

# PROPOSED CHANGES FOR THE MEXICAN ELECTRIC INDUSTRY

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## I. INTRODUCTION

Had this article been written less than six years ago, the title would have been different. Instead of "Proposed Changes," it could have simply been called "The Coming Changes in the Energy Sector." Prior to that time, the Mexican government party, the *Partido de la Revolucionario Institucional* (PRI), had absolute majorities in both Houses of Congress, which virtually assured the approval of initiatives taken by the President. While it is true that the PRI did not have the required two-thirds vote in Congress needed to pass a constitutional amendment before sending it to the state legislatures for their approval,<sup>1</sup> the task would have been much easier than it is today. This does not imply that the initiatives cannot pass; however, the negotiations and amendments necessary for approval are proving to be numerous and important.

## II. THE ORIGINAL PROPOSAL

On February 2, 1999, President Ernesto Zedillo sent a proposal to Congress that would amend Articles 27 and 28 of the Mexican Constitution to increase the role private investment would play in the development of the Mexican electric industry. Since the Constitution gives either House of Congress the power to initiate laws,<sup>2</sup> the President chose to send this proposal to the Senate, where the government party holds a majority. It is the Senate that initially discusses the proposal in a Committee. The Committee's favorable opinion is required before the bill can be sent to the full Senate. If approved by the Senate, the proposal will then be sent to the House of Representatives, where the PRI is the minority party. Finally, a majority of the state legislature must approve the proposal before it becomes law.

President Zedillo's initiative would eliminate from Article 27 the provision that forbids concessions in electricity for public service. Article 27 of the Constitution presently gives the Mexican government exclusive power to generate, transmit, transform, distribute, and provide electric energy for the nation. At this time, no private parties can be authorized to provide any of these services.<sup>3</sup> The proposed amendment to Article 27 would limit the government's function to

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1. The Mexican Constitution may be amended provided that "the Congress of the Union, by a vote of two thirds of the individuals present, agree to the amendment or additions and that they be approved by a majority of the legislatures of the States." MEX. CONST. art. 135. *translated in* <[http://www.msstate.edu/Archives/History/Latin\\_America/Mexico/1917const.html](http://www.msstate.edu/Archives/History/Latin_America/Mexico/1917const.html)>.

2. MEX. CONST. art. 73, § H.

3. MEX. CONST. art. 27.

providing "operational control" of the national electric transmission network.<sup>4</sup> In addition, Article 28 would be amended, leaving only the operation of the national electric transmission network to the government for exclusive management.<sup>5</sup> Together these amendments would open the electricity market to private investors.

The discussion of this proposal by the Senate Energy Committee began in March of 1999. The original schedule was to have the proposal approved before the session of Congress was adjourned on April 30, 1999. This did not materialize, and it seems quite improbable that a special session of Congress might be called. In order to facilitate its approval, the President made it clear that his purpose was to approach the legal framework. He would leave the actual selling of the assets of the electric companies presently owned by the Government to the next administration.

### III. BACKGROUND

Before 1936, all electric activities were performed exclusively by the private sector, through different regional companies around the country. In 1936, the Government of President Lázaro Cárdenas established the *Comisión Federal de Electricidad* (the Federal Electricity Commission) (CFE) in order to promote generation as well as to establish distribution in inadequately served regions of the country which included most of the country. At that time, two major private companies existed: *Compañía de Luz y Fuerza del Centro* (Mex-Light), owned jointly by Canadian investors and the Belgian "Sofina," which provided power for Mexico City and surrounding areas; and *Impulsora de Empresas Eléctricas* (Impulsora), owned by United States interests and operating in different parts of the Country.

In 1960, after a dispute between the World Bank and the Mexican government, Mexican authorities decided to nationalize the electric industry. To attain this goal of nationalization, the Mexican government directly negotiated with the U.S. interests for the sale of their Mexican assets. The Mexican government paid for these assets over a ten-year period. Pursuant to its efforts, the government acquired nearly 97% of the stock of Mex-Light. Finally, President López Mateos, who was in office at the time, amended Article 28 of the Constitution to its current form.<sup>6</sup>

The assets of Impulsora were incorporated into the CFE, fusing the two unions that held its labor contracts. This resulted in considerable labor disputes, primarily between Impulsora, the more radical union, and the CFE's union, *Sindicato Unico de Trabajadores Electricistas de la República Mexicana* (SUTERM). Ultimately, SUTERM prevailed over this dispute. Also, Mex-Light was preserved as an independent entity, mainly because of its militant nature. Presently, the CFE owns 90% of Mexico's generation and distribution ca-

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4. MEX. CONST. art. 27 (proposed Feb. 2, 1999).

