

# Mexico: Current Developments in Power (Electricity)

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## I. Introduction

The Mexican government continues to enact reforms opening the economy and fostering privatization in many economic areas. Foreign investors are afforded greater access to the Mexican economy and greater protection for their investments.<sup>1</sup> The discussion below focuses on the current developments in electric power regulations and maquiladoras (in-bond manufacturing operations) in light of recent reforms.

## II. The Mexican Power Industry

### A. ELECTRICITY/FOREIGN INVESTMENT LAW

The new Foreign Investment Law (FIL) provides that the area of electricity is restricted exclusively to the Mexican government. Related activities, such as the construction of electricity generating plants, electricity conduction lines and networks, and electrical installa-

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1. The first Foreign Investments Law, Law to Foster Mexican Investment and to Regulate Foreign Investment (old FIL), in effect for almost 20 years since 1973, was restrictive to foreign investments and an obstacle for the development of the country. This effect was tempered by further regulations published in 1989 (old regulations). A new Foreign Investment Law (new FIL), which was published on December 27, 1993—a contemporary of the North American Free Trade Agreement (NAFTA) between Canada, the United States, and Mexico—and amended on December 24, 1996, repealed the old FIL but adopted its regulations. The new FIL and its regulations, which were published on September 8, 1998, and entered in force on October 7, 1998, have clearly opened the Mexican economy to foreign investment and international competition following a deregulation path.

tions in buildings, may be conducted by businesses up to forty-nine percent owned by foreign investors. However, foreign investors may participate in a proportion greater than forty-nine percent, if they obtain a favorable ruling from the National Commission of Foreign Investments (NCFI), when a special request is filed demonstrating the investment's benefits to the Mexican economy and the criteria set forth in the FIL.

## B. CHANGES UNDER THE NORTH AMERICA FREE TRADE AGREEMENT (NAFTA)

NAFTA has lifted some of the restrictions on foreign ownership mentioned above, but public electrical service remains exclusively reserved to the Mexican government, in accordance with the Constitution.<sup>2</sup> If a foreign investor acquires more than forty-nine of a Mexican company that is owned or controlled by Mexican nationals and the value of the company's assets exceeds a minimum threshold amount, the acquisition is subject to review by the NCFI.<sup>3</sup> The NCFI's review is based on: (i) the investment's effects on employment and training; (ii) its technological contribution; and, in general, (iii) its contribution to increase Mexican industrial productivity and competitiveness.<sup>4</sup>

## C. ELECTRICAL POWER LEGISLATION

The main law regulating the Mexican electrical power industry is the Law for the Public Service of Electrical Power (Electrical Power Law).<sup>5</sup>

### 1. *Amendments to the Electrical Power Law*

Despite the constitutional restrictions on public electricity service, the Mexican government has gradually liberalized the Electrical Power Law to facilitate private sector involvement in the electricity industry to increase its efficiency and competitiveness.

The Regulations for the Electrical Power Law regarding Self-Supply (Self-Supply Regulations)<sup>6</sup> deal with the issuance of self-supply permits, which private individuals and groups to generate electricity to satisfy their private electricity needs.

The Electrical Power Law itself was amended in December 1992 to allow private electricity production through the following activities prior receipt of a permit from the Ministry of Energy (Ministry), with the advice of the Electricity Federal Commission (CFE): (i) electrical generation for self-supply, co-generation or small production; (ii) production of electrical power for sale to the CFE (independent production); (iii) generation of electrical power for export derived from co-generation, independent production and small production; (iv) importation of electrical power by individuals or companies for their own needs; and (v) generation of electrical power for emergency use in case of interruptions in public service.

In 1993, the Mexican government issued a comprehensive set of new regulations to

2. North American Free Trade Agreement, Jan. 1, 1994, annex III-2, 32 I.L.M. 605 [hereinafter NAFTA].

3. From 1994 to 1996, the first three years of the NAFTA, the threshold amount was U.S. \$25 million, which increased to U.S. \$50 million from 1997 to 1999. The current threshold amount is U.S. \$50 million. For the years 2000 to 2002, it will increase to U.S. \$75 million, and the amount thereafter will be U.S. \$150 million, adjusted annually for inflation. *See id.* annex I—Mexico.

