

## NATURAL GAS DISTRIBUTION REGULATION

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### **Abstract**

*This document discusses the economic content of a set of Rules affecting the provision of natural gas distribution services in Mexico. As such, it describes the mechanisms proposed in order to ensure economic efficiency in the undertaking of such activity, i.e., competition policies, rate regulation, delimitation of licensed geographic regions and design of auction procedures for the granting of distribution franchises.*

### **I. Introduction**

The natural gas industry has acquired renewed importance through the implementation of ambitious programs of privatization and deregulation designed to ensure its long run development.

Regulation of natural gas distribution services has evolved from an intrusive, "command and control" type, towards a less restrictive, incentive-based one. As such, price and rate structures are being changed into schemes that provide cost reduction incentives in the provision of the service.

\* The opinions expressed herein are exclusively those of the authors and not necessarily those supported by the Agency of the Mexican Government where they work or any other Mexican Government Agency.

International experience shows that the availability of gas in sufficient quantities and at competitive prices, induces chain reactions in several industrial sectors, impacting not only those which use it as a production input, but also those in which it may be utilized as a fuel, due to its lower price and cleaner operation conditions than other conventional fuels.

Because of historical and political reasons, every stage in the production process of natural gas in Mexico has particular economic and legal implications. These have to be thoroughly analyzed and evaluated before proposals are made to encourage the efficient development of the natural gas industry.

Until this year, the exploration, production, and supply of gas had been done exclusively by Petróleos Mexicanos (Pemex), who exercises a legal monopoly power. In addition, an incipient regulation restrained the participation of the private sector in the industry. The proposed Rulings, as discussed in this paper, have as its main objective the efficient development of gas distribution networks throughout Mexican territory.

Recent changes in the "Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo" allow for the private sector to construct, operate and own pipelines, infrastructure and equipment to perform the activities of transportation, storage and distribution of natural gas. Likewise, they permit the private sector to freely import or export gas.

Sections two and three discuss the objective and economic logic sustained in the proposed set of Rulings, respectively; section four reviews the main issues considered in such document. Section five describes the methodology proposed for rate regulation, and section six discusses the suggested auction procedure designed for the granting of distribution licenses. Finally, the conclusions are reviewed in section seven.

## II. Objective

The objective of the proposed Rulings is to create the conditions that foster the development of urban natural gas distribution networks in those regions where it would be economically feasible (i.e., where there would be net efficiency gains). As such, optimum Rulings would be those that elicit:

- \* the maximum number of feasible regions absent of any subsidy;
  - \* an acceptable standard in the quality of the provision of distribution services, and
  - \* the minimal "feasible" price for natural gas consumers.
- Considering the above, an urban natural gas distribution network would allow for: the satisfaction of industrial and residential energy needs at competitive price and quality conditions, comparable to those of Mexico's main trading partners;
- \* the substitution of environmentally harmful fuels in order to comply with new environmental legislation, and
  - \* the attraction of domestic and foreign investment flows that are compatible with both an optimum network design and welfare maximization of end users.

## III. Economic Logic Behind the Proposed Rulings

Given the goals and structural conditions of the Mexican natural gas industry, it is necessary that the Rulings pay special attention to the following aspects:

*Competition.* The Rulings propose the existence of only one firm for each of the licensed geographic regions during a specified exclusivity period, thus favouring temporary monopoly practices. One way to combine to avoidance of such practices, with a minimum regulatory burden is through the introduction of competition in the relevant market, given the restriction that the supply of alternative fuels is monopolized.

- \* establishment of "self-consumption partnerships";
- \* consideration of competitive conditions in the design of licensed geographic regions, and
- \* granting of additional distribution permits for the same licensed geographic region upon the expiration of the exclusivity period of the first license for such region.

## IV. Summary of the Rulings

### 4.1. Licensed geographic region

The authority will define, for each metropolitan region, at least one licensed geographic region. Such region shall have the necessary economic density for distributors to take advantage of economies of scale and density in the construction of pipelines. That is, a licensed geographic region shall not be as small as to prevent the development of a network of pipelines of an adequate diameter, and not as large as to concentrate several regions susceptible of being licensed individually (i.e., the economic density of Mexico City justifies more than two licensed regions).

