

Frequent Asked Questions on Regulations

1. How does the regulatory scheme in the electricity generation business in Colombia work?

Generation is an activity of free competition, therefore the participation of different economic agents, who shall be integrated within the National Interconnected System (SIN as per its acronym in Spanish) to adhere to the Energy Wholesale Market, is allowed. Every generation agent shall comply with the rules and regulations in force within the framework of Laws 142 and 143/1994.

The Ministry of Mines and Energy, the policy governing entity, relies on the sectoral information of the Mining and Energy Planning Unit (UPME as per its acronym in Spanish) for the formulation of the public policy. However, it is worth noting that the expansion of the generation park is decentralized, and expansion plans prepared by the UPME are indicative.

The Energy and Gas Regulation Commission (CREG as per its acronym in Spanish), as regulatory body, is responsible for developing the rules for the proper functioning of the Energy Wholesale Market, such as competition, Reliability Charge, energy contracts, international transactions, guarantees, complementary services, minor plants (generation with a capacity of less than 20 MW).

2. How does the regulatory scheme in the transmission business in Colombia, Peru, Brazil and Guatemala work?

- Colombia

Transmission activity is a regulated monopoly and the transmission planning is the responsibility of the UPME who, through calls, chooses the investors who will carry out the expansion projects under the criteria of Net Present Value using a discount rate defined by the regulatory body. The Expected Annual Revenue presented by the bidder assigned in the call, covers all costs incurred by the selected transmitter.

- Peru

Transmission activity is considered a natural monopoly and the network is of free use to third parties. *Proinversión* is the entity in charge of bidding for the construction of facilities included in the Transmission Plan, while the National Interconnected System Financial Operation Committee (COES as per its acronym in Spanish) plans the development of transmission of the so-called National Interconnected Electric System, SEIN, which is composed of:

- Guaranteed Transmission System (SGT as per its acronym in Spanish) whose concession and construction are done through a public bidding process.
- Complementary Transmission System (SCT as per its acronym in Spanish) whose construction results from the own initiative of agents or approvals of OSINERGMIN through the investment plan.

- Main Transmission System (SPT as per its acronym in Spanish) which consists of those works that began operation before the entry into force of Law No. 28832 and are part of the set of an interconnected system.
- Secondary Transmission System (SST as per its acronym in Spanish) which consists of those works that began operation before the entry into force of Law No. 28832 and are used to transmit electricity to a distributor or end consumer, from a Busbar of the Main System.
- Brazil:

Transportation concession holders are responsible for maintenance and availability of their facilities, which are operated by the National Electricity System Operator (ONS as per its acronym in Spanish). In accordance with Laws No. 9074/1995 and No. 9648/1998, access to the network by any agent is free and agents pay the cost of transportation.

The planning of the expansion of the transmission system is centralized and the responsibility of the *Empresa Pesquisa Energética EPE*. New works for the expansion of the Basic Network are tendered through a transmission auction, while reinforcements in existing concessions are authorized by the ANEEL (the Brazilian electricity regulator agency), which sets forth the general conditions for obtaining access to the transmission system (including contracts for connection and use of the system). Lastly, access conditions are consolidated in the access report issued by the ONS.

- Guatemala:

The transportation of electricity is of free use by third parties, however, when the use of public property is needed, and its use involves participation in the transportation of electricity, an authorization from the Ministry of Energy and Mines is required.

The National Electric Energy Commission (CNEE as per its acronym in Spanish) is in charge of bidding process for the expansion of the high-voltage transportation system and the definition of transmission tariffs subject to regulation.

3. How does the regulatory scheme in the electricity distribution and commercialization business in Colombia work?

- Distribution:

Electricity distribution in Colombia is carried out at different voltage levels or voltages that are classified into two groups:

- Local distribution system – SDL (as per its acronym in Spanish): Comprises low voltage (less than 1 Kv) and medium voltage (greater than or equal to 57.5 Kv).
- Regional transmission system: high-voltage energy transportation (greater than 57.5 Kv and less than 220 Kv).

The distributor (network operator – OR) does not act as an energy intermediary between the market and regulated consumers. Rather, distributors constitute natural regional monopolies with regulated remuneration based on criteria of efficiency and quality in the provision of the service. In this sense, their remuneration is determined by the CREG through a regulated charge.

- Commercialization:

In Colombia, the commercialization activity relates to the purchase of electric energy in the Energy Wholesale Market and its sale to end users, regulated or non-regulated. Regulated users are those whose power is less than 0,1 MW or monthly consumption is less than 55 MWh/month. The regulator has established that regulated users shall be protected in terms of price and service provision conditions.

