ESSENTIALITIES OF ENERGY POLICY IN ROMANIA

CRISTINA BÂLDAN, EMILIA UNGUREANU *

ABSTRACT: *The paper „Essentialities of Energy Policy in Romania" presents the fundamental objectives of European Union policies in the energy domain, the energy sector coverage and energy market liberalization. Market liberalization became mandatory in Romania, with the adhesion to European Union. Energy price liberalization in our country was a difficult process. Leaders of EU imposed on Government a pricing liberalization calendar with the mention that in case of not respecting it, the country would have been obliged to pay substantial penalties. Until the end of 2017, the transition to a 100% competitional market wil continue. The tarrifs for final clients will increase, and the political pressure for maintaining lower tarrifs for electrical energy may become significant. The current experience is showing that numerous clients will slowly adapt to the changing environment.*

KEY WORDS: *energy sector, electrical energy, market liberalization, regulated segment, electricity sector.*

JEL CLASSIFICATION: *D40, D49, L80.*

1. INTRODUCTION

The liberalization of the electricity markets, unlike the other sectors, such as telecommunications, was a chapter much more complicated and politically sensitive, for Romania. Romania does not depend so much on electricity imports, like other countries in Europe, the entire demand of electricity and a significant art of the natural gas demand can be covered by the internal production. This enabled previous governments to maintain low electricity tariffs, leading to a lack of political will to shift to a completely liberalized, competitive market.

Negative effects of regulating energy prices remain a major concern. They lead to distortions of competition and reduce liquidity on the wholesale markets. In the long run, regulated prices provides misleading signals regarding prices for investors and

* *Assoc. Prof., Ph.D., University of Piteşti, Romania, baldan.cristina@gmail.com*
Prof. PhD., University of Piteşti, Romania, emiliaungureanu@yahoo.com

thus have a negative impact on the development of new infrastructure. By setting a price level that does not allow new operators enter the market supply of energy at affordable prices to cover the cost, price regulation creates an obstacle to enter on the market for alternative suppliers, in this way threatening security of supply directly. For the French market, for example, electricity stock exchange proved unable to fix a benchmark price for the market considering the regulation of energy prices. (Dumitrescu, 2010).

The three fundamental objectives of European Union policy in the field of energy are: ***sustainability***-refers to the limitation of the effect of global warming by reducing emissions of greenhouse gases; ***competitiveness***-refers to the effective implementation of the internal energy market; ***safety power supply***- refers esspacially to reducing vulnerability with respect to energy imports, disruptions in supply, possible energy crises and the insecurity concerning energy supply in the future.

At the EU level, the priority measures have been drawn up to achieve those objectives, fundamental measures to be brought to fruition by the European Commission and the Member States in a coordinated manner. Thus, from an internal market view point, the European Union's energy policy aims at: ensuring the function of energy market in competition conditions; promoting the interconnection of energy networks; reducing emissions of greenhouse gases; the development of renewable sources of energy; promoting the efficiency of the energy economy.

First, the policy was aimed at using the market mechanisms to create a competitive market that would be more effective and would result in an interconnected market due to trans-European energy networks. Despite the small steps taken over a quite long period, today's progress in creating an efficient and competitive common European energy market is significant even if the process is estimated to be far from finality. Energy and gas market liberalization is an example of the EU's efforts towards promoting the interests and welfare of citizens within this area. Ensuring lower and more transparent energy prices, more rights for consumers, protection against the precariousness of energy supply is precarious arguments redoubtable in dedicated approach liberalization of energy markets in all EU countries. (Niţă & Drigă, 2009)

For the development strategy of the Romanian energy sector, the "Project of energy strategy in Romania for the period 2012-2035", correlated with EU policies in the field of electricity, sets out the following priority objectives: Satisfying the energy requirement on short term, medium term and long-term, affordable, appropriate to market economy; security of supply and economic stability under conditions of continuous increase in energy demand; the development of new technologies relating to the production of electricity, electricity consumption and environmental protection; a proper functioning of the internal electricity market, non-discriminatory, to guarantee transparent competition and integration in the regional and European market; in order to improve efficiency throughout the production chain-transport-energy consumption introduction of information technologies and communication (http://www.minind.ro/dezbateri_publice/2011/strategia_energetica_20112035_20042011.pdf.)