When these Rulings enter into effect, license auctions for natural gas distribution shall be held simultaneously for various geographic regions, when possible, specially for contiguous regions and for those regions with similar characteristics, in order to ensure that the differences amongst rates minimised.

On the other, when defining geographic regions it should be taken into account that the majority of consumers located within a specific region are as close as possible to a boundary of a region licensed to another distributor. In this way, once the exclusivity period expires, consumers can be supplied either by the distributor of their region or by the distributor of the contiguous region at similar price and quality standards.

License holders shall also be able to request voluntary expansions of their geographic regions in order to include consumers located outside of the region or, when the exclusivity period expires, in a nearby region.

#### 4.2. Exclusivity period

The Rulings propose auction procedures for the granting of construction and operation licenses of urban gas networks, granting the winner a six-year exclusivity period to distribute gas through pipelines within a specific geographic region.

The exclusivity period is not intended to be a time period in which to recover the pertaining investment, but one in which the greatest possible investment should be made. Once the pipelines have been laid in a region, no potential competitor shall have the incentive to invest, leaving the license holder with an exclusivity period that is effectively longer than six years, as long as it provides the service in favourable conditions of price and quality.

*Vertical integration.* The proposed Rulings introduce mechanisms that constrain vertical integration of transportation and distribution, within the same region.

*Rates.* Gas distributors are subject to price caps. By ensuring the quality and safety of the service provision, price caps could provide the incentives for cost reduction and efficient operation, thus generating higher benefit margins to distributors and to consumers in the long run. Furthermore, this scheme is flexible enough to allow distributors to give discounts and to adjust to changes in competitive conditions.

*License auctions.* A good mechanism to foster initial competition conditions is the allocation of licenses through auction procedures, subject to efficient selection criteria known by all the participants. These procedures shall allow to choose the best offer, based on the quality of service and the width of coverage, as defined in the proposed Rulings.

The auction procedures serve as an informational instrument for determining the initial rate applicable to the maximum monthly fixed charge to consumers (see section 5.3) and removes discretion of the authority in the granting of licenses and rights of way.

In order to eliminate the discretion of local authorities, the Rulings foster "coordination agreements" between federal and local authorities for the approval of rights of way, to be validated before the licenses are granted. These agreements shall provide rights of way to the winner of an auction and subsequently to those who apply for a new license after the expiration of the pertaining exclusivity period (see section 4.10).

Welfare gains are maximized and a fraction of the monopoly rents will be transferred to end users through the implementation of both a competitive auction process and a minimum rate criterion to be offered to consumers.

*Cross-price restrictions.* Given the presence of a dominant player in the transportation area and in order to avoid discriminatory behaviour or unjustified preferential treatment that harm or limit the interaction of distributors with large consumers and constrain the development of infrastructure, the Rulings establish cross-price restrictions. These will not allow discriminatory treatment of distributors, under similar conditions, within a licensed geographic region (see section 4.8.2).

In order to cope with these requirements, the proposed Rulings introduce the following elements:

- \* granting of initial licenses by auction;
- \* threat of direct connection between the transporter or distributor with the end user ("by-pass");
- \* open access to the pipelines of distributors, allowing the end user to acquire the commodity from any supplier;
- \* no exclusivity of rights of way.

Furthermore, licenses are granted for a thirty-year period and are automatically renewed for a fifteen-year period, making them virtually indefinite. This, in turn, gives investors certainty over the period necessary to recover their investment.

Since urban right of ways are granted sequentially, the person who first acquires the license for the pertaining region shall be able to construct a pipeline network within such region under the most favourable circumstances. By recognizing this fact, the Rulings propose a six-year exclusivity period. Without such period, the proposed auction procedures could not be undertaken and there would be greater possibility for discretionary behaviour by competent authorities.

#### 4.3. Granting of licenses

Licenses are granted through a two-stage auction process. The first stage allows the authority to review compliance of the applicant with minimum technical and financial requirements. The second stage allows the selection of the winner through a strictly economic criterion: the minimum vector of rates offered to final consumers.

Another advantage of the auction is that the initial vector of rates is established through the competitive bidding, solving the problem of lack of information of the authority therefore, reducing the probability of renegotiation.

