

ELECTRICITY REFORM

Reducing prices to the manufacturing sector important

Much of the attention generated from the efforts to overhaul Mexico's energy policy has focused on oil and natural gas. But many of the pre-requisites of successful reform lie in the electricity sector. The CFE must improve its operational efficiency, reduce exceptionally high power losses, and lower costs. Fundamental tariff redesign needs to eliminate subsidies and revert prevalent cross subsidization. The average price of electricity must fall to competitive levels, which is essential for the growth in manufacturing. The Mexican manufacturing sector pays much more for power than industries in many other countries – 75 percent more than in the United States, for example.

The broad market design guidelines of the proposed legislation are in place, although there are some issues that need resolution. An energy market will be created and run by the independent system operator. It will be organized as a tight pool, an arrangement by which several utilities integrate generation and transmission facilities to improve the management of power delivery. All generators have to bid their full available capacity and qualified users and retailers must submit demand bids. The market clears at the marginal bid. A salient feature of the market architecture is that generators have to bid their variable cost. This is the direct consequence of the industry structure: the CFE owns 80 percent of total generation. According to the competition law¹ it has monopolistic market power and must be subject to ex-ante regulation, as the government does not intend to privatize CFE assets. A cost-based energy market is not the norm, although some Latin American countries, like Chile, Argentina and Guatemala have opted for this solution. It is expected that as gas-fired plants displace the current fuel-oil generating capacity, the market price of energy should fluctuate between the variable cost of a combined cycle during off-peak hours and that of an open cycle during peak hours.

Potential problems exist with system

One of the main implications of a cost-based energy market is that market revenues do not allow generators to recover their fixed costs. The proposed law acknowledges this and establishes that in order to have access to the energy market, users and retailers must buy adequate capacity to meet their maximum demand. The energy market will thus be coupled

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to a capacity market. However, nothing is said in the law about the structure of such a market. This is probably one of the main unresolved issues in all the energy reform measures, because investment will not take place as long as the functioning of the capacity market is not clearly defined.

Renewable energy will be supported through the obligation of qualified users and retailers to have a green share in their energy consumption. The corresponding subsidy will then be defined by the size of the share and the magnitude of a penalty. This subsidy should be significant if the government is serious about promoting wind power. Today wind power is subsidized through a preferential grid usage tariff and a generous allowance that treats as firm power capacity that is in fact intermittent.

Because of the intrinsic congestion of the Mexican grid, the law states that the energy market will be nodal, a system that allows electricity prices to be determined at specific points of a grid. However, the law unnecessarily introduces a limited definition of financial transmission rights and offers confusing rules for their allocation. On the supply side, the market power issues are solved through the cost-based definition of the energy market. However, it is not addressed on the demand side: users and retailers have a clear incentive to underbid in the day-ahead market and overbid in the real time market. It is unclear whether pure marketers will be allowed to arbitrage away differences across both markets and discipline the demand side.

Today over 10 percent of energy consumption is through purely bilateral private contracts, with subsidized grid usage and back-up energy and capacity. In the future, the energy market will be a tight pool. The transition between these two extreme models is complex and is not adequately handled by the proposed law, which opens simultaneously the wholesale and retail market to competition. However, it is probably unrealistic to expect significant retail competition before wholesale competition consolidates.