The electric energy commercialization market has no barriers to entry for any level of consumption and may be developed in combination with other activities, as provided for by regulation and law, or independently.

The marketer that serves the regulated market, which generally coincides with the marketer distributor, is remunerated through a maximum charge per market (commercialization base cost), which recognizes the costs of all commercial processes from meter reading to collection, customer service, energy purchase management and a margin. In this way, as provided for by CREG Resolution 119/2007, the marketer is responsible for billing all the costs of service stages to regulated users.

4. How does the regulatory scheme in the natural gas transportation business in Colombia and Peru work?

- Colombia:

Natural gas transportation is considered an open service, in which concession for construction of gas pipelines is not required. However, due to the amount of investments required and nature of the service, it constitutes as natural monopoly.

The regulatory scheme that applies to natural gas transportation service seeks to guarantee access to infrastructure by consumers and remuneration of investments and costs of the activity through an efficient tariff.

On the other hand, the Mining and Energy Planning Unit (UPME) develops the Natural Gas Supply Plan adopted by the Ministry of Mines and Energy, which identifies the transportation projects required to ensure the long-term supply of natural gas in the country. In this sense, transporters will be able to develop these projects under an Expected Annual Income mechanism, which is guaranteed to be received for 20 years.

- Peru:

The activity of transporting natural gas by pipeline network is characterized by being a natural monopoly. Any natural or legal person, national or foreign, may build, operate and maintain pipelines for the transportation of natural gas according to the concession contract granted and subject to the provisions established by the regulation issued by the Ministry of Energy and Mines.

The Peruvian State, by means of Law No. 27133 (Law to Promote the Development of the Natural Gas Industry) and its regulations approved by means of Supreme Decree No. 040-99-EM, defined the procedure for the determination of NG transport tariffs by pipeline, assigning Osinergmin the responsibility of regulating the Transport Tariff in the Main Network every two years, as well as the charge for Main Network Guarantee (GRP as per its acronym in Spanish).

5. How does the regulatory scheme in the natural gas distribution business in Colombia and Peru work?

- Colombia:

Natural gas distribution is considered a natural monopoly and does not require concessions for the construction of networks.

The distribution service is regulated, both in operational and quality aspects, and tariff aspects. In order to start providing the service, the Energy and Gas Regulation Commission must have established regulated tariffs for the market to be served. Tariffs are approved for a market and not for a specific company, therefore, any agent who wants to provide the service in the same market shall apply the approved tariff.

- Peru:

Natural gas distribution to users through installed pipeline networks is characterized as a natural monopoly.

The rules and regulations of the distribution and commercialization activity is based on the Organic Law for Hydrocarbons, Law No. 26221/1993.

By means of D.S. N° 056-93-EM of November/1993, the Regulation for natural gas distribution through pipeline was approved. Later, with the issuance of Law No. 27116 of May/1999 the Energy Tariffs Commission was created, and by means of Law No. 27133 of September/1999 and other provisions, the development of the natural gas was promoted.

By means of D.S. N° 040-2008-EM, a single, orderly wording, which consolidated the modifications to the Regulation of natural gas distribution through pipeline, was approved. This regulation has eight chapters, one hundred and twenty-nine articles, four transitory provisions, five complementary provisions and two annexes. The following is a list of the significant issues established by the regulation:

- Procedures for granting concessions.

- Procedures for setting tariffs.
- Conditions for the application of the mechanism for the promotion of residential connections.
- Security Standards.
- Rules on the protection of the environment.
- Provisions on the competent regulatory authority.
- Rules related to auditing.

6. How does the remuneration scheme in the electricity generation business in Colombia work?

In Colombia, a generation agent can obtain revenues through:

- Short-term contracts through the Energy Exchange, where daily prices are offered, and energy availability is declared.
- Long-term financial contracts whose prices will be agreed with the counterpart.
- Participation in the expansion scheme of the generation park called Reliability Charge, which is based on remunerating Firm Energy that the generators can deliver to the system under critical hydrology conditions. With this charge, the generator ensures revenues to the new plants and/or generation units for a term of up to twenty years, additional to those received for the sale of energy through contracts and the Energy Exchange.
- Mechanism of long-term contracts. In order to participate in this auction, the participants shall pass the rating given by the Ministry of Mines and Energy.

7. How does the remuneration scheme in the electricity transmission business in Colombia, Peru, Brazil and Guatemala work?