5. MEX. CONST. art. 28. The proposed change would add to Article 28 a provision stating that "[i]t is exclusive to the Nation the operational control of the national electricity transmission network, which cannot be given in concession to private parties."

6. The nationwide effect was comparable to the expropriation of the oil industry by President Cárdenas.

capacities, while Mex-Light owns 2.3% of generating and 10% of distribution capacities.

In 1992, President Carlos Salinas authorized private investment in the power generation sector, including co-generation and the independent power project (IPP).<sup>7</sup> The self-supply and co-generation modes are limited because any energy produced in excess of the owners' needs must be sold to the CFE.<sup>8</sup> If the amount is greater than 20 megawatts (MW), and the owners desire to sign long-term contracts rather than merely making spot purchases, then a public bid procedure applies.<sup>9</sup> When the excess power is less than 20 MW, or of short duration, the CFE buys this energy at 75% of its cost. This cost structure makes it difficult for the owner to earn a reasonable rate of return.

#### IV. THE GOVERNMENT'S PROPOSED CHANGES

Even with moderate growth, Mexico's electricity demand is estimated to increase by approximately 6% per year. By the year 2005, Mexico will need to install an additional 13 gigawatts, which is approximately one-third of the total electricity installed in the past century. Given the scarcity of public resources, a major effort will be required to make this upgrade in transmission. The problem in upgrading is due not only to bottlenecks in the system restricting the full use of Mexico's generation capacity but also to old and poorly maintained distribution networks that allow for considerable loss of power. An estimated investment of 250 billion pesos (approximately \$25 billion (U.S.)) will be needed over the next six years.

The government's proposal is aimed at attaining these changes in three stages. The first two stages are to be conducted during the present administration, pending the adoption of the proposed Constitutional amendments and the new regulatory laws. First, the CFE and Mex-Light would be divided into specialized companies under government ownership. These companies will include several generation and distribution companies and one transmission company. The *Centro de Operación del Sistema Eléctrico Nacional* (Operating Center of the National Electric System) (COSEN) would be established and entrusted with dispatch. Another public entity will be incorporated for the operation of nuclear plants. As to generation, the government would only keep the nuclear plants. The government would also participate in the operation of hydroelectric facilities that have uses for both generation and agriculture. Other hydro-resources and generation plants would be privatized. Although the assets of the national transmission network will remain government property, the transmission company would have the concession to expand, operate, and maintain the network. Future investment in this company would be considered a government investment, and adequate formulas for depreciation and compensation to the owners would be devised.

Due to the strategic importance of the network's operation, President

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7. Ley del Servicio Público de Energía Eléctrica [Law on the Public Service of Electric Energy] [L.S.P.E.E.], art. 36 (1992).

8. L.S.P.E.E. Regulations, art. 126 (July 25, 1997).

9. *Id.*

Zedillo proposed that the government should own the electric dispatch through the COSEN, a government entity. The COSEN's mandate would be to insure a non-discriminatory entry to the transmission network and the transparency of the market operation. Finally, for distribution companies, thirty-year concessions would be granted, dividing the country into different areas to be operated by private companies.

In the second stage, a wholesale energy market would begin to operate. Generation and distribution would be opened to foreign and domestic private investors. Concessions would be granted to transmission companies interested in the development of networks, such as the entire Baja California area, that are not interconnected with the national transmission system.<sup>10</sup> Ultimately, Mexico would have numerous generating companies, one enterprise charged with the operation of the National Transmission Network, several regional distribution companies, and one operator of the wholesale electrical market responsible for dispatch.

The generators, distributors, and qualified users (amounting to approximately 300 customers consuming more than five million kilowatt hours per year) would operate through a wholesale market run by the COSEN. The generators, connected to the National Transmission Network, would be the sellers, purchasers, distributors, power marketers, and high-volume users.

