The regulatory framework of the Greek electricity sector in compliance with the EU Competition Law

Victoria Koutsoupia

SCHOOL OF ECONOMICS, BUSINESS ADMINISTRATION & LEGAL STUDIES

A thesis submitted for the degree of

*Master in Law (LLM) in Transnational & European Commercial Law, Arbitration, Mediation and Energy Law*

December 2016
Thessaloniki – Greece
Student Name: Victoria Koutsoupia
SID: 1104150024
Supervisor: Prof. Emmanuela Truli

I hereby declare that the work submitted is mine and that where I have made use of another’s work, I have attributed the source(s) according to the Regulations set in the Student’s Handbook.

December 2016
Thessaloniki - Greece
V. Abstract

This dissertation was written as part of the LLM Program in Transnational Commercial Law, Mediation, Arbitration & Energy Law at the International Hellenic University.

Energy is considered an essential commodity for the modern society. In my dissertation thesis I focused on the electricity sector and to the steps that should be taken in order to achieve the liberalization target. The European Union had set through legislation the framework for a well-functioning electricity market. Greece as member state of the Union is obliged to implement the EU Regulation in the national legislation. However, the current situation of the Greek electricity market is not in compliance with EU Regulation for competition in the energy sector. The liberalization process is moving slow and new entries in the market posses a very small share compared to the share of the state owned PPC that holds a dominant position in the market. Therefore, the existing problems in the market, such as low margin profits of new entries and high costs, lack of political will and reluctance of consumers to change supplier should be resolved as early as possible. The liberalized market of United Kingdom should become an example to follow the Greek electricity market. The harmonization and liberalization of the electricity market will promote national economy’s’ competitiveness since energy sector constitutes a significant magnet of investments

Keywords: electricity, liberalization, competition, EU regulation, barriers

Victoria Koutsoupia
5.12.2016
I. Preface

During my studies at IHU I found the issue of lack of competition in the neuralgic sector of electricity very significant. For this reason, I decided to conduct a relevant research. The scope of my research is to indicate the factors that distort competition and to emphasize the importance of developing a fully liberalized electricity market in compliance with EU competition law.

I would like to thank my supervisor Dr. Emmanuela Truli because she motivated, supported and guided me during the period my research study was conducted.

I would also like to express my gratitude to my parents for their support through my studies in the IHU.
III. CONTENTS

<table>
<thead>
<tr>
<th>ABSTRACT</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td>0</td>
</tr>
<tr>
<td>CONTENTS</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>2</td>
</tr>
</tbody>
</table>

Chapter 1. The current situation of the Greek electricity market | 4 |
Chapter 2. The role of competition in the electricity market | 7 |
  
2.1 Articles 102& 106 TFEU- Greek “lignite case” | 8 |
2.2 A liberalized energy market- the UK example | 10 |
Chapter 3. The regulatory framework towards a liberalized market | 11 |
  
3.1 In EU level | 11 |
3.2 In national level | 12 |
Chapter 4. Barriers in achieving the liberalization of the market | 16 |
  
4.1 Options for change | 19 |

CONCLUSIONS | 20 |
BIBLIOGRAPHY | 23 |
INTRODUCTION

Energy was at the heart of the EU’s first precursor, the European Coal and Steel Community. It is a fact that energy is essential to modern life. For the growth and competitiveness of EU industry, but also for people’s well-being it is extremely important to assure reliable access to supply at competitive prices. As the EU’s competition policy developed, however, the energy utilities – gas and electricity companies – were rarely affected. Both gas and electricity companies, the so called energy utilities, were traditionally regulated monopolies. The reason that these utilities were believed to be natural monopolies was because of the cost of duplicating the networks of pipes or wires used to deliver the product.

If the energy market was destined to be always a monopoly, any competition policy would be an inappropriate tool for dealing with it. Regulation, which meant to offer to consumers reasonable prices and companies reasonable profits, was seen as a much better model. As a result, in some countries (such as the US and Spain), there was a formal system of regulation covering privately owned utilities. In many others, a system of self-regulation was adopted, often combined with public ownership.