- Colombia:

The transporter receives income for its assets, depending on whether or not it is an existing asset:

- Assets existing as at December 31, 1999: Receives the income determined in a manner managed under the new replacement value (VNR) methodology, which remunerates investment and AOM expenses.
- Assets granted under the public call mechanism: This mechanism, whose application began in 1999, remunerates the developer of a transmission project through an Annual Revenue for 25 years that covers all costs incurred by the selected transmitter in the call, including AOM costs. As of year 26, revenue is calculated using the procedure applied for the remuneration of existing assets, the transporter receives remuneration for the investment in non-electrical assets and land.

According to CREG Resolution 083/2008, the rate of return used to remunerate transmission assets is 11.50% in constant pesos before taxes. The regulator defines this rate and seeks to reflect the WACC of the transmission activity.

Based on the methodology for calculating the Usage Fee of the National Transmission System, STN (CREG Resolution 011/2009), marketers pay an “postage-stamp charge” that allows remunerating

the total Regulated Revenue of transporters. This charge is applied by the demand in the energy tariff. Generators do not pay charges for the Use of the STN.

- Peru:

The expansion of transmission is carried out through a concession scheme based on the payment of a fixed annual revenue made to the awarded bidder in exchange for a commitment to operate and maintain the networks for a period of 30 years.

- Facilities of the Guaranteed Transmission System

The facilities of the Guaranteed Transmission System are governed by the provisions of Law 28832 and are remunerated according to the Tariff Base that includes the remuneration for investments that remains constant during a 30-year bidding period and is updated at a real annual rate of 12% and efficient costs of operation and maintenance.

- Facilities of the Complementary Transmission System

As provided for by paragraph b) of Article 139 of the Regulation of the Law of Electrical Concessions, the transmitter receives a remuneration for these facilities equal to the annual average cost, which includes the investment cost which is remunerated based on the provisions of the relevant Investment Plan and the standard annual cost of operation and maintenance of facilities. If the latter is not included in the SCT Concession Contracts, it is determined by OSINERGMIN every 6 years as a percentage of the cost of the investment.

- Facilities of the Main System

As defined in the Law of Electrical Concessions (LCE) of 1992, these transmission assets are remunerated through regulated tariffs using the methodology of new replacement value, considering a useful life of 30 years and the discount rate established in the Law of Electrical Concession, equal to 12%. On the other hand, operation and maintenance costs are determined for an entire company as a whole, due to the fact there are operation and management processes and/or activities that are associated with all the company's facilities.

- Facilities of the Secondary System

In accordance with paragraph b) of Article 139 of the Regulation of the Law of Electrical Concessions, an annual average cost equivalent to the annual income for Toll and Tariff Revenue is established, which is updated in each tariff setting according to the update formulas established by OSINERGMIN.

- Brazil:

The transmission system that integrates the SIN is operated by the National Operator of the ONS System and each transmission agent must sign specific agreements with the ONS. The public utilities related to the transmission system are governed by ANEEL's tariff policies, which basically consist of the stipulation by ANEEL of a permitted annual income (RAP as per its acronym in Portuguese) to be received by each concession holder or licensee through the Usage Fee of Transmission Systems to be paid by each agent accessing the transmission network.

In order to determine this tariff, ANEEL considers the results of the applicable transmission public auctions conducted by the government and the RAP to be paid to the transmission agents from the date of commencement of operation of their respective facilities.

Transmission concession contracts are generally entered into for thirty years.

- Guatemala:

The regulation includes two options for remuneration:

- It corresponds to a fee when the ministry bids a project. In the contract, prices are agreed as annual revenue. For large projects, remuneration is made in phases.
- The price for the use of transport networks (tolls) is free as long as it is agreed through contracts between the interested parties. For all transactions derived from the opportunity market, the toll for the use of transmission networks is regulated by the National Electric Energy Commission (CNEE).

8. How does the remuneration scheme in the electricity distribution and commercialization business in Colombia work?

- Distribution:

The CREG fixes for each OR (Network Operator) an income and a charge for the use of its distribution networks, which is expressed in \$/kWh. This charge is payable by users for each unit of energy consumed.

As defined in CREG Resolution 015/2018, the revenues of the Network Operator are determined through a Revenue Cap in which the investments are remunerated (including the profitability of the investment in the assets used and the recovery of the invested capital) and the expenses for the provision of the service, as well as incentives (positive or negative) associated with the quality of the service provided and the efficiency achieved by the OR in executing investments and AOM expenses.

The value of the investments is determined by THE CREG based on the depreciated replacement cost methodology, which considers the general age of the system's assets, reduction in their value due to their use, new investments made by the ORs, and assets that leave operation. With this new methodology, companies shall present to the Commission plans for investment in system expansion, asset replacement, improvement of service quality, incorporation of new technologies and reduction of losses, which are approved by the CREG based on efficiency criteria and are subject to permanent monitoring.