The bidding process will be discussed in section 6, and the annex describes the procedure.

#### 4.4. Minimum investment commitments

The Rulings establish minimum investment commitments for license holders, which are set to be endogenously determined. The market, through the use of available information and the rate vector provided by the distributor, determines the investment commitments as a function of the volume of gas and the number of potential entrants in a given licensed geographic region. Forecasting errors of authority are thus eliminated and the possibility of renegotiation once a license has been granted is thereby reduced.

A revision of the fulfillment of the investment commitments shall be undertaken before the pertaining exclusivity period expires. If such commitments are not fulfilled, the exclusivity period is canceled, allowing other distributors access to the applicable region. As a consequence of such cancellation, a portion of the guarantee

presented by the distributor upon the granting of its license is lost; such portion is determined as a function of the excess demand observable in the applicable region.

Once the exclusivity period expires, all distributors present in the region acquire the obligation to cover all the service requests received in the year immediately preceding that in which such period expires. This obligation is endogenous to the rates offered to consumers.

#### **4.5. By-pass**

The undertaking of by-pass activities requires a license, which shall be granted automatically when all minimum technical requirements are met by the applicant. By-pass between a consumer and a transporter shall be permitted even while an exclusivity period for a given region is enforceable, in order to provide competition to distributors and additional negotiating power to large consumers.

A consumer will be able to buy directly from a supplying firm only if such consumer covers the construction costs of a pipeline from its delivery point to a receipt point. However, the by-passing consumer will not be able to distribute gas to other firms while the exclusivity period of the pertaining distributor within the specific licensed geographic region is still enforceable, unless such consumer becomes a part of a self consumption partnership.

The possibility of by-pass allows for large consumers to negotiate for lower rates with a particular distributor without having to construct a pipeline. Furthermore, such possibility maintains a credible threat to the distributor in that region given that once the exclusivity period is over, consumers doing by-pass can apply for a distribution license within the same geographic region and, should the license be granted, expand their networks.

The above possibility facilitates the introduction of competition within a particular region: allowing small consumers access to this potential new distributor, gives them a better negotiating position with existing distributors even before the expiration of the pertaining exclusivity period.

#### **4.6. Vertical integration**

Transporting firms that carry gas to a licensed geographic region shall not be allowed to hold more than ten percent of distributing firms within the same region, and vice versa. This is so because it would be practically impossible to detect preferential self-supplying in those situations.

Vertical integration would in turn destroy the effectiveness of by-pass threats and the possibility of new entrance upon the expiration of the exclusivity period. There is an exception to the above, however. If there is neither a transporter nor a distributor servicing a particular region, a firm may be allowed to provide both services, provided it is the winner of the auction for that particular distribution license and is also granted a transportation license. Nevertheless, such integration has to be diluted upon the expiration of the exclusivity period in order to comply with the ten percent restriction.

The Rulings establish an additional restriction for parties who have equity participation in a firm that transports gas to a specific geographic region and are interested in obtaining a by-pass license, or for transportation firms which have equity participation in another firm interested in obtaining a by-pass license. Both of these cases require a favourable resolution from the Comisión Federal de Competencia (Antitrust Commission).

#### **4.7. Threat of entrance**

The authority shall grant additional distribution licenses for a specific licensed geographic region to any interested party that complies with the minimum technical requirements, upon the expiration of the pertaining exclusivity period. It will be sufficient for corresponding petitioners to satisfy the requirements imposed during the first phase of the initial auction for the first license. At the same time, the by-pass licensees could become distributors with lower investment costs, because of their prior investments.

This will allow the existence of a credible threat, for the existing distributor, concerning the entrance of new competitors, which in turn will give the initial distributor the necessary incentives to achieve maximum growth and to provide the service in competitive conditions even before the exclusivity period expires.

#### **4.8. Contracts and secondary markets for capacity**

##### *4.8.1. General guidelines*

The Rulings set forth minimum guidelines applicable to contracts between distributors and consumers or amongst consumers that wish to resell or buy capacity in the secondary market. The purpose regulating this matter is to promote the creation of such a market, which may result in supply conditions that can be more easily adaptable to the needs of consumers and a more efficient use of the network.