Once the EU decided to liberalise the energy market, competition policy became applicable and also necessary for the well-functioning of the market. The EU has adopted a number of directives aiming to set out the framework for a market-led energy sector, with third party access to the transmission and distribution networks, and a choice of retailer for all customers, even though these depend upon the agreement of Member States. The EU competition policy enforcement has a major role in the liberalization of the energy sector because it has led to stronger competition and European gas and electricity markets and hence lower prices, higher investment and improved productivity. More specifically, the impact of competition policy enforcement on short run measures of intensity of competition such as profit elasticity and productivity dispersion (at sector-country level); and medium and long-term competitive outcomes such as investment and productivity (at firm-sector-country level) are significant developments. The EU merger policy enforcement is meant also to improve market outcomes, especially in low-regulated markets, although the impact of EU anti-trust enforcement and state aid control is not yet statistically significant.

In many EU countries, including Greece, there are major concerns over the functioning of these liberalized markets as evidenced by continued high market shares of incumbents, limited market penetration of new entrants, lack of cross-border trade, rising retail energy prices in several Member States and a lack of consumer confidence in these markets.

In order to achieve a liberalized energy market the EU adopted many regulations. Along with regulation, the European Commission has also used instruments of competition policy to

---

1 Richard Green. EU Regulation and Competition Policy among the Energy Utilities, Institute for Energy Research and Policy, University of Birmingham, December 2007, p.1
3 Richard Green, EU Regulation and Competition Policy among the Energy Utilities, Institute for Energy Research and Policy, University of Birmingham, December 2007, p.1
4 European Commission, The economic impact of enforcement of competition policies in the functioning of EU energy markets, Publication Office of the European Union, 2016, p.8
5 European Commission, The economic impact of enforcement of competition policies in the functioning of EU energy markets, Publication Office of the European Union, 2016, p.2
improve the functioning of European gas and electricity markets. As an example, in Greece the European Commission with the case C-553/12 P indicated the issue of maintenance of preferential rights granted by Greece in favour of public undertaking for the exploration and exploitation of lignite deposits.6

Taking these facts into consideration, this dissertation thesis will attempt to analyse the current situation of the electricity sector in Greece and how this could potentially change to comply with the EU competition law. The various political obstacles and consumer scepticism will be considered, along with possible ways to mitigate their influence. The research will also examine the potential collateral benefits of this growing sector for the ailing Greek economy. Furthermore, European models that have accomplished noteworthy transformations towards more liberalized competitive electricity markets will be comparative points of reference for my research.

---

6 case C-553/12 P
1) The current situation of the Greek electricity market

In Greece it has been a normal practice for governments to involve themselves in the energy business, and especially in the activities of the electricity and gas industries.\(^7\) The situation in Greece as it was identified by the final report of EU Commission was and still is the following:

First of all there is too much concentration in the national markets. There is lack of liquidity that prevents any successful new entry. There is too little integration between Member States’ markets. Furthermore the absence of transparently available market information leads to distrust in the pricing mechanisms and the inadequate current level of unbundling between network and supply interests has negative repercussions on market functioning and investment incentives. The customers have been bound to suppliers through long- term downstream agreements and the current balancing markets and small balancing zones favor incumbents.\(^8\)

The structure of the Greek electricity market is a gross mandatory pool with a technical algorithm which co-optimizes energy and reserve the Day- Ahead stage. A Capacity Adequacy Mechanism (CAM) complements the energy market arrangements and ex-post markets clears deviations.\(^9\)

The main problem of the Greek electricity market is that there is no true level playing field with the incumbent PPC still holding a dominant position in the market, although there is a new legislation that intensifies the independent role of the Regulator. In order to allow to the later to exercise its role to the maximum level and patronize the implementation of important market reforms, the current staffing issues of the Regulator must be promptly managed.\(^10\)

In the retail market, during the period 2013 and 2014 PPC remained by far the dominant supplier, as it held almost the entire retail market (99,5% of the total number of customers and about 97,6% of the total electricity supplied). Even though eight other suppliers were active, the switching rate was still low. Only a very small percentage of 2,71 % of the total customers changed electricity supplier in 2014, which was a little better than that of the year before (1,86% in 2013) according to the Data provided by the DSO.\(^11\)

The Greek government has now committed to reduce the old monopoly operators share to 25% in the short-run and 50% by 2020, although effective measures that encourage competition on electricity retail and generation remain to be enacted. In the same way, progress must be made, in order to converge the electricity market of Greece towards the Target Model of the EU, such as by introducing forward intra-day and balancing markets.