Residential customers, along with small and medium sized-users, will receive their electricity from their zone distribution company with no option to purchase from other suppliers. Their itemized bills will specify the prices paid for generation, transmission, and distribution. The price for generation will be market-based while the price for transmission and distribution will be regulated.<sup>11</sup>

#### V. SUPPORT FOR THE CURRENT PLAN

After receiving the President's initiative, the Senate opened hearings throughout the country. The hearings were largely in favor of opening the electric sector to private investors, but there was much dissention as to the method.<sup>12</sup> On April 8, 1999, the Secretary of Energy, Luis Téllez, appeared in the Senate and indicated that the proposed laws introduced important changes and clarifications to the President's original initiative. For example, the national transmission network would not be open to concession, but would instead be operated, maintained, and expanded by the CFE.<sup>13</sup> Programs for rural and poor areas would be

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10. The new government-owned companies for generation, distribution, and transmission would be sold to private investors, including workers' pension funds and state or municipal governments.

11. Due to the restriction against competition in the areas of transmission and distribution, the concessionaires of transmission and distribution would be subject to regulation of safety, quality, and price.

12. In the case of Baja, it was envisioned that the electric grid would be operated as a whole until it is interconnected. Alternatively, market conditions might be established, in which case the transmission grid would become part of the national network.

13. Anteproyecto de Ley de la Industria Eléctrica [Proposed Electric Industry Law] [A.L.I.E.], art. 4, 44 (draft legislation proposed 1999). Article 4 states that "the Federal Electricity Commission, as a decentralized public organization . . . will exercise the physical operation, vigilance, conservation, maintenance, and expansion of the national transmission network."

established including a subsidy program for the needy.<sup>14</sup> These subsidies will be paid by the federal, state, or municipal government and not the companies.<sup>15</sup> They will be specified in the monthly bills for service to the users.<sup>16</sup>

No distributor, marketer, or generator may have relevant presence in the market since this would be a violation of antitrust laws. Generators may not control distributing companies and vice versa. In addition, these companies may not obtain marketing permits in their distribution zones.<sup>17</sup> Plants with their own fuel supply may not use the national transmission system.<sup>18</sup> Private networks connected to the grid will be integrated into the national system and will become government property. Therefore, adequate compensation must be paid to the owners at the end of their permits.<sup>19</sup>

Until they have been restructured, the CFE and Mex-Light will continue to operate as they have been in the past.<sup>20</sup> The restructuring of the CFE implies the creation of two kinds of new entities to which its assets will be transferred.<sup>21</sup> Two decentralized agencies will be created; one will operate, maintain, and expand the National Transmission Network and the other will be responsible for nuclear plants.<sup>22</sup> The CFE will conduct the activities of the decentralized agencies, including the appointment of its Director General.<sup>23</sup>

The COSEN will have a nine-member board. Five of the members must be government officials chaired by the Secretary of Energy. The remaining members must include one representative each from the distributors, generators, qualified users, and the CFE. All board members must be Mexicans with knowledge of the industry. The board will also have an operations committee, which must include the Director General of the COSEN and four members appointed by the board to represent the distributors, generators, qualified users, and the CFE.<sup>24</sup>

The COSEN must determine which generating plants will be used to satisfy demands at any given time. Furthermore, the market will operate according to certain rules regarding requisites to participate, characteristics of the generators,

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14. "The Federal Government, in coordination with the competent authorities of the federal entities and the municipalities, will promote the electrification of rural communities and outlying urban zones, so that the formulation and execution of programs support users with limited resources." A.L.I.E. art. 10

15. Article 11 empowers the State, in accordance with the Mexican Constitution and Article 28 of the A.L.I.E. to grant subsidies under the subsidy program. A.L.I.E. art. 11. Article 12 complements Article 11 by providing that the subsidies "will be clear and direct" and will be granted in accordance with "the terms of the budget of approved expenses by the corresponding legislative bodies." A.L.I.E. art. 12.

16. "The corresponding invoice will specify the quantity of energy consumed and the price, as well as the amount of the subsidy given to the benefiting family." A.L.I.E. art. 13.

17. *Id.* art. 30.

18. A.L.I.E. art. 43.

19. *Id.* art. 51.

20. A.L.I.E. *transitorios tercero* [Transitory Article Third].

21. A.L.I.E. *transitorios cuarto* [Transitory Article Fourth].

22. A.L.I.E. art. 4, *supra* note 13

23. Anteproyecto de Ley Organica de la Comision Federal de Electricidad [Proposed Organic Law of the CFE], art. 9 (draft legislation proposed 1999).