2. ENERGY SECTOR COVERAGE

The law establishes the regulatory framework for the activities in the field of electrical energy is that which defines the coverage of the electricity sector. Electricity sector shall comprise all of the generation of electricity and heat in cogeneration, system services, distribution, transport and electricity supply, import and export of electricity. In addition to these activities, the energy sector comprises a number of auxiliary activities (for example: the design and execution of infrastructure). Energy sector is formed out of the following type of activities: Production of electricity in power plants, including cogeneration power plants-production; Transport electricity via high voltage lines from energy production capacities up to distribution facilities or consumers directly connected to the electrical networks of transport-transport; The transport of electricity through voltage lines (each having a nominal voltage of up to 110 kV inclusive) up to the end consumers-distribution; The sale and purchase of electricity on wholesale markets (trading) and sale of electricity to the end-consumers.

Within the energy sector, in addition to the main activities, are being carried out on a number of other secondary activities, such as selling of green certificates system services, the trade in emissions of greenhouse gases, maintenance services.

The consequence of the fact that the electricity sector has a number of peculiarities is functioning on the basis of a license issued by the regulatory authority. Thus, the need of production at the same time, changes in consumption continues to level the demand for electricity, and the need to ensure a high degree of coordination of the activities of production, transmission, distribution throughout the country are just a few of the items that customizes the power sector operation.

The activities of production and the sale of electric power are deployed in a competitive regime, while the activities of transport of electricity through electrical networks of high, medium and low voltage constitute natural monopolies, which are carried out under a regulated regime.

In our country, the electricity sales transactions are either wholesale or retail. Thus, we can identify two main market components:

- Wholesale Electricity Market is the market in which electricity is purchased for resale, and the transactions are carried out mainly between the manufacturer and licensed suppliers/shippers, shippers or between different licensees, under certain circumstances, between producers/suppliers and great industrial consumer. In accordance with the provisions of the commercial code of the Wholesale Electricity Market, transactions conducted on the market for wholesale electricity for the sale purchase: transport services, technological services, electric power system, system services, distribution services.
- Retail electricity market is the one in which electricity is purchased for the purpose of consumption, and the transactions are carried out between suppliers and consumers of electricity.

In accordance with the legal provisions in force, the electricity market in our country is composed of:

- Regulated Segment- regulated market operates on the basis of commercial agreements with regulated prices/tariffs. This segment comprises mainly the

activities of natural monopoly (i.e. the activities of transmission and distribution of electricity), but it embodies and trading system for electricity (under this mechanism the regulatory authority in the field of electrical energy is that which lays down both prices and quantities contracted, incurred in transactions between manufacturers and suppliers, as well as captive prices/rates to captive consumers) adopted temporarily, up to the actual opening of the electricity market, in order to ensure the prices regulated tariffs/captive.

- Competitive market- competitive segment - working on the basis of commercial agreements, but with negotiated prices and quantities, concluded between producers, suppliers and/or clients. In this market segment, the prices are formed freely on the basis of demand and supply, the role of the regulatory authority in the field of electricity within its territory is to elaborate general rules of operation of the market.

3. THE ELECTRICITY SECTOR

Once the company that used to have monopoly, namely RENEL, was restructured by vertical and horizontal separation, the structure of the electricity market was developed. The market was divided in activities of production, transmission, distribution, and supply, with different players at each level.

Depending on the source of energy, separate electricity generation companies were established at general level, and large state-owned production companies were created, focused on hydroelectric energy, nuclear energy and coal power plants. The group of state-owned companies account for 80% to 90% of the total production, dominating the production, the hydropower is 30%, the nuclear power almost 7%, the coal approximately 32%, and hydrocarbons 18%. Approximately 13% of the total power produced represents private companies, which generate energy from gas power plants and renewable resources. Due to the low electricity tariffs in Romania, imports do not have a significant role.

The Competition Council believes that production companies are managed separately and compete with each other, although most of the production capacity is owned by the state. In order to describe the relationship with the state-owned producers, other sources used the term "cartel soft", highlighting the fear that the market is not 100% competitive, because each energy producing company is organized separately as a legal entity, all being controlled by the same ministry and pursuing strategies they would not pursue as privatized players with independent shareholders. Despite the fact that the energy mix in the market is balanced, each producer bases itself on a single source of energy, which is why the optimal operation of the power plants is difficult. Suppliers with high prices especially are in a risky position, because the market structure and the share of renewable sources are increasing.