4. *See id.*

5. This law was adopted in 1975 and amended in 1983, 1989 and 1992.

6. Regulations for the Electrical Power Law, D.O., May 31, 1991.

accompany the modifications to the Electrical Energy Law (1993 Regulations).<sup>7</sup> The 1993 Regulations replaced all prior regulations to the Electrical Power Law, including the Self-Supply Regulations adopted in 1991.<sup>8</sup>

## 2. *Opportunities for Private Electricity Generation*

Since January 1, 1999, foreign investors are allowed to own, without the need to obtain a favorable ruling from the NCFI, up to 100 percent of Mexican companies that perform the following activities: (i) construction of electricity generation plants; (ii) construction and maintenance of electricity conduction lines and networks; (iii) electrical installations in buildings; and (iv) construction activities, not elsewhere classified.<sup>9</sup>

The new FIL regulations confirm what the Electrical Power Law already indicated, that private parties may obtain permits to produce electrical power under certain conditions and make their surplus available to the CFE as described in the following sections.<sup>10</sup>

### a Self-supply

The electricity must be produced only for the individual's or company's needs and may not be sold or transferred to third parties other than the CFE. Permits will be granted as long as the Ministry does not believe that the production of energy would place the country at a disadvantage. Before the 1992 amendments, the Ministry would grant permits only if normal supply by the CFE was impossible, inconvenient, or less efficient than private production.

A group of consumers can obtain a permit to operate an electrical power plant to satisfy their collective electricity needs provided that they form a corporation to operate the center and that each member of the group is a co-owner of the corporation. The corporation may not provide electricity to non-members of the group without express permission of the Ministry. A permit is not required for self-supply of less than 0.5 MW or of any amount reserved exclusively for emergency use.

### b Co-generation

Permits are available for co-generation, which is defined as the direct or indirect production of electrical power using secondary thermal energy or fuels produced by industrial processes. The electricity produced must be used to satisfy the needs of an associated establishment (host industry). The co-generation process must also be more economically efficient than resorting to conventional generating plants. The permit holder need not be the same entity that produces the secondary thermal energy or fuels.

### c Independent Production

Private individuals and entities may obtain permits to generate electricity for sale to the CFE or for export. The capacity of such plants may exceed 30 MW. The Ministry and CFE are required to consider private power purchases in its long term planning and its decisions to build new capacity for public electricity service. To obtain a permit, independent producers must: (a) be individuals or corporations organized under Mexican law; (b) be dom-

7. Regulations for the Electrical Energy Law, D.O., May 31, 1993, effective June 1, 1993, and amended on July 25, 1997 [hereinafter 1993 Regulations].

8. *Id.* Second Transitory Article.

9. See NAFTA, *supra* note 2, annex I—Mexico.

10. *See id.*

iciled in Mexico; and (c) either agree to sell their electrical power production exclusively to the CFE under long-term contracts to meet the CFE's identified needs, or export all or part of such production with the prior approval of Ministry.

#### d Small Production

Mexican individuals or entities domiciled in Mexico can obtain permits to produce electrical power on a small scale for: (i) projects to produce power for sale to the CFE with a total capacity not exceeding 30 MW; (ii) projects to supply electricity for personal consumption to small rural communities or isolated areas, provided that the interested parties create a cooperative, partnership, corporation, or other arrangement and that production does not exceed 1 MW; and (iii) projects to produce power for export, within the maximum limit of 30 MW.

#### e Import/Export

Finally, private parties may obtain a license to produce electricity for export by means of co-generation, independent production, or small production. Individuals and companies may obtain an import permit, but only for purposes of self-supply of their own needs.

### C. CONDITIONS REGARDING ALL PERMITS

#### 1. *Limited Sale or Transfer Rights*

Permit holders may only sell or transfer the electricity they produce as expressly provided for in the law.