24. Anteproyecto de Ley Organica del Centro de Operacion del Sistema Electrico Nacional [Proposed Organic Law of the COSEN], art. 7-9 (draft legislation proposed 1999).

demand determination methodology, price-setting methods, payment procedures, and restrictions on transporting electricity.<sup>25</sup> All participants in the wholesale market are entitled to be connected to the transmission network and treated in a non-discriminatory manner.<sup>26</sup>

Several subsidiaries are to be created for generation and distribution. These subsidiaries will be operated independently without the burden of regulation applied to government-owned companies. The CFE will participate in capital acquisition and administration. The extent of this involvement has not yet been determined. The subsidiaries' shares are to be sold through a public bidding process or in the stock market. The percentage of shares sold also has not been determined.<sup>27</sup>

Permits for generating plants will include the installation and maintenance of the transmission lines.<sup>28</sup> Generators will be able to enter into agreements with the distributors, marketers, and qualified users, where the price differential applicable to their supply is established.<sup>29</sup> Nuclear, geothermal, hydroelectric, and co-generation plants will be required to sell at market price.<sup>30</sup> However, no permit will be needed for self-supply of quantities less than 10 megawatts, and generators will be able to use all or part of their capacity for self-consumption.<sup>31</sup>

Concessions will be required for distribution because distributors use government assets, and the rates will be officially determined.<sup>32</sup> These distribution companies will connect all users, including qualified users, in a non-discriminatory manner.<sup>33</sup> Marketers may sell to distributors, qualified users, or other marketers. They may also act as brokers.<sup>34</sup>

Distribution or generation concessions using government property (water resources), which were initially for thirty years, will now be considered for as long as fifty years. The concessions may be renewed an indefinite number of times.<sup>35</sup> When the concession expires, all the networks will be returned to the

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25. "The operation of the wholesale electric market will be subject to the provision in the rules of operation issued by the Center of Operation of the National Electric System." These rules will address ten fundamental areas which are as follows: (1) requirements for participants in the wholesale electric market to offer or acquire electric energy; (2) characteristics the generators must satisfy for capacity and connection services; (3) "methodology for determining the supply level and availability of the electric energy supply"; (4) "the manner in which the prices in the wholesale electric market will be determined as well as the procedures for its collection"; (5) restrictions for transporting electric energy that would exist in the national transmission network; (6) "the operating procedures for maintaining the security and stability of the national transmission network, including those that should be applied in emergency situations"; (7) conflict resolution procedures; (8) application of penalties for noncompliance with the rules of operation; (9) "procedures for modification of the rules of operation"; (10) "the organization and functioning of the wholesale electric market". A.L.I.E. art. 22, §§ I-X.

26. *Id.* art. 46.

27. A.L.I.E. *transitorios cuatro, sexto*, [Transitory Articles Fourth, Sixth].

28. A.L.I.E. art. 37.

29. *Id.* art. 38.

30. A.L.I.E. art. 26.

31. *Id.* art. 41.

32. A.L.I.E. art. 52.

33. *Id.* art. 60.

34. A.L.I.E. art. 65.

35. *Id.* art. 81.

government at no cost.<sup>36</sup> The same term of fifty renewable years applies to generating permits where the property remains with the owner, as well as to permits for transporting electricity through private networks.<sup>37</sup> The term for marketers is twenty-five years, which is also renewable.<sup>38</sup>

If irregularities arise in the administration of a company with a concession, the government, with the support of the CFE, may appoint an administrator to temporarily handle its affairs until such irregularities have been corrected.<sup>39</sup> In the case of a natural disaster, war, serious disruption of the public order, clear and present danger to national security, danger to the peace, or danger to the national economy, the government may temporarily take over the installations of a company. This includes not only those companies holding a concession but also all generation, transmission, and distribution companies.<sup>40</sup>

It should be noted that no mention is made of any Mex-Light restructuring. This could mean that Mex-Light will either continue to operate as it does now or that it will be divided into both a power generator and a distribution company.<sup>41</sup>

## VI. THE DEBATE

There are several important players voicing their concerns in the debate over the proposed changes. One is the private sector, which fully supports the initiative. This support is primarily based on two considerations: first, it is imperative that Mexico be competitive in energy pricing if it wants to continue expanding its export sector; second, Mexico is in urgent need of investment in areas where the private sector is not interested in participating. Thus, if Mexico is able to free resources from the energy sector, the government will be better able to use those resources in other areas.