- Commercialization:

Retail marketing activity is remunerated through a commercialization charge that is applied to the end-user tariff. This charge remunerates the fixed costs of the activity such as meter reading, billing, distribution of invoices, customer service. The energy purchase management for end users is carried

out by the marketer and its cost is transferred to the user, after a comparison with the average market price called Mc.

9. How does the remuneration scheme in the natural gas transportation business in Colombia and Peru work?

- Colombia:

The current tariff methodology for the remuneration of natural gas transportation activity in Colombia has been in force since August 2010 and is contained in CREG Resolution 126/2010, issued by the Energy and Gas Regulation Commission (CREG). The tariffs currently charged by the transporters for the gas transport service are governed by this methodology.

For each transporter and for each section of gas pipeline, by means of a resolution, the CREG defines the regulated charges that remunerate the investment costs (pair of fixed and variable charges) and AOM expenses. These charges are updated annually by means of macroeconomic indexes.

A monthly bill is generated for users who have contracted the natural gas transportation service, the value of which depends on the contracted transportation capacity, natural gas transported in the period and sections of gas pipelines used.

A new remuneration methodology to replace that contained in CREG Resolution 126/2010 is currently under discussion. It is expected that this new methodology will come into effect before the end of 2020 and the process of applying for new regulated charges will begin.

- Perú

Transport Tariffs of Camisea's Main Network were set by means of Resolution No. 033-2014-OS/CD. These tariffs are applicable in the period from May 1, 2014 until the end of the Recovery Period, in accordance with the BOOT Contract for the Transport of Natural Gas through Pipeline from Camisea to City Gate.

The regulatory framework defines two types of regulated tariffs: one applicable to electricity generators, which is equivalent to the Base Tariff, and the other applicable to any other user of the gas pipeline. This last tariff considers as a demand the projection of natural gas transportation throughout the useful life of the gas pipeline and is updated at the discount rate established in the relevant regulations. To date, the Base Tariff is equal to the Regulated Tariff due to the fact that the guaranteed capacity has already been reached.

As of May 1, 2009, a usage factor of the transportation network (FU as per its acronym in Spanish) equal to 0.9 is applied; which generated that the transportation costs for firm and interruptible service are different from that date. For this reason, Resolution No. 100-2009-OS/CD specified that distribution concession holders shall transfer to their customers the average cost of transport (CMT as per its acronym in Spanish).

10. How does the remuneration scheme in the natural gas distribution business in Colombia and Peru work?

- Colombia:

The methodology of remuneration of the natural gas distribution activity was issued by means of CREG Resolution 202/2013, however, some parts of this resolution and the approved charges were abolished by means of CREG Resolution 093/2016. For two years, a discussion took place to define the abolished paragraphs of Resolution 202/2013, which were established by CREG Resolution 090/2018, 132/2018 and 011/2020.

On the most, the tariffs currently charged to users for gas distribution services are established under the methodology of CREG Resolution 011/2003.

For each distribution market, through resolution, the CREG defines the regulated charges that remunerate investment costs and AOM expenses (fixed and variable charges). These charges are updated monthly by means of a macroeconomic index.

A new process of approval of regulated charges is currently being initiated, based on CREG Resolutions 202/2013, 090/2018, 132/2018 and 011/2020 which are expected to be applied in 2021.

- Perú:

The regulation scheme for the distribution of NG through pipeline network attempts to adjust tariff revenues to the regulated costs of the concession holder company and thus seeks to ensure the economic-financial balance of the company.

The process of setting tariffs in NG distribution takes place every four years and consists of two stages: the first determines the level that guarantees the economic and financial balance of the regulated company, while the second assigns the level of tariffs to each of the tariff categories that have been defined.

The level of tariffs is determined through the establishment of an efficient model company or reference company, which allows NG distribution tariffs to remunerate the company's efficient costs.

The average cost of the distribution service is determined as the quotient of the sum of present values of the annuity of investment costs and operation and maintenance costs, as well as the present value of demand.

Once the average cost for the construction of a model company is obtained, the NG distribution tariffs, applicable to each type of consumer, are determined.

It is worth mentioning that in Clause 14 of the BOOT Contract for the Concession of the Natural Gas Distribution System through Pipeline Network in Region Ica, signed between Contugas (concession holder of natural gas distribution in Ica) and the State, the initial natural gas distribution tariffs, as well as charges for connection and right to connection applicable in the region for a period of 8 years, were established.