Eight distribution companies that have local monopoly based on concession own the distribution grid. Most distribution companies were privatized and are auxiliaries of European electricity conglomerates, being viewed as "last-resort" suppliers for retail customers who continue to receive electricity under regulated conditions instead of a free market.

Both at wholesale as well as at retail level, the electricity supply was opened to competition. Market competition, at retail and wholesale levels, is very low, the share of the biggest supplier in the retail market exceeding 20%, while the combined market share of the 10 biggest suppliers is 75%. The Romanian electricity market is supposedly becoming increasingly integrated with the neighbouring CEEC markets, because, together with Poland, it is expected to join a current market integration project started by the Czech Republic, Hungary and Slovakia, but there are concerns that the transmission current tariffs will affect the trade with other member countries.

Nevertheless, supply contracts cam be concluded on the market organized by OPCOM (the gas and electricity market operator); in the past, the parties concluded bilateral long-term supply agreements, outside the market. At least one third of the total production has been governed until recently by such agreements, although the recent insolvency of the company Hidroelectrica led to the termination of such bilateral agreements. Many long-term supply agreements concluded by Hidroelectrica are being analysed by the European Commission, because the low electricity tariffs for the main industrial customers create problems in terms of state aid. At the same time, the Romanian Competition Council analyses a few contracts with potential anticompetitive effect that might close access in the markets and might remove liquidities from the spot market.

Long-term contracts also provide significant advantages, because they provide the funding required for producers' investments and reduce tariff volatility, especially for users. Certainty is present in the market for the new 2012 Energy Law, which provides for a transparency requirement for all bilateral electricity supply agreements and for the market usage for all supply agreements.

The main source of distortion of effective competition in the electricity markets is the big regulated retail market, which has consequences on other market levels as well. Although, for several years, large industrial users were supplied with electricity under competitive conditions, which led to encouraging the creation of a competitive supply market, private customers and small-size companies continued to benefit from tariff regulation, which maintains tariffs artificially, at low levels. Currently, private customers and small companies have the option to shift to competitive suppliers, but very few chose to do this. Once they shift to the competitive segment of the market, consumers may no longer return to the regulated one, which leads to an additional factor of losing the transfer supplement.

Due to the fact that suppliers in the regulated segment of the retail market purchase significant quantities of electricity through contracts regulated with a maximum price limit, the regulation of tariffs has effects that exceed retail markets. Although ANRE has limited the use of regulated wholesale contracts, such contracts continue to cover almost 25% of the total electrical power produced. Moreover, due to the fact that ANRE regulates distribution companies, it can prevent them from undergoing cost increases, in order to favour prices for end consumers, which undermines, in its turn, the incentive to invest in leaving the grid.

Until the end of 2017, the transition to a market 100% competitive will continue. Tariffs for end customers will grow, and political pressures to keep lower tariffs at electricity can be significant. The current experience shows that many

customers will adjust slowly to a changing environment. The number of complaints filed with the consumer protection authority is high, but it largely concerns the lack of transparency in electricity bills. Nevertheless, there is a risk that, if the transition is not adequately managed, the number of complaints will grow suddenly, and trust in the competitive market will be undermined. This would increase, in its turn, political pressures to maintain tariff regulations (http://www.consiliulconcurentei.ro/ uploads/ docs/items/id9159/romanian_peer_review_2014_16x23final_ro.pdf)

Table 1. Evolution of current production capacities in Romania, in the 2008-2013 period and forecasts for the 2014-2020 period

Available net power	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Achievements					Reference scenario				
Thermo-electric power plant	8807	8875	9271	9271	8828	8415	8378	9614	9579	9489
Nuclear power plants	1300	1300	1300	1300	1300	1300	1300	1300	1965	2630
Hydroelectric power plant	6145	6196	6227	6322	6356	6392	6392	6446	6500	6332
Wind power plant	1006	1753	2451	3000	3200	3300	3500	3800	3900	4200
Biomass energy plant	24	27	49	100	125	150	176	200	200	300
Photovoltaic power station	0	21	565	1200	2000	2000	2000	2000	2000	2000
TOTAL	17282	18172	19863	21193	21810	21557	21747	23361	24144	25251

Source: Report on the preliminary results of the sectoral enquiry on the Romanian electricity market, p.42, available at: http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport_investigatie_utila_ energie_electrica_07012014-forma_neconfidentiala-pub.pdf

From the data presented in Table 1, we can see that the power available in Romania was on an uptrend from 2008 until 2013, and it will reach, in 2020, up to 25251 MW, which is the equivalent of the installed capacity at national level, with an increase by approximately 50%. We can also notice that the share of electric power from renewable sources, especially wind power, recorded significant increases in the analysed period.