As far as the electricity prices are concerned, they still exceed the EU average. Even when electricity prices were fully liberalized in July 2013, no effective entry into the market has taken place. In 2013 and 2014 electricity prices for household consumers remained below the EU average. The prices were increased significantly, partly because of the introduction of non-recoverable tax rates and also because of a gradual move towards cost recovery and removal of cross- subsidiaries.\(^12\) As a result, in case of electricity consumer satisfaction is low.\(^13\)

The problem that continued to arise in the domestic electricity market through 2014, was that other than plant portfolio diversification, a key element for a more competitive market evolution with sustainable financial outcomes and less dependency would be the appearance of vertically integrated companies (with both generation and supply portfolios) other than PPC. A

\(^8\) http://ec.europa.eu/competition/sectors/energy/2005/inquiry
\(^9\) POYRY, Greek electricity market design study, December 2014, p.8
\(^12\) European Commission, Commission Staff Working Document, Country Factsheet Greece, Brussels SWD (2015) 226 final, p.4
\(^13\) http://ec.europa.eu/consumers/consumer-evidence/consumer-scoreboards/10Edition_index_eu.htm
vertical structure would enable firms to better manage risks through balancing the production and retail activities with consumers consisting a physical hedge, therefore allowing transfer of costs and creation of value across the value chain.\textsuperscript{14}

In June 2016 according to the Data of LAGIE the market shares in the retail market of electricity were the following:

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Share (June 2016)</th>
<th>Market Share (May 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPC</td>
<td>90,82%</td>
<td>90,54%</td>
</tr>
<tr>
<td>IRON</td>
<td>2,73%</td>
<td>2,62%</td>
</tr>
<tr>
<td>PROTERGIA</td>
<td>2,37%</td>
<td>2,22%</td>
</tr>
<tr>
<td>EPEDISON</td>
<td>2,28%</td>
<td>2,27%</td>
</tr>
<tr>
<td>NRG</td>
<td>0,64%</td>
<td>0,65%</td>
</tr>
<tr>
<td>WATT AND VOLT</td>
<td>0,51%</td>
<td>0,48%</td>
</tr>
<tr>
<td>VOLTERRA</td>
<td>0,49%</td>
<td>0,52%</td>
</tr>
<tr>
<td>GREEN</td>
<td>0,46%</td>
<td>0,43%</td>
</tr>
<tr>
<td>TITAN</td>
<td>0,03%</td>
<td>0,03%</td>
</tr>
</tbody>
</table>

From the above data it appears that the Greek market is slowly liberalized in order to comply with the European Target Model. Furthermore the Greek government should proceed to the liberalization of the market in order to be consistent with the obligations deriving from the Memorandum of Understanding (between Greek government and Troika) that was signed in 2015. According to the MoU at the end of the year 2016 PPC should have retail market share of no more than 87,24%, at the end of 2017 total market share 75,24%, at the end of 2018 total market share 62,24% and at the end of 2019 market share 49,24%.\textsuperscript{16}

According to the official data of LAGIE, at the end of March 2016, almost 520,000 electricity meters at a total of 7,4 million were transferred from PPC to private companies. The competition was more strengthened after the tender of lignite and hydro- electric capacity (French model NOME) of the PPC. In this tender private companies were able to buy cheap energy, acquiring the possibility to improve even more their offers and their invoices to the customers. In order to be competitive in the market, even PPC proceeded to decrease of invoices for (low) domestic- consumption consumers. Recently, an offer from PPC for the consistent domestic customers was in progress, to return the double of the value of the fixed amount. The only thing that is clear is that this situation is beneficiary for the consumer, because he receives offers and counter- offers with better prices.\textsuperscript{17}

The Regulatory Authority for Energy (RAE) following decision n. 353/2016 determined the annual amount of electricity that would be available through auction sales of electricity products. It is called NOME type of Auctions and it is based on the French model of concluding

\textsuperscript{14} European Commission, Commission Staff Working Document, Country Factsheet Greece, Brussels SWD (2015) 226 final, p.34

\textsuperscript{15} Δημοσίευμα στην Deal News, Το Deal Ηρώων- Wind -“Ανακατατάξεις στα μερίδια”, Παρασκευή 29 Ιουλίου 2016, σελ.37

\textsuperscript{16} Δημοσίευμα στην Deal News, Το Deal Ηρώων- Wind -“Ανακατατάξεις στα μερίδια”, Παρασκευή 29 Ιουλίου 2016, σελ.37