#### 2. *Scope of Activities Permitted*

Permits to generate electrical power may also include the right to transport and distribute power. Permit holders may also use the national electrical system network with CFE permission for an agreed-upon consideration, provided that such use would not jeopardize public power service or affect third parties.

#### 3. *Emergency Service*

All permit holders must provide electricity for public use when public service is interrupted. In such cases, the permit holders will be entitled to compensation.

#### 4. *Permit Term*

Permits for independent production are issued for a thirty-year renewable term, while all other permits are issued indefinitely, so long as all applicable legal provisions are satisfied.

#### 5. *Transfer of Permits*

The Ministry may authorize the transfer of permits.

#### 6. *Compliance with the Official Mexican Norms*

All permit applicants and holders must comply with technical rules issued by the Ministry regarding the contents of the permit application and the operation of the resulting electricity production facilities. These rules are contained in the Official Mexican Norms (Norms), which are published from time to time in the Official Gazette of the Federation.

According to the current Norms, permit applicants must prepare a report describing their energy needs and the technical details of their planned project. The Norms also

establish a series of rules regarding the planning, design and operation of power generation facilities.

#### D. CONSTRUCTION OF NEW FACILITIES

The CFE is responsible for providing electrical power service to the public, which includes any construction, installation, or other works necessary to plan, operate, and maintain the national electrical system. The CFE is authorized to contract with public and private entities to provide such service.

The opportunities for foreign suppliers, however, could potentially be limited by a provision of the Electrical Power Law which requires the CFE to give preference to Mexican parts suppliers whenever possible. Although this provision was not changed by the 1992 amendments, it also is not mentioned in the 1993 Regulations. In any case, foreign investors can avoid any preference for Mexican suppliers by subcontracting for Mexican companies with CFE contracts or by investing directly in Mexican companies to carry out such contracts. The CFE has recently entered into a number of contracts<sup>11</sup> with various consortia or joint venture groups, involving Mexican and foreign companies, in order to expand Mexico's electrical power capacity.

The New Regulations for the Electrical Power Law regarding Contributions<sup>12</sup> provides that private entities or individuals may request the creation or modification of determined electrical facilities. Such regulations also provide the method to calculate the contributions to perform such specific works.

#### E. SALE OF ELECTRICAL POWER AND CAPACITY TO THE CFE

The Electrical Power Law authorizes the CFE to contract with private parties to purchase electricity, in order to provide it to the public at the lowest cost. The following is a summary of the CFE purchasing procedures, which are established in the 1993 Regulations to the Electrical Power Law.

##### 1. *Bids for the Addition or Substitution of Generating Capacity*

If the Ministry determines that private electricity supplies are necessary to satisfy Mexico's energy needs, it may authorize the CFE to purchase electricity from private producers through a competitive bidding process. The 1993 regulations establish the procedures for the bidding process. The CFE may purchase electricity from private producers with a generating capacity of 20 MW or less without soliciting bids.

##### 2. *Terms of the Purchase Agreements*

The CFE will enter into agreements for the purchase of electric power and capacity commitments from holders of generation permits who: (i) are successful bidders in the process described above; (ii) have an energy surplus of 20 MW or less; and (iii) are otherwise authorized to sell electric power to the CFE. The parties are free to establish the agreement term, provided that it does not exceed the term of the seller's generation permit.

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11. Among others, the build-lease-transfer, known in the trade as BLT, projects for the construction of power plants.

12. New Regulations for the Electrical Power Law Regarding Contributions, D.O., Nov. 10, 1998.

The CFE will enter into a separate agreement for each generation plant, regardless if a same person owns several plants. The agreements should include the following: (a) generation capacity offered to the CFE; (b) terms and conditions regarding the generation capacity and delivery of power in ordinary and emergency situations; (c) formulas to determine payment for generation capacity and electrical power deliveries in ordinary and emergency situations, incentives or adjustments in the generation capacity offered to the CFE, and updating factors for the payments; (d) term of the agreement; (e) technical conditions of the electrical power, including the interconnection point for delivery, measurement of the power, and tension; (f) contractual penalties for non-performance of the agreement; and (g) governing jurisdiction (i.e., the Mexican Federal Courts) and, if applicable, arbitration rules for technical matters. Agreements for the purchase of surplus power from permits holders with a generation capacity less than 20 MW or other small purchases need only to include the terms described in items (d) through (g) above.