However, given that distributors will have greater bargaining power than the consumers, the initial capacity reselling shall be regulated by price caps established in the rate regulation chapter of the Rulings. Subsequent sales will be completely deregulated, allowing the parties involved to manage their contractual relationship at their convenience. As an exception to such rule, and in order to avoid a situation of artificial scarcity of capacity, the Rulings establish that should the consumers not resell or use their excess capacity, the market may appropriate of such, through an auction procedure. With the same objective in mind, the Rulings explicitly exclude clauses that may, implicitly or explicitly, allow for monopoly practices (see section 4.8.3).

##### *4.8.2. Non discriminatory conditions*

The Rulings establish that the provision of natural gas distribution services shall be undertaken in conditions of quality and safety, in a non discriminatory manner. The Rulings define unduly discriminatory treatment as the denegation of similar treatment to similar consumers under similar conditions.

To complement the above, the Rulings define the following price differences as non discriminatory conditions:

- (a) those amongst the different classes of services;
  - (b) those originated by the location of consumers relative to a specific city gate;
  - (c) those owed to distinctions in consumer types according to the quantities of gas consumed and the respective consumption conditions, based on generally applicable criteria for determining price caps for each consumer type and service class.
- 4.8.3. Consumer protection against distributor bargaining power**
- In order to protect consumers against the bargaining power of distributors, the Rulings specify clauses that shall not be allowed to be included in gas distribution and supply contracts. Therefore, contracts between distributors and consumers shall not include clauses that:
- (a) allow the distributor to unilaterally modify the content of the contract or avoid its responsibilities;
  - (b) release the distributor from its civil responsibility, except for those cases in which the consumer does not fulfill its contractual obligations;
  - (c) transfer the civil responsibility of the distributor to the consumer or to a third party;
  - (d) set forth prescription terms inferior to those specified by law;
  - (e) require the fulfillment of specific formalities for the judicial acceptance of contractual actions promoted against the distributor;
  - (f) require the consumer to relinquish the protection of applicable legislation or to be subject to foreign courts;
  - (g) require the consumer to acquire services or products additional to the gas distribution services, or
  - (h) limit the resale of contracted capacity.

**4.8.4. Resale of contracted capacity**

In order to promote a more efficient use of the network, the Rulings allow for the resale of excess capacity and establish the conditions necessary to avoid the concentration of unutilized capacity.

With these purposes, the Rulings state that whenever a consumer contracts firm service, it can resell the resulting capacity, either totally or partially, to other consumers within the same geographic region. If the consumer does not resell or use that capacity, the distributor, through the use of market mechanisms, may use such excess capacity to provide interruptible services to other consumers.

Both classes of services, firm and interruptible, shall be defined in an official standard to be issued by the competent authority.

Resale contracts shall be as agreed by interested parties. When no agreement is attained, the consumer may request the competent authority to resolve the issue according to generally applicable criteria to be issued by the competent authority.

Feasibility for the reselling of capacity and the procedures that the parties must be subject to in such issue shall be determined by the generally applicable

criteria referred to above. Such criteria shall set forth the methodology applicable to the computation of changes in variable costs of the carried gas and the mechanisms through which the distributor shall be reimbursed, when applicable.

**4.9. Security standards and sanctions**

Given the characteristics of the industry, the handling of gas requires the establishment of minimum applicable standards. The Rulings propose that the authority shall set technical standards in areas such as safety, construction, and metering.

The observance of such standards will be supervised by private verification units, which shall supervise the construction, infrastructure and equipment related to the gas distribution networks. Such verification units shall be co-responsible for negligence in the compliance with applicable regulations by distributors.

As a means to secure continuous compliance with the commitments acquired through the pertaining license, the authority may impose specific sanctions or revoke the license. Revocation may be undertaken only after giving the interested party an opportunity to correct the corresponding faults, notwithstanding the imposition of the applicable economic sanctions.

**4.10. Interaction between federal, state and municipal authorities in order to make the operations of license holders possible**

Gas distribution licenses are granted by federal authorities. However, in order to be fully effective, such licenses require the granting of the pertaining rights of way, which are of local competence. Interaction problems in those fields amongst different authorities surpass the scope of the proposed Rulings. In order to provide a solution for such problems, the Rulings invite local authorities to participate in the issuing of licenses, thus allowing an opportunity for the authorities to negotiate any obstacles that local legislation may impose on the license holder.