National electricity consumption. For the analysis of the electricity production and sale market, the electricity consumption is very important, because it shows the balance between demand and supply for the whole electricity system. It also reflects the electricity demand recorded at national level.

The electricity consumption is subject to fluctuations, depending on the moment of the day and the season. Thus, in the daytime, the electricity demand tends to be higher, in working days and on Saturday, whilst in the nigh time it is lower, as well as on Sundays and statutory holidays, and it also has a seasonal variation. In order to ensure the stability of the grid, a forecast of the electricity demand must be made.

Such forecast implies, in its turn, a forecast of the characteristics of the respective demand: size, evolution over time, models of demand.

Table 2 presents the electricity consumption in the 2011-2013 period and the forecast for 2014-2020.

Table 2. Scenarios of the evolution of the domestic electricity consumption in Romania

	U.M	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		Achievements			Forecast						
REFERENCE SCENARIO											
Domestic net electricity consumption	Twh	54.9	54.4	52.3	51.8	51.8	52.1	52.6	53.2	54.0	54.9
Annual growth rate	%	2.9	-0.9	-3.9	-1.0	0.1	0.5	1.0	1.1	1.5	17
UNFAVOURABLE SCENARIO											
Domestic net electricity consumption	Twh	54.9	54.4	52.3	51.0	50.2	49.7	49.5	49.5	49.7	50.1
Annual growth rate	%	2.9	-0.9	-3.9	-2.5	-1.5	-1.0	-0.5	0.0	0.5	0.8
FAVOURABLE SCENARIO											
Domestic net electricity consumption	Twh	54.9	54.4	53.3	52.4	52.9	53.6	54.4	55.5	56.9	58.4
Annual growth rate	%	2.9	-0.9	-3.9	0.1	1.1	1.3	1.5	2.0	2.5	2.6

Source: Report on the preliminary results of the sectoral enquiry on the Romanian electricity market, p.45, available at: http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport_investigatie_ utila_energie_electrica_07012014-forma_neconfidentiala-pub.pdf

Table 2 presents two scenarios of the evolution of the consumption by 2020. From the previously presented data, it results that in the period between 2011 and 2014, at national level, the electricity consumption recorded a continuous downtrend, and for the next period it is forecast that this downtrend will be stabilized, on the contrary, it will continue to decrease.

Taking into account the above-mentioned data, it is deemed that by 2020, the electricity consumption at national level will not grow significantly.

4. ENERGY MARKET LIBERALIZATION

Market liberalization became mandatory in Romania, with the adhesion to European Union. Energy price liberalization in our country was a difficult process. Leaders of EU imposed on Government a pricing liberalization calendar with the mention that if it was not complied, the country would have been under the obligation to pay substantial penalties. At the European level, liberalization of energy was set up in July 2009, through the adoption of the third legislative package concerning the internal electricity and natural gas markets, which had to be completed in 2011.

Romania was not compliant with European deadlines, new energy law being adopted with delay by the Chamber Parliament's decision-making and promulgated by the President of Romania in the first half of July 2012. Liberalization of energy in Romania and its operation in the competitive regime based on a few principles which transpose European market consolidation of electricity, such as: implementing the principle „activities dissociation"; regulated tariffs elimination; final consumer's protection; competition environment development through measures that will ensure a secured resource access; sustainability and competitiveness of the energy.

Out of the three European models for implementing the principle of "decoupling", Romania opted for the alternative of an independent system operator, governing the separation of generation, supply, transmission and distribution of electricity. Price liberalization schedule was approved at the end of June 2012 through a Government memorandum, which provides removing regulated tariffs for industrial consumers starting in September 2013, when 15% of the amount of energy aimed at such consumers was acquired by them from the competitive market, the next course of action being the full liberalization which is expected to occur in 5 successive quarterly stages.

In terms of tariffs covered for residential consumers, starting with July 2013 it has been regulated the acquisition from the competitive market of a share of 10% of the required amount of energy consumption, thus the 50% threshold is expected to be attained in July 2015 and the percentage of 100% by the end of 2017. Considering the step by step increases on the competitive energy market share, the regulation authority in energy will be able to intervene and suspend its operations, only in exceptional cases, in crisis situations or in the case in which the safety of persons/installations or system integrity is under threat.