Permit holders are responsible for providing, operating, and maintaining the installations required for the transformation, measurement, protection, and control of the electrical power in accordance with the Official Mexican Standards and the CFE's specifications. Permit holders are also responsible for delivering the power subject to the operation rules of the National Electric System and the applicable provisions of the regulations.

The CFE is responsible for making payments on the day and in the manner agreed upon, for notifying the permit holder of any temporary suspension in the delivery of electrical power resulting from the CFE's maintenance or repair operations (except in emergencies), and for giving timely notice to the permit holder of foreseeable deliveries.

Both the permit holder and the CFE shall be responsible for installing and adapting their protection and control equipment to avoid possible damage to their installations due to internal or external disturbances. Any electrical power and capacity supplied by the permit holders in addition to that agreed upon with the CFE, shall be purchased by the CFE at market value.

### 3. *Compensation*

The CFE shall make one payment for capacity, adjusted by an availability factor, and another for power delivered at the interconnection point. The payments for capacity and power delivered shall reflect the permit holders' variable and fixed costs, including return on investment, related to both generation and transmission.

Payments for capacity will be adjusted each month by a coefficient based on the availability factor observed during the month. The agreement may include formulas to update the payments, taking into account fuel prices, among other factors.

### 4. *Delivery Rules*

Delivery of electrical power to the public service network must comply with the operation and delivery rules of the National Electrical System established by the Ministry in accordance with the Electrical Power Law and Regulations.

Electrical power deliveries to the National Electrical System from plants owned by the CFE and private parties are to be accepted by the CFE according to the short term total cost or price offered, with strict priority given to the lowest cost electrical power. The CFE must follow this rule, except for safety reasons or in a technical emergency.

The CFE will send a monthly notice to each of the private producers, with whom it has entered into electricity purchase agreements, of its estimated power needs from each producer for the following three months. This notification does not legally bind the CFE.

Each of the private producers, on the other hand, shall inform the CFE five days before the beginning of each period (as determined by the CFE), of their estimated costs and/or prices for that period. In the case of producers who have won contracts with the CFE through the bidding process, the estimate shall be of the short-term total cost of electrical power for that period, according to the formulas described above. All other producers (e.g., sellers of surplus production) are to estimate the price and maximum amount of electrical power to be delivered at base, intermediate, and peak hours during the period<sup>13</sup>.

#### 5. *Transmission*

To deliver electrical power to the National Electrical System, private producers may: (i) request the transmission services of the CFE; or (ii) build their own transmission lines, provided they are not interconnected with the public service network and that they comply with the Official Mexican Standards. In the former case, the CFE may use existing installations where available or may agree with the private producer on the construction of new installations, sharing the construction costs.

The private producers shall compensate the CFE for its transmission services. The charges shall be based on the CFE's actual cost to provide the service, considering technical solutions that minimize the cost, such as exchange of electrical power among different control areas and other solutions proposed by the private producer. The Ministry may intervene to resolve disputes between the CFE and private producers over the charges.

#### 6. *Sale of Electrical Power to Permit Holders by the CFE*

The CFE shall provide backup capacity to private producers through supply contracts as needed, except where prevented by a technical or economic impediment.<sup>14</sup> One "backup rate" shall apply to purchases by all private producers.

#### 7. *Inspections*

The Ministry is authorized to inspect the private producers' facilities as required to oversee compliance with the Electrical Power Law and Regulations. Inspectors must present an inspection warrant with the inspection date, place to be inspected, duration of the inspection, purpose of the visit, and other pertinent circumstances. Upon presentation of such documentation, the inspector shall have free access to the facilities, premises, and installations to be inspected, as well as to any information requested by the inspector.