This mechanism allows the authorities to solve jurisdiction problems before the auction process begins, so that the potential participants can be certain that the auctioned license already contains the approval of local authorities in regard to the granting of local rights of way.

**V. Maximum Rates**

**5.1. General issues**

The competent authority shall establish generally applicable criteria that will, in turn, set forth the methodology to be used to determine maximum rates to be charged to end users. Such methodology must separate the transportation and commodity costs of the gas and take into account peak load charges, load factors, distinctions amongst different consumer types by quantity of gas consumed, lev-

ies to the gas distribution service, distinctions by type of service, and the distance between the city gate and the delivery point or the connecting point with the by-pass licenses.

## 5.2. Guiding principles in the determination of maximum rates

Maximum rates determined by the competent authority shall be such that they:

- (a) allow a return to a distributor similar to the one expected from other activities implying similar risks, considering an optimal behaviour of the distributor and a satisfactory service provision and provide that the design, construction and operation of the distribution network are appropriate;
- (b) allow capital costs shared amongst several consumers to be distributed in an equitable way, in accordance with the quantity and quality of the gas consumed by each of them, and
- (c) consider the quantity and quality of gas consumed and the type of service, as defined in applicable standards, as well as the costs of connecting the delivery point of the consumers with the gas distribution network or a transportation pipeline.

## 5.3. Elements of the distribution rates

Generally applicable criteria, as mentioned above, shall contain a classification of consumers by type, according to the volume of gas consumed, and shall set the minimum and maximum quantity of gas consumed for each consumer type. Maximum applicable rates shall include the following elements:

- (a) *Maximum fixed charge for connecting costs.* This charge will cover the cost of connecting the delivery point of a consumer to the pipeline of the distributor. It shall depend on the length and diameter of the pipe connecting both points. Generally applicable criteria shall define the methodology by which additional connection costs are to be shared among two or more consumers, should there be more than one consumer requesting gas distribution services within an area located inside a licensed geographic region.
- (b) *Maximum monthly fixed charge for the carriage of gas through the distribution network* (and an accompanying methodology for increasing or decreasing such charge, according to the distance between the city gate and the reception point of consumers). This charge will cover the investment costs and fixed operation and maintenance costs of the distribution network. This charge is the highest amongst the carriage costs of the gas from the city gate delivery point to the delivery point of the consumer. For those licensed geographic regions with an enforceable exclusivity period, this charge shall be set in the auction process, in which the license is granted to the participant that offers the lowest weighed average of tariffs to consumers, according to the weights determined by the authority.

(c) Maximum charge per unit of carried gas. This charge will cover the variable costs of the volume of gas carried.

(d) Cost of gas at the city gate. The computation of such cost will include a mechanism that transfers the price of the gas from the city gate to the delivery point and a methodology that will allow the distributor to share with the consumers the savings obtained by acquiring the commodity at favourable conditions.

It is important that the first three elements consider inflationary adjustments and efficiency changes determined from the behaviour of all the distributors, applied in accordance with generally applicable criteria to be established by the competent authority. As such, the criteria will use indexes and benchmarks not susceptible of being modified by the behaviour and operating costs of any particular distributor.

For such purposes, the competent authority will acquire valuable information about costs, behaviour and performance during the first few years of the license.

The sum of the first three elements represents the cost of carrying the gas from the city gate to the delivery point of a consumer, while the fourth element represents the cost of the commodity.

The rate charged to the consumer must show, separately, the charges corresponding to each of the four elements mentioned above. Furthermore, with the intention of adding flexibility to the contractual arrangements, the distributor and the consumer may agree to gas price and distribution costs inferior to those established by the maximum applicable rates, so that these rates will apply should the distributor and a consumer do not reach an agreement for such matters.

## 6. The Auction Process

### 6.1. Description

There are three assumptions through which a distribution license auction process may be initiated. First, at the request of at least two or more individuals or firms who satisfy the minimum technical and financial requirements; second, when the authority determines that it is in the public interest to initiate such process; and finally, in the case of a revocation of a license.