The SUTERM, the union for the CFE, has publicly supported privatization; however, there is growing discontent among its rank and file. For the first time in years, a large number of workers are urging a change in the union's position. In any case, the SUTERM proposes that only the oldest generating plants be sold. The SUTERM's proposal for distribution is to create thirteen zones over which concessions would be granted and whose assets would not be sold.

The SME, Mex-Light's union, has supported public demonstrations against change, mainly because it has the most expensive labor contract in the country. The SME has tried, successfully at times, to garner support from other unions and different sectors of society to fight together against the project. Instead of the government's initiative, the SME proposes that only BLT schemes be used in

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36. A.L.I.E. art. 82.

37. *Id.* art. 85.

38. A.L.I.E. art. 86.

39. *Id.* art. 99.

40. A.L.I.E. art. 103.

41. The duties of the *Comisión Reguladora de Energía* (Energy Regulatory Commission) (CRE) are: (1) to grant permits to distributors, qualified users, and marketers; (2) to participate in the wholesale market; (3) to grant permits to generating plants not using government resources, which require concessions from the Energy Ministry; (4) to determine the minimum consumption required for classification as a qualified user, and to keep a registry of these requirements and users; (5) to regulate tariffs; and (6) to determine the distribution zones. A.L.I.E. art. 17.

generation. The SME wants to have eight zones for distribution, all with independent operation but with no private participation.

Surprisingly, minority factions of the PRI party objected because it is part of the Party's platform that electricity be in the government's hands. In distribution, the PRI party wants the companies to be government entities with no concessions granted, and with independent administration not subject to the Treasury or Energy Ministries.

Of the other two important political parties, the right-of-center *Partido Acción Nacional* (PAN) is still withholding its support. The PAN declared on July 1, 1999, that it would vote against the project in retaliation to the PRI's position of not approving changes in the Electoral Law. This could mean that the initiative is now a hostage to the different political currents and interests of the parties.

The left-leaning *Partido de la Revolución Democrática* (PRD) proposed the elimination of requiring a single purchaser of power, the CFE, from IPP's and co-generators. This would allow energy to be sold, at market risk, either to the CFE or industrial consumers. Distribution companies would be independent companies vertically integrated into a network managed by the COSEN, in which private investment would be allowed.

## VII. CONCLUSION

What is to be expected? The political scene in Mexico is already dominated by the elections that are going to take place on July 2, 2000 when a new President and full Congress will be elected. Everything is now viewed from the perspective of what would increase or decrease the chances for the different candidates and parties to win the race. If the Constitutional amendment is discussed by the full Congress after September 1, 1999, campaigns are going to be in full swing. More political infighting can be expected and this issue will be an important part of the platform of parties and candidates. Nevertheless, considering the different positions of the players mentioned above, common sentiment supports a change in Mexican electric policy.

Generation will most likely be more open even before the law changes. This opening will begin as more self-supply and co-generation projects materialize. The CFE will then take a more positive view of these entities, considering them allies and not competitors. The first change would be to have plants established at market risk and to have the COSEN separated from the CFE to promote an independent energy market.

The government already has begun to give in with respect to transmission. There is very little chance that it will continue to be state owned and operated with the private sector participating only in a maintenance contract. Regarding distribution, it will be difficult to predict the outcome. It should be easier to make changes in distribution; however, most of the manpower involved is in this area. Because of this, more union pressure will be directed against a modernization scheme that might result in job losses. Even if private participation is approved, it will be very gradual. There will be no interest shown in the Mex-Light zone unless its labor conditions are substantially changed.

For the project to be a success, it is crucial to have very clear and transparent market operation rules. The COSEN must prove to be a credible and impar-



tial arbiter in the load distribution between the different generators without favoring the plants that might still remain in the CFE's control. Otherwise, it would be very difficult for the private sector, whether national or foreign, to be interested in investing.

Finally, the government has made extensive use of the argument that Mexico will have power shortages in the next few years. As a result, there is growing interest among industrial users to look for electric supply alternatives for better reliability of service and price. A number of developers are currently going through the country, mainly in northern Mexico, offering new and ambitious projects. Some of them will probably materialize, but the overwhelming expectation of the industry presently is to refrain from committing. Long term commitments are particularly doubtful because it is widely believed that energy prices are going to fall once the new electric regulation, in whatever form it finally takes, is in place.

