Essentialities of Energy Market Liberalisation in Romania

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Abstract

The paper "Essentialities of Energy Market Liberalization in Romania" presents the main aspects concerning the energy market liberalization and the electricity consumption recorded at national level. The electricity consumption has a great importance in analyzing the production and retail energy market, as this is showing the demand-offer equilibrium for the entire electro-energy system.

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 not respecting it, the country is obliged to pay substantial penalties.

Key words: energy sector, electrical energy, market liberalization, regulated segment **J.E.L. classification:** D40, D49, L80

1. Introduction

This paper presents the main aspects of the liberalisation of the energy market from Romania and electricity consumption recorded nationally. Electricity consumption has a particular importance for the analysis of market production and marketing of electricity because it shows balance request-offer for all power system. It also reflects the demand for electricity registered nationwide.

The specifics of electricity supply services is derived from the very characteristics that can be summarized by: complexity, diversity, movement. Cognitive approach difficulties are caused by a number of causes: intangibility product electricity cannot be divided into components, with consequences for the process of determining the functions; the complexity of the organizational and institutional structure, of the underlying infrastructure for generating electricity; the complexity of the costs allocation method between different components of the power system; the complexity of the "package" that is included in the product; permanent changes taking place in the creation process of the service; multiple interrelations between energy supply service and the national economy sectors; the lack of transparency in the setting of electricity tariffs; diversified impacts on the environment. (Bădileanu, 2001, p. 75)

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 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, p.128)

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.

2. 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 not respecting it, the country is obliged to pay substantial penalties. At 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, full liberalization occurs in 5 successive quarterly stages.

In terms of tariffs covered for residential consumers, starting with July 2013 has been regulated the acquisition from the competitive market 10% of the required amount of energy consumption, thus the 50% threshold to be attained in July 2015 and 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/media_server1/document-2011-09-7-10059377-0-analiza-efor.pdf)

Liberalization of energy market in Romania is mandatory and once we adhered to EU, the prices should align to the European one's. The liberalization calendar can't be changed, and not respecting it will drive to penalties that should be paid by the government. (http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0094:0136:RO:PDF)

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 no later than 1 January 2009 obligations have not been met. Boc's Government continued delaying the issue citing the reason why social protection.

In April 2011, the European Commission has officially asked by certain Member States, including Romania, to align its national law 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/stiri-energie-8375032-otilia-nutu-expert-sar-discuta-online-joi-ora-15-00-despre-reforma-energie-ceruta-impactul-asupra romaniei.htm)

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.

3. Electrical energy consumption at national level

The electricity consumption has a great importance in analyzing the production and retail energy market, as this is showing the demand-offer equilibrium for the entire electro-energy system. It also reflects the demand for electricity registered nationwide.

Energy consumption is subject to fluctuations depending on the time of day and season. Thus, during the day, the demand for electricity has tended to be higher on weekdays and Saturdays, and during the night, on Sundays and other public holidays, registering also a seasonal variation. To ensure the stability of the network, we need an accurate estimation for electricity demand. This implies in turn, another estimation for it's demand characteristics: size, evolution over time, the models of requests.

In table 1 are presented the energy consumption in the period 2011-2013 and the forecast for the period 2014-2020.

Table 1. Evolution scenarios for the net internal electrical energy consumption in Romania

Table 1. Evoluti	M.U.	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	MI.U.	2011		1	2014	2013				2019	2020
		Actuals			Forecast						1
Refference											
Scenario											
Net internal	Twh	54,9	54,4	52,3	51,8	51,8	52,1	52,6	53,2	54,0	54,9
consumption of											
electrical energy											
Yearly growth	%	2,9	-0,9	-3,9	-1,0	0,1	0,5	1,0	1,1	1,5	17
pace											
Un-favorable											
Scenario											
Net internal	Twh	54,9	54,4	52,3	51,0	50,2	49,7	49,5	49,5	49,7	50,1
consumption of											
electrical energy											
Yearly growth	%	2,9	-0,9	-3,9	-2,5	-1,5	-1,0	-0,5	0,0	0,5	0,8
pace											
Favorable											
Scenario											
Net internal	Twh	54,9	54,4	53,3	52,4	52,9	53,6	54,4	55,5	56,9	58,4
consumption of											
electrical energy											
Yearly growth	%	2,9	-0,9	-3,9	0,1	1,1	1,3	1,5	2,0	2,5	2,6
pace											

Source: Report concerning preliminary results on sectrial investigation on the Electrical Energy market in Romania, p. 45, available at:

http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport investigatie utila energie electrica 07012014-forma neconfidentiala-pub.pdf

Looking at table 1, we can see 3 forecast scenarios until 2020. From the data presented before, it is clear that in the period 2011-2014, at national level, the electrical energy consumption is dropping continuously, and for the next period is considered that the downtrend will stabilize, or, contrary, will deepenConsidering the above data, it's appreciated that until 2020, the electrical energy consumption at national level will not register a significant increase.

Table 2. Electrical energy volume tranzactioned on the retail market, the total production and retail market size of electrical energy in Romania, including the import and export from 2009-2013

Indicator	2009		2010		2011		2012		2013	
	Gwh	%	Gwh	%	Gwh	%	Gwh	%	Gwh	%
Production	56693	100,0	59139	100,0	60385	100,0	56714	100,0	55777	100,0
Import	676	1,9	943	1,59	1036	1,72	1402	2,47	450	0,81
Export	3154	5,56	3854	6,52	2942	4,87	1149	2,03	2466	4,42
Internal Consumption	41583	73,35	43440	73,45	45814	75,87	45884	80,90	43771	78,47
Electrical energy volume on the retail market	80803	142,35	95212	161,0	105910,5	175,4	100248	176,76	76914	137,90

Source: Report concerning preliminary results on sectrial investigation on the Electrical Energy market in Romania, p. 48, available at:

<u>http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport_investigatie_utila_energie_electrica_07012014-forma_neconfidentiala-pub.pdf</u>

Looking at the data from table 2, it's clear that the electrical energy volume transactioned annually on the retail market is higher by approx. 140-175% compared to the production. Also, in the period 2009-2013, the quantity of imported electrical energy registered a lowe value compared with the quantity of exported energy.