The auction will take place in two stages. The first will certify potential investors, identifying those that do not comply with technical, administrative and financial requirements as established by the authority.

The potential participants will guarantee their offer. To the extent in which the above-mentioned requirements are sufficiently strict, this phase will allow the authority to eliminate "opportunistic" candidates. Thus, the occurrence of this stage will reduce the probability of renegotiating the service conditions once the license has been granted.

Additional mechanisms are established in order to avoid renegotiations and

punish noncompliance circumstances. These are set forth in the form of sanctions, guarantees over investment agreements, cancellation of the exclusivity period, bad reputation to be considered when requesting another license and revocation of the original license.

The second phase proceeds according to a criterion which, combined with the threat of by-pass, separation between distribution and transportation and other mechanisms previously referred to, would induce the winner of the auction to behave in a relatively competitive manner in the provision of gas distribution services. This criterion is the weighted average of the maximum fixed costs offered by each bidder for the different types of services (see section 5.3. c above).

The opinion of the Comisión Federal de Competencia shall be considered when deciding if the auction should be simultaneous, sealed or English. Should reasonable competitive conditions exist, a simultaneous English auction maximizes the probabilities of eliminating arbitrage procedures in the auction, especially when auctioning regions with similar load factor characteristics.

An annex is included to describe the proposed auction procedures.

## 6.2. Allocation criteria for distribution licenses

When granting a license for providing a service with natural monopoly characteristics as well as when establishing the methods used to regulate the behaviour of the winners, it is important to consider the informational asymmetries between the applicants and the authority in regard to the estimation of the value of the license and of the variables that may reduce the monopoly power of distributors.

The proposed auction procedure does not require the regulatory authority to possess much information, since it uses the lowest weighted average of fixed charges (see section 5.3.c above) as the selection criterion. Such mechanism reduces the regulatory cost and the discretion of the authority when selecting the winner.

Another advantage of the procedure is that the maximum applicable rate is set by the interested firms, eliminating errors from the authority and reducing the high costs of negotiations for the establishment of price caps with the distribution firms, which in turn have an incentive to distort the information regarding the variables that determine the rate levels and the corresponding actualization factors.

In regard to the included proposal for undertaking simultaneous auctions is the possibility of a potential distributor to be interested in various regions, and its valuation of a given region could depend upon its winning or losing another region. Therefore, if the regions are auctioned one at a time, they will probably not be allocated in the most efficient way, and thus different rates may apply within geographic regions of similar characteristics.

Finally, given that many investors will participate in the auctions, undertaking the auctions in several stages will allow such investors to reevaluate their bids and to improve their respective valuations. This mechanism and its advantages

have been proved by the Federal Communication Commission (FCC) in the auction of the radioelectric spectrum.

It will not be necessary to auction the licenses in the long run, once all the regions in the country have been auctioned, because of the multiple incentives that the Rulings provide in order to foster the competition in the regions upon the expiration of (and even during) the exclusivity period.

## VII. Conclusions

Once the regulatory framework has been set in place through the publication of these Rulings, establishing natural gas distribution networks will require:

- \* granting distribution licenses through a transparent application of the auction process;
- \* development of the methodologies used to determine maximum rates;
- \* a harmonious interaction between federal and local authorities in order to expedite the granting of right of way licenses.

These elements will generate appropriate conditions to attract the investment needed to construct and operate urban distribution networks, as well as to maximize the probabilities of achieving the provision of natural gas distribution services under adequate conditions of efficiency, safety, quality and price.

## Note

- 1 Published by the "Diario Oficial de la Federación" (Official Gazette) in May 11, 1995.