Final consumer's protection was consolidated through regulating supplemental rights that are ensuring the quality, safety and correct price for the offered services. The new energy law states the consumers right to buy energy from a supplier, to change the supplier after max. 3 weeks from the procedure initiation, the right to close contracts with more suppliers in the same time (right stated for large industrial clients) etc. In addition, the disputes arising from contract execution will be settled by the competent authority, consumers having also the right to benefit from arbitrage for settling out-of-court settlements that may arise during the contractual period.

Concerning the European concept „energy poverty", under the new law, vulnerable consumers, defined as "those household customers who, for reasons of age, health or low-income is in risk of social exclusion", enjoy access to facilities to ensure "universal service" in respect of the supply of electricity and the guarantee of their disconnection from ban network, including in crisis situations. Energy law includes a number of provisions which are to be filled on the basis of secondary legislation. The most important of these are: ensuring access to the networks of transport and distribution of electrical energy in a non-discriminatory and transparent manner, refusal should be highly argued; possibility of producers and suppliers of electricity to power their own places of consumption or eligible customers through "direct line" in the absence of appropriate access to the electrical network in the public interest; tougher sanctioning the offences that are violating the loyal competition principles on

the energy market (the highest level of fees being 1.000.000 lei, or 10% of the turnover of the offender).

Energy law has been challenged by experts in the field of energy from non-governmental sector who say that the continuation of settlement prices does not benefit consumers, but to preferred firms and large producers. Unlike the Bill which stated that the supply of energy in regulated conditions will be realized for industrial clients until 31 of December 2013, and for the household one's, until 31 of December 2015, the liberalization calendar maintains the regulated prices for households at least until 31 of December 2017, which means 2 more years than the initial agreement. With accepted or contested aspects, the market liberalization became a reality in Romania. The market became volatile and the prices are following better the equilibrium between demand and offer.

Today's life is hard to imagine without electricity or gas. Energy price, the source of energy situation, and in general, the state of energy market (producers and distributors) are concerning us directly and are themes on the governor's tables. Two subjects are central in Romania right now: the energy market liberalization (electricity and gas) and energy source diversity. The conflicts between parties are mostly related to the calendar ant the implementation methods, and not to different strategy options/positions. The performance of all governments, according to experts, is weak, and in the case of energy market, the European Commission launched against Romania more infringement procedures (2 procedures have been started for not liberalizing the markets of gas and electricity and 2 for obstacles raised against energy commerce abroad, based on the directives from the Second Package of Liberalization from 2003). (http://media.hotnews.ro)

Liberalization of energy market in Romania is mandatory and once we adhered to EU, the prices should be aligned to the European levels. The liberalization calendar can't be changed, and, in the case of overlaping, the govermnent should pay penalties. (http://eurlex.europa.eu)

European directives are considering social protection of vulnerable households, but this category should be clearly defined and established by the national legislation of each Member State and should not be done by regulating prices for an extended period. In this respect, Romania claimed impossibility to households withstanding price increase and obtained during the Tăriceanu Government (2007) a 2-year derogation from the European Commission, but until 1 January 2009 obligations have not been met. Boc's Government continued delaying the issue, by putting forward the reason of insuring social protection.

In April 2011, the European Commission has officially asked to certain Member States, including Romania, to align their national laws relating to regulated prices for final consumers. On 29 September 2011, the European Commission initiated a new infringement procedure (the first on this subject being in 2009) for not adopting the European directives in the national legislation and not respecting the directives content (http://economie.hotnews.ro).

Even so, the Romanian authorities have managed to delay the imposition of a liberalization graph and transpose of juridical obligations until the activation of the final stages of the first infringement process.

5. CONCLUSION

- The liberalization and the integration of European retail markets is far of being completed;
- There cannot be a retail integrated market if we don't have a wholesale integrated market.
- Lack of framework harmonization on the retail market represents a major constraint in the European market's integration.
- Even if the offer is vast and differentiated, consumers don't benefit of better prices.
- There is a need to eliminate distortions introduced by regulations;
- Wholesale prices of electrical energy that are artificially maintained at low levels are producing dividends in external transactions, by penalizing the Romanian consumer.

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