Table 3. Evolution of consummers number supplied in competitional regimme and regulated regimme in the period 2009-2013

Supplied consummers	2009	2010	2011	2012	2013
Regulated regimme	8833375	8914618	8944092	8991838	8991881
Non-household	583432	591756	563030	554734	501190
Household	8249943	8322862	8381062	8437104	8490691
Competitional regime	4887	8323	12675	13467	19214
%competitional non- household	0,83	1,39	2,20	2,37	3,69

Source: Report concerning preliminary results on sectrial investigation on the Electrical Energy market in Romania, p. 62, available at:

<u>http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport_investigatie_utila_energie_electri</u>ca_07012014-forma_neconfidentiala-pub.pdf

Despite the fact that the degree of liberalization on the electrical energy market registered multiple fluctuations in the period 2007-2013, the number of household consummers in competitional regimme has increased constantly, reaching in the analyzed period an increase of almost 300%. However, the value registered for the non-household consummers supplied in competitional regimme, ponderated with the total of non-household consummers has been very low, reaching the level of 3.69%.

Table 4. Electrical energy consumption evolution for final clients, by their type and supply regime

Supplied Consummers	2009		2010		2011		2012		2013	
	Gwh	%								
Regulated regimme	23046	55	21365	49	20289	44	20779	45	18966	43
Non-household	12057	29	10119	23	8699	19	8792	19	7296	17
Household	10990	26	11246	26	11590	25	11987	26	11670	27
Competitional regime	18536	45	22075	51	25525	56	25105	55	24805	57
Non-household	18536	45	22075	51	25525	56	25105	55	24805	57
Household	0	0	0	0	0	0	0	0	0	0
Final Total Consumption	41583	100	43440	100	45814	100	45884	100	43771	100

Source: Report concerning preliminary results on sectrial investigation on the Electrical Energy market in Romania, p. 62, 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 4 we can see that, in the period 2009-2013, the competitional market segment increased continuously, corresponding with a lower regulated segment. The volume of electrical energy registered by the non-household consummers had a simillar evolution. The consumption of households has been executed in regulated regimme, and in the analyzed period has not registered significant variations from a volume share perspective.

For the electrical energy market evolution, considering the openess to a competitional and functional market, a relevant indicator is the supplier change rate.

Table 5 is showing the fact that the supplier change rate value, calculated by considering the supplied energy quantity, registered significant increases in 2013, comparing with 2012.

Table 5. Electrical energy consumption trends

Nr. crt.	Consummer type		nge rate (%) 2, by:	Supplier change rate (%) in 2013, by:			
		Number of consummer places	Supplied energy	Number of consummer places	Supplied energy		
1.	Non-household consummers with low consumption + Households	0,013	0,409	0,057	1,215		
2.	Non-household consummers with high consumption	7,241	8,986	6,687	9,993		
3.	Non-household consummers with very high consumption	7,346	14,302	15,687	17,305		
4.	TOTAL	0,033	7,649	0,075	8,990		

Source: Report concerning preliminary results on sectrial investigation on the Electrical Energy market in Romania, p. 64, available at:

http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport investigatie utila energie electrica_07012014-forma_neconfidentiala-pub.pdf

4. Conclusion

Energy market liberalization, unlike the other sectors, has been a much more complicated and sensible chapter from a political perspective for Romania. Romania does not depend too much on energy imports, like other European countrires- the complete electrical energy demand may be covered from internal production. This fact gave the posibility to the past governments to maintain low energy tarrifs, triggering a lack of consideration in transform the market to a competitional, fully liberalized one.

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. The number of complaints sent to consummer protection authorities is high, but is mainly focused on the lack of transparency for electrical bills. Exists the risk that, in the situation in which the transaction is not adequated managed, the number of complaints will rise sharply, and the trust in the competitional market will be submined. This will increase also the political pressures to maintain regulated tarrifs.

5. Bibliography

- 1. Bădileanu, M., 2001, Electrical energy prices and value analysis, Bucharest, Economic Publishing;
- 2. Dumitrescu, M., 2010, Electrical energy markets the influence of EU energy policy on the electrical energy prices, *Competition– Studies, research and analysis on the economic competition protection*, No. 1-2010, p. 128, [online]. Available at: http://www.consiliulconcurentei.ro/uploads/docs/items/id1105/revista romana.pdf [accessed on December 1st, 2016].
- 3. *** http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0094:0136:RO:PDF, [accessed on 2 November 2016].
- 4. *** http://media.hotnews.ro/media_server1/document-2011-09-7-10059377-0-analiza-efor.pdf, [accessed on 4 November 2016].
- 5. ***- http://economie.hotnews.ro/stiri-energie-8375032-otilia-nutu-expert-sar-discuta-online-joi-ora-15-00-despre-reforma-energie-ceruta-impactul-asupra-romaniei.htm, [accessed on 4 November 2016].
- 6. *** http://www.consiliulconcurentei.ro/uploads/docs/items/id10016/raport investigatie utila_energie_electrica_07012014-forma_neconfidentiala-pub.pdf, [accessed on December 1st, 2016].