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**ANNEX**  
**PROPOSED AUCTION PROCEDURE**  
**(Sequential steps)**

1. The borders of each geographic region shall be defined by the authority.
2. The auction may be initiated under three circumstances:
  - 2.1. if requested by interest parties;
    - 2.1.1. every interested party shall submit an application containing the following:
      - 2.1.1.1. name, trade name and address of the applicant;
      - 2.1.1.2. documents sanctioning the financial, technical and managerial capabilities of the applicant;
      - 2.1.1.3. when applicable, documents sanctioning the personality and powers of the legal representative of the applicant, certified by notary public;
      - 2.1.1.4. proposed limits of the geographic region in which the gas distribution services are to be provided;
      - 2.1.1.5. information on any venture or corporation in which the applicant takes part, directly or indirectly, and which may be related to the processing, transportation or distribution of gas, LP gas or any other substitute fuel; as well as information relative to the shareholders that own, when applicable, a controlling stake of the shares of the applicant, certified by notary public.
    - 2.2. when it should be required by the needs of a specific population center, as determined by the Secretariat of Energy (the "SE"), provided that a distribution license holder, whose exclusivity period is still enforceable, does not operate within such geographic region; or
    - 2.3. when the Secretariat has determined the revocation of a distribution license with its exclusivity period still enforceable, and only for the remaining term within such period.
  3. The borders of a specific geographic region may be modified by the SE.
  4. Auctions for neighbouring geographic regions, as well as for those for which the SE determines the existence of a sufficient number of prospective applicants, shall be conducted simultaneously. In all other cases, auctions shall be undertaken individually.
  5. The "calls for bids" are published.
  6. Interested parties shall submit their application to the SE within the following 10 days after the publication of the applicable "call for bids". The application shall contain the data referred to under 2.1.1.1. and 2.1.1.5. herein.
  7. The applications are sent to the Federal Competition Commission (the "CFC"), which shall issue its opinion within the following 20 days. If the CFC does not issue its opinion within such term, the pertaining application shall be considered to be not objected.
    8. The auction basis are elaborated. They shall contain the following:
      - 8.1. technical specifications of the project;
      - 8.2. financial, technical and managerial capabilities required for the provision of the service;
      - 8.3. minimum investment programmes and commitments applicable to the minimum coverage and development of the distribution network within the specific geographic region, to be undertaken during the exclusivity period. They shall also contain the maximum dates by which the above mentioned programmes shall be undertaken:
        - 8.3.1. the minimum investment commitments and the maximum terms referred to above are the following:
          - 8.3.1.2. the minimum quantity of gas that shall be provided by the end of the third year after the granting of the License or by the end of the second year after commencing operations, whichever occurs first. This quantity shall not be greater than 40% of the total volume of gas requested by users; and by the sixth year it shall not be greater than 100% of the total volume of gas requested by users by the end of the fifth year;
          - 8.3.1.2. the minimum number of users to be served by the end of the third year after the granting of the License or by the end of the second year after commencing operations, whichever occurs first. This number shall not be greater than 40% of the total number of users; and by the sixth year it shall not be greater than 100% of the total number of service requests received by the end of the fifth year.
        - 8.3.2. The above procedure eliminates the possibility of having inconsistent rates and investment commitments, which can open the door to future re-negotiations by distributors. Additionally, the Rulings establish a series of automatic and credible instruments, the objective of which is to prevent future renegotiations. These instruments are the loss of the exclusivity period during the first evaluation undertaken by the authorities, a monetary sanction, the development of a bad reputation by such a distributor -- which shall be considered in the pre-selection criteria for future auctions (as mentioned in the main document) --, and the collection of the guarantee or insurance covering the fulfillment of the terms if the investment commitments, as referred to under section 8.8 herein. It is important to point out that these instruments are previous to the revocation of the License and the possible expropriation of the pertaining assets.



