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COMPETITION IN ENERGY MARKETS: NATIONAL LESSONS LEARNED DOCUMENT – THE PERUVIAN CASE

PROJECT : COMPETITION IN ENERGY MARKETS

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NATIONAL LESSONS LEARNED PAPER

1. INTRODUCTION

This “National Lessons Learned Document – The Peruvian Case” (NLLD), is based on the study “*Competition in Energy Markets – the Peruvian Case*” and the input of the participants in the National Workshop (NW) held for this purpose on March 21, 2006. The NLLD summarizes those topics as pertain to Peru, covering competition in energy markets issues, both where deemed to have had successful results and where difficulties were faced, in order to provide a complete picture.

This NLLD is linked to Phase II of the component named “Competition in Energy Markets in Latin America and the Caribbean,” which includes specific studies of a broader project in four selected countries: Brazil, Chile, Peru, and Trinidad & Tobago. This component is included because “*OLADE perceives a need to determine strategies to sustain competition, as this was the primary reason for restructuring the energy sector and thus providing policy guidelines aimed to regulate the private sector and ensure that it serves consumer interests.*”

The “Competition in Energy Markets” component is part of the larger “Sustainable Energy” project whose purpose is to enhance policymaking by OLADE’s member countries in the fields of rural energy, energy markets, gender issues, indigenous affairs, and climate change.

The overall project and its different components are covered jointly by the Latin American Energy Organization (OLADE) and the Governing Board of the University of Calgary, with financial support from the Canadian International Development Agency (CIDA).

The goals of the study “Competition in Energy Markets – The Peruvian Case,” found in a separate report, and the “National Lessons Learned Document – The Peruvian Case” herein is to provide an in-depth review and study of the national experience of operating Peruvian energy markets,¹ to assess efforts to rebuild monopolies and to obtain the lessons learned.

¹ Accordingly, any lessons learned in Peru that might be useful for other countries of Latin America and the Caribbean (LAC) should obviously be applied with all due care, taking into account differences of time and place, as well as the peculiarities of each nation.

2. GENERAL

Based on implementation of the first-generation energy sector reform, the following lessons learned are provided as an overall balance.

Lesson Learned No. 1: Results of the First-Generation Reform

Markets subject to supply and demand with open entry and competition, as well as markets subject to energy sector regulation and pricing, as implemented in the first-generation reform, have brought the country many more benefits than unsolved problems.

The operation of energy sector market segments, whether regulated or under a supply and demand regime, has accompanied and furthered the nation's development in terms of both goods production and enhancement of the people's quality of life.

Furthermore, operation of these markets has meant that the financial load placed on the national treasury by the energy sector prior to the reform has become a source of domestic generation of economic resources for the treasury (through tax payments) and for stockholders.

Likewise, market functioning has brought enhanced business efficiency, modern technology transfer to the country, and specialization and training for personnel of the sector and others requesting it.

Market operations have also enabled consumers to manage their demand based on energy price signals.

Additionally, it has brought about a complete change of attitude among representatives of both state-owned and private institutions, mostly in terms of customer service, transparency and efficiency. This new level of efficiency is seen in the substantial decrease in investment costs, appropriate management of variable costs, timely data availability, and a choice of suppliers and users on the market.

Market operations have made it possible to vary national energy matrix structures, resulting in expansion of the energy source portfolio, consumer migration towards using secondary energy products as opposed to traditional, very low-efficiency primary energy supplies, and substantial improvements in energy use efficiency as measured in terms of useful energy.

In addition, energy market segments generally give price signals for suppliers to choose where to intervene and for consumers to select their preferred products.

Relatively low levels of new capital for investment projects are also seen in certain energy market segments, due to various factors.

However, as with all reform processes, this one has not been trouble-free, since reality is always more complex than any extrapolations of theory and political will.

Lesson Learned No. 2: National Energy Policymaking and Planning

National energy policies, both at a State level and as a complement to the respective governments, should be explicit and supported by planning.

State-generated National Energy Policies (NEP), as well as complementary energy policies of the respective administrations in power, should be explicit, publicly available, and accompanied by their respective goals, objectives, plans, and programs. The latter are seen in plans that are mandatory for State institutions and should be entrusted to a specialized entity.

As an integral part of the National Energy Policy guidelines, target levels of competition should be explicitly stated for each energy market segment. This will result in the basic data required by both market agents seeking to join and State institutions overseeing the achievement of target levels of competition, as well as by users who hope to see beneficial results from such competition.

3. RULES AND REGULATIONS

The next lesson learned is in terms of the rules and regulations that are applicable to the energy sector.

Lesson Learned No. 3: Rules and Regulations

In order to encourage investments and competition in markets, a second-generation reform should be developed and implemented in the energy sector, so that the different market segments will send the right economic signals. These include among other, electric sub-sector issues, payment for capacity and transmission, greater contracting freedom and, consequentially, universal access to the short-term market and changes in system / market administrative entity management.
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Some energy market segments do not send the right signals to encourage agents to invest. This is why the relative development of some sub-sectors is lower than others. It is therefore necessary to level off as much as possible the size of economic signals sent by all market segments, in order to achieve some degree of equal development.