11. What is the current status of the tariff in Codensa?

With CREG Resolution 189/2019 and 122/2020, the necessary variables were approved to calculate the income and charges associated with the electrical energy distribution activity for the commercialization market served by Codensa, in accordance with the distribution remuneration methodology defined in CREG Resolution 015 of 2018, from July 2020.

According to CREG Resolution 015/2020, the rate of return used to remunerate distribution assets is 11.64% for 2020 and 11.5% as of 2021.

12. What is the current status of the tariff in TGI?

TGI currently applies the regulated charges approved under the methodology contained in CREG Resolution 126/2010, for each stretch of gas pipeline.

TGI's current regulated charges are contained in CREG Resolution 003/2018 and 106/2018.

Charges can be consulted in the following link:

<https://beo.tgi.com.co/Other/CargoServicios#gsc.tab=0>

A new remuneration methodology to replace that contained in CREG Resolution 126/2010 is currently under discussion. It is expected that this new methodology will come into effect before the end of 2020 and the process of applying for new regulated charges will begin.

13. Which is the current status of the tariff in Cálidda?

The new Single Distribution Rates (TUD as per its acronym in Spanish) have been established for 4 years and are valid from May 7, 2018 until May 6, 2022. TDUs were approved for nine tariff categories, depending on the consumption range or end user characteristics, in accordance with the provisions of Resolutions Osinergmin N ° 055-2018-OS/CD, N ° 098-2018-OS/CD and N ° 160-2019-OS/CD.

14. What is the difference between electricity transmission assets and that is linked to the regulatory risk?

The Mining and Energy Planning Unit (UPME) prepares the Generation-Transmission Reference Expansion Plan, adopted by the Ministry of Mines and Energy, which identifies the expansion works in the National Transmission System (STN) or Regional Transmission System (STR) required and which shall be executed through public calls.

In public calls, the works are awarded to the bidder with the minimum cost, and the expected income from the bid is guaranteed for a period of 25 years, from the date the project is put into operation.

All transmission assets that are not executed and operated as a result of a public call are remunerated according to the current methodology (CREG Resolution 011/2009), which is reviewed every five years, and the income received by the transporter may be modified.

15. Who is the regulator of electric energy and/or natural gas in Colombia, Peru, Brazil and Guatemala? What is the interference of the regulator in each case?

- Colombia: Energy and Gas Regulation Commission– CREG
- Peru: Supervising Organism for Energy and Mining Investment - Osinergmin
- Brazil: National Electric Energy Agency - ANEEL
- Guatemala: National Electric Energy Commission – CNEE and Directorate General of Hydrocarbons – DGH

16. What impacts will the OECD have on regulation in Colombia?

With OECD membership, Colombia takes the good practice of implementing the analysis of the impact of standards and resolutions both before the issuance where the participation of agents is incorporated, and for the evaluation of the standards time after their issuance. In addition, Colombia will incorporate into the regulations, public consultation processes for all new regulations that include the good practices of the OECD.

17. What is the methodology for calculating WACC and in which business segments is calculated?

The WACC is the weighted average cost of capital that, taking into account all the sources of resources of a company, whether own or others, calculates a percentage that allows bringing the present value of income and expected costs of an investment project to value it. This rate is used to remunerate the investment projects of regulated activities, namely: transmission/transport of gas and distribution of electric energy and gas.

18. Which are the regulatory risks in each of the segments mentioned and in each of the countries where we have a presence?

Country	Service	Activity	Risk
Colombia	Electric Energy	Generation	<ul style="list-style-type: none"> • Implementation of measures that generate regulatory instability or produce market skimming. • Intensification of downward behavior of short-term energy prices.
		Transmission	<ul style="list-style-type: none"> • For assets that are not within the remuneration period of public calls, modification of tariff methodology in such a way that it does not fully

			remunerate investment or AOM expenses.
		Distribution	<ul style="list-style-type: none"> Modification of tariff methodology in such a way that it does not fully remunerate investment or AOM expenses.
		Commercialization	<ul style="list-style-type: none"> Implementation of measures that reduce competition in the market.
	Natural Gas	Transportation	<ul style="list-style-type: none"> Modification of tariff methodology in such a way that it does not fully remunerate investment or AOM expenses. To allow other agents in the chain to execute transport infrastructure.
		Distribution	<ul style="list-style-type: none"> Modification of tariff methodology in such a way that it does not fully remunerate investment or AOM expenses.
Perú	Natural Gas	Distribution	<ul style="list-style-type: none"> Modification of tariff methodology in such a way that it does not fully remunerate investment or AOM expenses.
Guatemala	Electric Energy	Transmission	<ul style="list-style-type: none"> Modification of tariff methodology in such a way that it does not fully remunerate investment or AOM expenses.