REGULATORY FRAMEWORK ANALYSIS FOR THE INTEGRATED GAS AND POWER SYSTEM IN COLOMBIA

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Overview

Usually when speaking of sectors such as electricity and natural gas, they are generalized as infrastructure services due to the complexity and magnitude of their networks.

Until the beginning of the 1980s, the trend of economic thought in Latin America recommends the management of infrastructure services through vertically integrated public monopolies. Since the mid-1980s, a new consensus has emerged that questioned the increasing returns and economies of scale justifying the provision of infrastructure services through a public monopoly.

The new consensus argued that the market and competition should be present in all phases where possible, that the transaction costs related to the separation of activities that made up the provision of infrastructure services were small in comparison with traces of efficiency derived from the presence of an integrated monopoly.

Consistent with the new consensus, competition and private sector participation were the canons of infrastructure sector reforms in Latin America. Although these reforms are working with relative success in most countries, the degree of competition in the provision of these services is low.

Currently there is a crisis in the country caused by the catastrophe that occurred in Hidroituango, a series of events arising from erroneous technical decisions in the construction of the project are putting the project and the life of communities at risk. under this scenario, CREG has carried out a series of reforms in the current regulations on thermal power plants.

Methods

The analysis of the regulatory framework was made under a critical and structured analysis in which: I) The current structure of the electricity and gas sectors is described separately. In this stage, the organizational structure, the structure of the industry and the structure of the market are analyzed. II). The regulatory framework of the thermoelectric sector is described and analyzed, taking into account that gas thermal power plants are the common element of both systems. III) The current regulation applied to thermal plants is analyzed taking into account the current regulatory changes coming from the Non-entry of the Hidroituango energy and IV) A new general regulatory framework is proposed that can prepare regulatory entities for energy crises in the gas and electricity sectors.

Results

Regulatory changes in the load for reliability, specifically in the obligations of firm energy (amount of energy that a plant, with certainty, can deliver in conditions of very dry hydrology)

In the framework of the analyzes that were recently carried out, the proposals were published by the CREG for comments propose:

- Carrying out an auction for the expansion of the reliability charge for the 2022-2023 period, which seeks to define electricity generation projects with firm energy to cover the growth of demand in said period, in accordance with the 4-year planning period established in regulation. As an additional element, and in the face of possible scenarios of backlog of projects under construction that could exceed the planning period and carry out a firm energy deficit in the period from December 2021 to November 2022, an incentive is included for the projects that can enter into operation before that date, that is, in the year 2021 or earlier.
- Proposal for a managed assignment of the reliability charge for the existing generation plants, for the periods 2019-2020, 2020-2021 and 2021-2022, as part of the mechanisms available within the regulation of the reliability charge.
- Call for the realization of a reconfiguration auction for the sale of firm energy obligations (OEF) for the period 2018-2019. This is a mechanism considered within the load for reliability taking into account the balanced surplus balance of firm energy committed to the system account in the short term.
- Proposal of a new mechanism to promote the entry of electric power generation projects that provide firm energy to the system, but that does not participate in the expansion auction.

The analysis of these measures has shown that it is not sufficient or appropriate for the scenario in which the gas and electricity sectors are currently located. The non-entry of hydropower energy can not become the cause to carry out "life-saving" strategies for companies participating in the energy markets. On the other hand, the users do not have to pay for the errors of the large generating companies. But these regulatory measures end up favoring and rescuing the capital of the companies without an effective regulation towards the prices transferred to the final users.

Conclusions

We have seen how the electricity market in Colombia faces challenges from the demand side, where the poor performance of industrial demand for energy turns out to be a false balm for the country's energy sector, because what we want is diversification productive-exporting and that the energy sector can affirm, without hesitation, which is ready to face industrial growth of over 4% per year.

Likewise, on the supply side, major challenges prevail towards the medium term, such as: i) implementing the expansion approved for 2015-2029, including electricity interconnection in Latin America; ii) achieve a better hydrothermal balance to face new climatic phenomena; and iii) supervise and control the Charge for Reliability scheme.

In this last front of Cargo for Reliability, Anif had been mentioning how the regulatory framework managed by CREG has been relatively efficient to maintain long-term sustainability criteria, but it is undoubted that this scheme should still be refined. There it would be possible to evaluate the possibility that the thermal plants, after having received fixed revenues from the Reliability Charge and recover their initial investments, return to the government said infrastructure after a determined period. Here we would be replicating what happens in the telephony network sector, considering factors of technological obsolescence.

In any case, what should be avoided on this front of Reliability Charge is to act in the direction proposed in Bill 130 of 2018 (Senate). There it is proposed to allocate most of these resources to additional subsidies for low strata, investments in carbon reductions and projects that guarantee the reliability of the system. This last as an absurd alternative to overcome the Electricaribe crisis.

Finally, the energy market is in default of having a control and surveillance entity, with powers similar to those of the Superfinancial, which provides reliability to the structured financial instruments scheme. This would avoid replicating failures such as those of Enron in the United States in 2001.