In order to establish rules and regulations that will promote investments and result in long-term market competition, it is necessary to arrive at a consensus among the country's different political forces, including the opinions of both market agents and consumers. This system should also be applied to all major changes in the regulatory framework. A consensus may be more easily reached by proposing that benefits deriving from established incentives be shared between the supply and demand sectors.

It also requires that all legal norms seeking to achieve goal levels relative to a given reality should allow an appropriate transition period, so that all agents, competitors, institutions, and users may adapt gradually. One decisive example of this is electric sub-sector quality standards, which despite all progress made require a complete overhaul.

Regulatory framework adjustments should be sought with regard to the major power sub-sector issues that require changes, i.e.,: (i) paying for capacity; (ii) paying transmission systems at stable prices; (iii) sufficient generation at competitive prices; (iv) universal access by market agents to the system and market under free competition; (v) greater freedom when contracting out requirements on behalf of intermediate and final consumers; and, (vi) management of the institutional framework that handles the system and market. The great majority of these are covered by the second-generation reform contained in the so-called "White Book."

The right time to approve these changes and implement them as integral second-generation reforms may be fast approaching, as a new term is beginning in the central government administration.

4. COMPETITION AMONG PRODUCTS

The next lesson learned has to do with competition among products in the energy sector.

Lesson Learned No. 4: Competition among Products – Taxes and Subsidies

<p>Presently, competition among energy products is still distorted by the tax structure applied to their consumption, the continuance of certain exemptions to the general tax regime, and the use of crossed subsidies that drive consumer use preferences.</p>

Competition among energy products is still distorted, as the State has established an inconsistent tax structure for their consumption. This means that consumers choose products to meet their energy needs based on prices having different tax types and rates. These include:

- The running tax ("*Impuesto al Rodaje*" – IRJ) that applies only to motor gasolines, covers one third of all fuels used in highway transportation. This exemption drives consumer preferences towards Diesel 2, which is exempt from this tax, in detriment of the government funds used to cover the needs contemplated by this tax.
- The selective consumption tax ("*Impuesto Selectivo al Consumo*" – ISC) applies solely to certain energy products and even then with highly differentiated rates. This measure also drives consumer preferences towards products that are exempt from this tax or that have lower tax rates.

To a lesser extent, although negligibly so, competition among energy products is also distorted by the continuance of ISC exemptions on fuels for consumption in jungle areas and the implementation of a crossed subsidy on power consumption (FOSE)² for demands below a certain threshold.

- The selective consumption tax exemption, in addition to the general sales tax (IGV) exemption, applied to energy products purchased in the country's jungle areas, also distorts consumption and promotes intra-national smuggling towards areas where this tax does apply.
- However, the so-called exemption to the selective consumption tax on petroleum-based liquid fuels for electric generation purposes, is not a true exemption because this fuel is an input that is transformed into another type of energy – electricity – and is therefore not for final consumption.
- The crossed subsidy for electricity consumption (FOSE) adds to the distortion of energy product competition, since consumption of other energy sources does not receive this benefit.

It is up to the State – which should rise above the lobbying of interest groups – to review all tax structures applied to energy products, in such wise that they do not drive consumer preferences, thus promoting competition among energy products.

Accordingly, the running tax (IRJ) should be universally applied to all products consumed for highway transportation. Likewise, the selective consumption tax (ISC) should be applied to the universe of energy products for final consumption. Calculation variables for determining ISC rates might include: (i) the intrinsic energy capacity of each product; and (ii) any negative environmental impacts that might condition its use. In the applicable rate, the latter would internalize environmental externalities for use of these products.

² This crossed subsidy is called the social power compensation fund ("*Fondo de Compensación Social Eléctrica*").

As part of its transparency policy, the State should also remove the selective consumption tax exemption and the general sales tax exemption for jungle areas. If deemed politically correct for the balanced, equitable development of the country's different regions, these taxes could be replaced with a direct subsidy to serve as a source of financing for investment projects in production infrastructure. The subsidy on electricity consumption (FOSE) could also become a direct subsidy included in State accounting, even though its original source is actually the present consumers.

5. COMPETITION AMONG AGENTS

The next lessons learned have to do with competition among agents in the energy sector.

Lesson Learned No. 5: Free Competition Norms

The general competition norm, which also applies to the energy sector, lacks a quantitative means to measure competition, and this allows market concentration without much oversight.

Although since before the first-generation energy sector reform there has been a general competition norm that applies to all economic sectors, it offers no quantitative means to measure competition. There is not even a simple system for measuring ownership concentration, much less sophisticated systems for obtaining more representative results in complex cases. This is because enforcement of this norm is entirely subject to the discretion of authorities, making it erratic.

Furthermore, although there is a specific norm for electric sub-sector competition that has been quantified somewhat, it has the following features:

- Market concentration involving the entry of foreign agents into the electric sub-sector lies outside the scope of this norm. Thus, entry in the energy sector is not treated on the basis of this specific legal provision.
- It was subsequently passed on to most of the privatization process. This failure also shows that privatization procedures were followed without taking into account the expected energy market competition variable. It further illustrates a lack of true determination of expected competition levels in supply and demand markets with free entry and competition where implemented.

