



The New Restructuring of the Power Sector in Mexico: Is it failing Investors and Customers?

In this new edition of InfraEcon Insights we examine some of the economic and regulatory implications of a decree introduced by the Mexican government in March 2021. The decree involves some reforms of the energy sector and changes to the current law. In addition, we address the impact of the decree on private investment and on the potential damages and remedies that investors might face.

On March 9th, 2021, the Mexican government enacted a major revision to the Electric Industry Law (Ley de la Industria Eléctrica, "LIE") that governs the operation of the electric power sector. The decree mandates substantial changes to the manner in which electric power generators are allowed to operate on the national grid. These reforms were explicitly enacted to benefit the government-owned utility company Federal Electricity Commission (Comisión Federal de Electricidad, "CFE") and its power plants, which have lost substantial revenue and market share to a growing sector of privately-owned power plants.

The decree enacts several major changes to the power sector that will each adversely affect independent power generators and their investors:

1. Power plants owned by CFE will be dispatched before privately-owned plants, replacing a market structure in which generators are dispatched based on cost (the standard approach across most of the world's power markets). Access to the national electricity network is also limited.
2. At its discretion, CFE may cease auctions for long-term power supply. These auctions have allowed privately-owned generation to compete with CFE's power plants for supply contracts on a cost basis.
3. Existing supply contracts between CFE and independent power generators may be reviewed and altered, or even canceled.
4. Existing and future permits to self-supply electric power by industrial and other facilities may also be reviewed or altered by the Energy Regulatory Commission.

5. The State will be able to issue Clean Energy Certificates to generators that previously did not receive them.

These measures will affect investors and their investments from an economic and regulatory perspective for the following reasons:

1. Mandated changes to the order in which power plants are dispatched will significantly affect the economics of the electricity sector, causing harm to both private power plant owners and electricity consumers. The liberalized market policies introduced a few years ago have sidelined much of the output of CFE power plants in favor of less expensive power from new investor-owned power plants. Clawing this lost market share back by administrative decree has no welfare-enhancing economic rationale, since it is an economically inefficient use of available generating resources. This will lead to higher electricity costs and, ultimately, higher prices for consumers. Investor-owned power plants will be called on to generate less electricity than before the decree, with corresponding drops in revenue. Since private generators will now have to compete for the residual power demand not served by CFE capacity, many of these power plants may be called to operate in a manner less efficient than intended (i.e., starting and stopping each day or running at partial output). The actions of the government will result in higher electricity prices, reflecting the cost of dispatching more expensive resources. From a damages perspective, but for the actions of the Government, investors would have operated more frequently and more efficiently, resulting in more revenue and higher profits.
2. Not only does the decree ignore generating costs by prioritizing government-owned generation, it ignores the operating

characteristics of power plants as well, and could result in less reliable system operations. Electricity systems typically dispatch wind and solar resources first because that energy is the least costly and for weather constraints. Low-cost and inflexible resources such as hydro and nuclear are dispatched next, while flexible thermal generators are scheduled last to meet changing electricity demand. If the ability of generators to respond to fluctuating power demand plays a reduced role, system reliability will necessarily suffer and lead to increased rates of power disruption. These avoidable disruptions could lead to claims by customers that have contracted for reliable power (e.g., industrials, medical facilities).

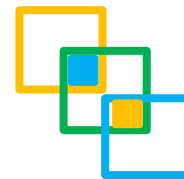
3. Confidence in the system as a whole will be undermined as a result of the decree's unilateral revision of contractual obligations. Reliance on contracts is a cornerstone of market economies. Contracts are a method by which to achieve economic efficiency; they are freely negotiated and agreed to as a way to allocate risk and reward. Each party assumes the risk that they are willing to bear for the expected benefits that will be derived from the agreement. If contract terms are arbitrarily voided or changed by government fiat, a signal is sent to the market that mutually agreed terms cannot be relied upon. From an economic perspective, this ability to unilaterally modify contracts introduces a significant new risk to investors, and any further investment in electricity infrastructure will likely demand a premium to compensate for this risk, which could lead to further increases in the price of power to the ultimate consumer.
4. In addition to the direct market losses from reduced output that will be incurred by private investors (solar, wind, or conventional plants), the changes in power plant operations caused

by the decree could have cascading effects that implicate other contracts enacted by a power plant (e.g., fuel purchases, maintenance contracts, supply agreements). By proving that a plant operator would have performed but for the actions of the government, any contractual penalties for non-performance would amount to damages.

5. Changes to the structure and accounting rules of the Clean Energy Certificates program will dramatically affect the revenues of many existing and potential power plants, particularly wind and solar generators. Such environmental programs are typically critical to the decision to build renewable generation, and arbitrary modifications to the program could cripple the development of renewable power projects in Mexico. Changes to the certificates would affect the revenues of the projects and potentially harm investors that would see its profits reduced.
6. Changes from the market-based auction mechanism for the procurement of power to the monopolistic system that has been enacted is almost certain to reduce the efficiency of the entire power system. The auction process provides transparency and clear price signals to potential power suppliers and electricity customers, but this will be lost if CFE supply decisions are no longer made through an observable market mechanism.
7. Cancellation of self-supply possibilities would have significant economic impacts, as on-site generators play a significant role in the business model and operation of many large industrial facilities. Foreclosing that option and requiring all customers to procure power from the grid will have a cooling effect on Mexico's economy. For customers that already self-supply, limiting their legal ability to do so will

serve to strand significant investments already made, and amount to damages for which the government may be liable.

Infrastructure Economic Consulting and its group of Affiliates have the necessary experience and expertise to support investors in the Mexican energy sector to analyze the specific circumstances of their investment in the context of the new measures. In addition, we are experts in assessing from an economic and regulatory perspective the individual damages and remedies that such actions would have on their investments. There are numerous economic issues that the new rules for the operation of the Mexican power sector will raise. They deserve a thorough analysis from an economic and regulatory perspective and the potential harm on investments need to be assessed.



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