### F. ADMINISTRATIVE PROCEEDINGS AND SANCTIONS

The regulations establish rules for the application of sanctions for violation of the Electrical Power Law and Regulations. In the case of illegal generation and/or sale of electricity, these sanctions may include a fine of up to 100 times the annual minimum wage for the Federal District<sup>15</sup> for each kilowatt of electrical power sold illegally, or for each kilowatt of generating capacity. The private producer will have the right to plead its case in adminis-

13. Based on this information, the CFE will send a delivery program to each private producer with detailed, hour-by-hour information about deliveries to be made on the following day. The CFE is to send the program by no later than 3:00 p.m. on the preceding day.

14. 1993 Regulations, *supra* note 7, art. 20.

15. Currently, around \$125,742.50 U.S., at the rate of \$10 MexCy. per \$1 U.S.

trative proceedings before the Ministry within fifteen days of receiving notice of a resolution against it.

### 1. *The Forthcoming Amendments*

On February 2, 1999, President Ernesto Zedillo announced a bill to amend articles 27 and 28 of the Mexican Constitution (the amendments) with respect to private investment in the electric industry.<sup>16</sup> The next session of Congress was scheduled to start on March 15, 1999; Minister of Energy Luis Tellez submitted these amendments on February 3, 1999. The purpose of the amendments, which allow private parties to generate, distribute, and trade electric power, is to satisfy the electrical needs for the year 2000 and beyond and to reduce the federal budget. Tellez proposed that the Mexican Electrical Industry would be restructured in three phases.

### 2. *Division of the CFE into Local Agencies*

The current National Center of Energy Control<sup>17</sup> will become the Operating Center of the Electrical National Center (CONSEN) and will perform the following functions.

### 3. *Electrical Transmission*

The generators will deliver the electricity to the CONSEN. Thereafter, the CONSEN will transmit it to the distributors and traders in the locations where the electricity is needed. This activity will remain under government control in order to avoid distrust and competition among the generators and distributors.

### 4. *Financial Authority*

The CONSEN will receive repayments from the distributors and traders, and deliver these funds to the generators.

### 5. *Private Companies to Generate and Trade Electricity*

The private companies will begin generating and trading electricity in competition with the government companies. The National Bank of Foreign Trade (Bancomext) will provide financing to these private investors, who may hold up to 100 percent foreign investment.

### 6. *Government to Sell Assets and Companies at Public Auction*

The government will sell its electrical assets and companies through public auction. The government will also admit securities of private electric companies to the Mexican Stock Market.

### 7. *The Government's Role Regarding the Forthcoming Amendments*

Under the proposed constitutional amendments, the Mexican government will: (i) regulate Mexico's electrical industry and oversee it through the CFE and the CONSEN; (ii) prepare specific power programs for rural areas; (iii) grant subsidies when necessary; and (iv) operate nuclear energy plants. According to President Zedillo and Minister Tellez, these amendments are intended to be enforceable in the year 2000, when the next administration

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16. Articles 27 and 28 provide for the regulation of the natural resources and determine which activities are reserved exclusively for the Mexican government and Mexican nationals.

17. The center is an agency of the Federal Government that distributes electricity.



will take charge of the government. In the interim period, the federal government will attempt to restructure the electrical industry in order to aid its adjustment to the amendments. Zedillo's proposed amendments have the support of the business sector. However, Zedillo and Telez must convince Congress to approve them.

### III. New Rules for the Maquila Operations (In-Bond Manufacturing Operations)

#### A. LEGAL BACKGROUND

Published on June 1, 1998, a New Decree for the Fostering and Operation of the Exporting Maquiladora Industry (New Decree) adjusted certain provisions to the compromises under the NAFTA. Since the first Maquila Decree, on August 15, 1983, these kind of operations have been following basic similar rules.