- 8.4. when applicable, diligences required to obtain the applicable permits and authorizations from local authorities, as may be required by applicable coordination agreements (refer to main document);
- 8.5. the methodology, general criteria (as mentioned in the main document and benchmarks used for determining maximum rates:
- 8.5.1. a listing of rates in which each rate shall be classified according to user categories, shall be established by the authorities. Such user categories shall indicate the minimum and maximum consumption volumes applicable to each;
- 8.5.2. rates applicable to each user category shall include the following charges, which shall be exogenous, know by the time of the auction and established according to an applicable methodology:
- 8.5.2.1. maximum fixed charge for connection costs;
- 8.5.2.2. maximum charge per unit of gas carried. Such charge shall cover the variable costs of the carried gas, and 8.5.2.3. a mechanism for the transfer of the acquisition cost of the gas, from the distributors to the users;
- 8.5.3. the maximum fixed charge for the carriage of gas through the distribution network shall be proposed for each user category by the bidders, according to the following rules:
- 8.5.3.1. the SE shall establish, in the auction basis, the weights which it shall use in order to obtain the weighted average of the charges proposed by each bidder for each user category;
- 8.5.3.2. the maximum fixed charge proposed by the bidders for each user category shall be multiplied by the applicable weight; the resulting quantities for each category shall be added in order to obtain the weighted average of maximum fixed charges;
- 8.5.3.3. the maximum fixed charges for each user category and their corresponding weighted average shall constitute the "initial economic proposal". The lowest weighted average of maximum monthly fixed charges for the carriage of gas through the distribution network shall be the only criteria (described in the main document) which shall decide the winner of the auction;
- 8.6. the form and amount of the guarantees for the seriousness of the proposals, which shall be constituted in favour of the SE;
- 8.7. the type and coverage of the insurance of guarantee for the coverage of the damages which might be caused in the provision of the service. Similar insurance should be asked to similar Licensees;
- 8.8. the type and coverage of the insurance or guarantee for the coverage of the unfulfillment of the investment programmes and commitments;

- 8.9. the methodology to which the technical proposals shall be clarifications of the auction basis.
- 8.10. the place, date and time of the meetings for the clarifications of the auction basis.
9. The presentation and opening of the proposals shall be undertaken in two stages.
10. First stage. In this stage, both economic and technical proposals shall be submitted, but only the technical ones are opened. All incomplete proposals or those submitted by an applicant which has developed a bad reputation shall be rejected. A period for the detailed study of the proposals that were not rejected is thus initiated.
11. Second stage:
- 11.1 a list containing those proposals rejected during the period for detailed analysis shall be read aloud, specifying the reasons for such rejection;
- 11.2. envelopes containing the initial economic proposals that approved the technical (first) stage are thus opened;
- 11.3. the maximum fixed charges and their weighted average shall be read aloud; all proposals for each License being auctioned shall be arranged by decreasing order of magnitude according to their corresponding weighted averages, and they shall be shown on a public board;
- 11.4. the initial economic proposals may be improved in sequential sub-stages of 24 hours each, in which all approved bidders may improve the best proposal or proposals:
- 11.4.1. a proposal shall be considered to be better than that of a previous sub-stage of it exceeds the latter by at least 3%;
- 11.4.2. all proposals shall be re-arranged at the end of each sub-stage; the auction shall continue until, in any sub-stage, the best proposal of the preceding sub-stage is no longer improved for any given License.
12. If the amount or combination of interested parties does not guarantee the competitiveness in the auction procedure, the SE will have to appoint that the second stage will be executed from 11.1 to 11.3. The SE will have to determine which process will be followed before the publication of the "call for bids". This decision will have to be supported by CFC.
13. The result of the auction shall be informed at a public meeting, and it shall favour the applicant which, having qualified for the second stage of the auction, offered the lowest fixed charge weighted average. The SE shall grant the corresponding License within a term that shall not exceed 15 days from the date in which the result of the auction was informed.
14. Construction works are initiated and, afterwards, service provision begins.
15. At the end of the third year after the granting of the License or after the second year of commencing operations, whichever comes first, the SE shall verify the fulfillment of the minimum investment commitments and their applicable maximum dates by the Licensee. The minimum commitments include the coverage of at least 40% of requested services and volume. If the

- Licensee does not fulfill these commitments, it shall lose its exclusivity period, shall receive a monetary sanction, a note of bad reputation shall be taken and the SE shall collect the applicable guarantee (see 8.3.2.). If the Licensee has fulfilled its commitments, the corresponding fraction of the applicable guarantee shall be freed.
16. At the end of the exclusivity period, the SE shall again verify the fulfillment of the minimum investment commitments and their applicable maximum dates by the Licensee. The same sanctions as above apply for the unfulfillment of such commitments and terms.
17. Once the exclusivity period has expired, the distributor shall have the obligation to provide the service to any party interested, within the pertaining geographic region. The unfulfillment of this obligation shall be sanctioned with a monetary infraction and a note for bad reputation to be considered in future auctions.