so far and allow for further amendments to secondary regulations affecting open access principles. However, such an amendment was rejected by Congress in 2022.

As a result of AMLO's failure to amend the Mexican Constitution and the upcoming change of administration this year (2024), it is unlikely that AMLO will attempt (again) to amend the existing legal framework to tip the regulatory scales in favour of CFE and Pemex. Furthermore, AMLO's administration has taken other non-regulatory actions to strengthen CFE's position as a power generator, including the recent indirect acquisition of 13 power generation plants with an approximate 8,534MW generation capacity from the Spanish electricity company Iberdrola SA for around US$6 billion.

Although the Iberdrola acquisition has been largely categorised as a nationalisation measure, Iberdrola has stated that such a purchase is in its best interest and that it intends to expand its renewable power generation capabilities in Mexico in the near future (as the vast majority of the portfolio sold to the Mexican government are fossil-fuelled).

The Federal Judiciary (the Federal Supreme Court and federal judges and magistrates) have played a key role in preventing the enforcement of general rules (laws and regulations) that aim to unwind the 2013 Reform, seeking to significantly favour state monopoly in energy, and affecting acquired rights and legitimate expectations of private stakeholders (including end users, such as industries). In this regard, the determinant role assumed by our judiciary has prevented a wave of investor-state disputes under international treaties, as seen in other jurisdictions when they change their regulations. To date, there are less than a handful of new arbitration cases that derive from actions undertaken by the AMLO administration. The recent ruling of the Mexican Supreme Court reversing the 2021 amendments to the LIE may also potentially settle the ongoing disputes between the US, Mexico and Canada under the newly revised NAFTA, now called USMCA.

Outlook and conclusions

The governmental policies championed by AMLO have affected the development of new projects in Mexico, particularly those related to renewables, as he has been very vocal about his desire to empower CFE and Pemex to once again become the principal players in the energy industry. However, the fact that Mexico is still far from developing all the infrastructure needed to provide efficient and sustainable energy resources to its users makes it impossible for the current administration to completely shut out private investment from participating in the energy industry.

Moreover, with the launch of the near-shoring strategy between the United States, Mexico, and Canada, access to reliable energy sources is understood to be a key and determining factor in successfully developing new industrial facilities in Mexico. Therefore, we anticipate that the Mexican government will be more open to facilitating energy investments so that major companies can effectively operate in Mexico.

A prime example of this openness to foreign investment is the recent announcement by Tesla of a US$5 billion investment in Mexico for a new manufacturing facility to be located near the US border. AMLO publicly stated that such an investment will benefit the region. Although not explicitly stated in AMLO's announcement, it is clear that additional investments will need to be made to secure a reliable energy supply for Tesla and many other companies looking to establish operations in Mexico.

In conclusion, despite the challenges posed by the current administration's policies, the need for reliable and sustainable energy infrastructure in Mexico presents significant opportunities for private investment in the energy sector. The Mexican government's commitment to facilitating foreign investment and nearshoring opportunities, suggests that the energy industry will continue to play a crucial role in Mexico's economic growth and development in the coming years.

Endnotes

1 Jorge Cervantes Trejo and Hernando Becerra are partners at Gonzalez Calvillo SC.
Back to section

gonzalez calvillo
meet new standards

Jorge Cervantes Trejo jcervantes@gcsc.com.mx
Hernando Becerra hbecerra@gcsc.com.mx

Gonzalez Calvillo SC