#### B. THE MAQUILA OPERATION

##### 1. *Approval and Registration as Maquiladora*

A Maquiladora company must obtain the approval and registration of its program before the Ministry of Commerce and Industrial Development (SECOFI). Maquiladoras can have up to 100 percent foreign-owned equity without the previous approval from the Foreign Investment Authorities but must be registered at the National Registry of Foreign Investments. The New Decree provides that as of November 1, 2000, SECOFI will request the Ministry of Finance's advice to grant such approval, provided that such Maquiladoras applicants are in good standing in their tax obligations and are not under a fiscal executive proceeding.

As a result of the New Decree, the effects of an approved Maquiladora program will be indefinite, without the need of periodic updating. However, Maquiladoras must report to SECOFI by the last working day of April, all of the foreign trade operations that they performed during the prior year.

The SECOFI application basically requires a proposal of what is to be produced, the amount of capital/equity to be invested, the number of jobs to be created, the site of the Maquiladora, the percentage of Mexican content to be brought in, the overall net positive foreign currency generation and the corresponding Maquila (services) agreement certified by notary public.

#### B. GEOGRAPHICAL RESTRICTIONS

Since October 23, 1996, there are no geographical restrictions to locate facilities destined for industrial development. However, there are local rules and regulations on zoning and environmental matters, which make it difficult to locate maquiladoras in large urban centers such as Mexico City, Guadalajara, and Monterrey.

#### C. IMPORTS OF PRODUCTION ASSETS AND RAW MATERIALS

Following approval by SECOFI, the manufacturer may operate its maquiladora assembly facility and import in-bond the fixed assets, components and raw materials necessary to operate, as long as such fixed assets, components, and raw materials are finally taken outside of Mexico.

The components and materials expected to be processed and exported, their corresponding containers, packaging materials, labels and brochures, as well as their transportation trailer boxes and containers, can remain in Mexico for two years maximum. Machinery, tools, fixtures, spare parts, equipment and instruments, as well as computer and telecommunication equipment (fixed assets) to be used, can remain in Mexico for as long as the program lasts. SECOFI approves the transfer of any machinery or tools between maquiladora companies and/or those who furnish them, provided that the General Import Tax for such machinery has been paid.

#### D. SELLING WITHIN THE MEXICAN MARKET

The Mexican government allows Maquiladora plants to sell directly into the domestic market. Starting with their second year of operations, Maquiladora companies may be authorized by SECOFI to sell an equivalent of up to eighty percent of their export annual production of the prior year directly into the domestic market. This percentage will be increased to eighty-five percent in the year 2000 and a 100 percent in the year 2001. As of November 1, 2000, this authorization will be no longer required. The quality of the products must be the same for both exportation and domestic sale.

#### E. SUB-MAQUILA OPERATIONS

Maquiladora companies can hire local companies to perform specific manufacturing operations. Such sub-Maquila operations must be also authorized by SECOFI for an indefinite time period.

#### F. RULES ON RESIDUES

Hazardous residues generated in Maquiladora production, transformation, manufacture, or repair processes, must be re-exported or returned to the country of origin for disposal during the period determined by the Ministry of the Environment, Natural Resources and Fishing through the National Ecology Institute. Non-hazardous residues may be returned to the country of origin or destroyed in government-approved facilities. Maquiladora companies may legally dispose of their non-hazardous residues in Mexico by donating them to charities, which can resell them, or by selling them to a Mexican company for recycling. These residues include containers and packaging material of the temporal imported material, and under the New Decree, manufactured material rejected for not complying with the company's quality control standards.

#### G. EXPORT CERTIFICATE

Maquiladoras can request a zero percent rate value added tax payment on local purchases of materials and supplies integrated into the production to be exported. Accordingly, local suppliers charge a zero percent value added tax rate on sales to Maquiladoras, as though they were exporting such supplies themselves. Local suppliers to Maquiladoras must obtain a *Constancia de Exportación* (Export Certificate) from them. Maquiladoras will only be authorized by SECOFI to issue an Export Certificate if they previously advised SECOFI of such local suppliers.