Likewise, market entry barriers that are implicitly established by the norms of some sectors constitute an obstacle to the promotion and strengthening of competition.

For this measure, the State should modify the general laws applying to free competition, including quantifications to identify and limit concentration, dominant

position and abuse of dominant position through buyouts and mergers. Likewise, all implicit conditions in the laws of each sub-sector that constitute barriers to market entry should be changed. This is the only way to ensure that supply and demand markets continue as such and do not migrate –while maintaining the name– to another status: abuse of dominant position. Action on this is decisive and imperative.

Lesson Learned No. 6: Current Competition and Market Concentration

Currently, concentration of ownership is most energy market segments, including those belonging to the State, show levels comparable to dominant position situations and/or duopolies, and are following an upward trend.

Given its market size, economies of scale, technology, and other factors, it is difficult to raise competition in energy markets such as Peru's. However, this initiative should press forward at all times, proactively and ingeniously establishing mechanisms to foster such competition. These devices include prioritizing incentives over penalties.

This review of competition in Peru's energy market segments, measured in terms of ownership concentration by economic groups, shows that most have high or very high concentration rates that are similar to decisive ownership position situations and duopolies. This is a clear sign of low or very low levels of competition. Obviously, there will always be segments that appear to be exceptions to this rule.

This review also leads to the following conclusions:

- The State still holds large shares in several market segments, causing an increase in concentration indices.
- Private agents, making use of legal loopholes and based on economic market signals, tend to concentrate horizontally and vertically in order to generate synergies that offer them relative advantages in relation to their competitors.

One should not set aside the fact that one mechanism for promoting competition in electric sub-sector markets is the transmission system topology, and that consumers receive economic signals from the opportunity market.

The process of privatizing³ existing State-owned companies and assets was truncated toward the middle of the second decade of the first-generation reform.

³ The term privatization signals the entry of domestic or foreign private investors in energy markets by any means of transferring the control of assets and/or companies formerly belonging to the State. See also sale of shares, limited-term exploitation licenses, management services, joint ventures, equity capitalization, etc.

The window of opportunity is no longer the same, in terms of both the domestic and international environment.

In order to continue and conclude the privatization process and promote more new investments in energy infrastructure, so as to inject greater competition levels "in" and "for" the market taking into account the present juncture in the domestic environment, this measure requires launching a public information campaign to revert conditions that are perceived as politically incorrect. Continuation of the privatization process should also include the competition forecast variable sought as a determining factor when evaluating its results.

6. INSTITUTIONAL FRAMEWORK

The next lessons learned have to do with the institutional framework for the energy sector.

Lesson Learned No. 7: State Institutions and Autonomous Agencies

Sustainability over time and market competition should go hand-in-hand with State institutions and autonomous agencies that are strong, expert, close to the user, expedite, cost-effective, and proactive.

Sustaining supply and demand markets over time and injecting the highest level possible of competition into energy markets require, among other things, that the institutional framework overseeing, monitoring and managing them be as strong and robust as the largest agents on the market. In this way, its provisions will be perceived and accepted as serious, transparent and adequately backed, and their representatives will be perceived and accepted as having integrity, expertise, experience, and a reputation for knowing the market. This measure requires that institutions have suitable professionals, so that that this perception and acceptance will be grounded on day-to-day actions.

Likewise, in the search for efficiency, these institutions should approach the users of their services in the most expedite, cost-effective way possible, with their powers and duties clearly delimited. It is essential that their actions be proactive and get ahead of events, thus avoiding a posture of reacting after the fact. These measures are required in both the State institutions and autonomous agencies involved in energy markets, in order to promote private investment in the sector, and to foster and oversee competition among agents "in" and "for" the market, as well as among energy products.

Under this measure, the institutional framework of the State and the autonomous agencies should be strengthened to promote investment and competition in the energy sector, updated in terms of formalizing and computerizing their procedures, and decentralized in order to come closer to the users of their services.

They should be continually vigilant to avoid the temptation of many representatives of society, political parties, suppliers' and consumers' unions, and the State itself, which under diverse pretexts have attempted to take control of sectoral agencies. Only then will they avoid losing their character as truly autonomous agencies.

Lesson Learned No. 8: COES and the Electricity Market

COES should be adapted and renovated in order to play its role as an independent technical institution that manages the electricity sub-sector system and spot market.

The system's economic operating committee (*Comité de Operación Económica del Sistema* – COES) is the institution in charge of electric system dispatches and basically managing the system and the spot or short-term market. As new duties are assigned to it and new types of agents enter the market, its management will need to be adjusted and renovated in order to send signals of independence, transparency and fairness, so that society will accept its decisions.

Bringing together the duties of system administration and spot or short-term market management without an institution that is independent from all group pressures, including those of the State, will never ensure free access to system infrastructures and to the market under equal conditions. The condition of free access to the system and the market is essential to achieve greater market depth and liquidity and thus increase market competition in the electricity sub-sector.

Under this measure, the structure and designation of COES management should be entirely renewed regarding the independence of its members from all pressure groups, including the Government itself.