\textsuperscript{17} energypress, Ηλιακή ρεύματα: Το ποτάμι του αντιγεννητικού δεν γερίζει πίσω, Greek Energy, Ειδική έκδοση για τους κλάδους και εις επιχειρήσεις Ενέργειας στην ελληνική αγορά, 2016, p.50

5
bilateral agreements between the electricity production and distribution industries and it was adopted to inter alia implement the European Union’s Third Energy Package.18

The first NOME auction took place on October 25, 2016 and it was very successful. The offered amount of energy was overgrown by demand and the market prices were escalated from 37,37 to 37,34 euro per megawatt hour. Therefore, the revenues of the auction for PPC are estimated at 50,5 million euro. The NOME auctions are designed and implemented aiming to accelerating the liberalization of the electricity market by limiting the market share of PPC. This measure substitutes the plan for the “small PPC” that was aiming to the same outcome by selling the electricity production units of PPC. The final target was the diminution of PPC’s market share to a percentage under 50% until 2020 with intermediary targets, whose successful completion will determine the energy amounts that would be auctioned in the next period of time.

The low prices –in comparison with wholesale market- allow the suppliers to have more attractive prices for electricity households and companies to ensure lower prices for the supply of industrial units. On the other hand PPC questioned the NOME auctions, since the prices were formulated under the cost production. The company, thus, reserved its right to safeguard its interests towards energy direction.19

Undoubtedly the realization of NOME auctions constitutes a major step towards the opening of the electricity retail market in Greece. It contributed significantly to the redistribution of shares in the retail electricity market and developed healthy competition by reducing the electricity supply prices paid by end consumers.20

18 MacroPolis, NOME auctions as a mechanism to strenghten competition in the Greek Electricity Market, 27.10.2016
20 Client’s alert, NOME auctions as a mechanism to strenghten competition in greek electricity market: Legal and Regulatory aspects, Metaxas& Associates Attorneys at Law
The role of competition in the electricity market

For the most part of the post-war period it has been a conventional wisdom that the market failures in the utility industries were so great as to merit state ownership, vertical integration, and monopoly. State ownership “resolved” the conflict of interests between the private and public benefit, vertical integration ensured that customers held the risk of upstream sunk investments and monopoly prevented the destructive competition which was widely thought to have pervaded the industries in the 1920s and 1930s.21

Competition law ensures that firms (undertakings) operating in the free market economy do not restrict or distort competition in a way that prevents the market from functioning optimally. The basis of a free market is competition between firms and competition is considered to deliver efficiency and welfare. At the opposite end of the spectrum to perfect competition lies monopoly. A monopoly is a market where there is only one seller either because there are barriers which prevent other firms from entering the market or because there is natural monopoly, in the sense that only one undertaking can operate profitably on the market. As it is natural, when the firm is not constrained by any competitors it will price as high as possible. It is often said that monopolies have fewer incentives to innovate than firms in competitive markets but on the other hand it is also argued that substantial market power is an incentive to innovate.

The concept of effective competition is important in the EU. A dominant position is defined for the purposes of Article 102, as involving an undertakings’ power to prevent effective competition being maintained on the relevant market. 22 There is a broad consensus that European energy markets should be liberalized and also that they need some degree of regulation. It is important because the availability of energy at competitive prices affects us all, directly and indirectly.23

The potential for increased competition in the network-bound energy industries (electricity and gas) has attracted a great deal of attention in recent years in the context of discussion about market liberalization and privatization. Until recently the physical characteristics of networks—meaning the fixed grids and pipelines—seemed to have constrained the scope for such liberalization and market opening. A further constraint has been perceived in the high degree of government ownership and control in these industries—especially in much of continental Europe and also in Greece. Supervision by public authorities was also necessary to safeguard the large number of captive consumers dependent upon energy supply through transmission and distribution networks. Furthermore, the very high cost of infrastructure investment was also a contribution to the high profile of national governments.

However, underlying assumptions about these constraints on the scope of competition have increasingly been challenged. As a result, in most of the industrialized countries, the structure of the electricity and gas industries, stagnant for many decades, is now being transformed by sweeping programs of institutional reform. The main aim of these measures is the creation of enforceable rights of access for third parties to the transmission and distribution networks.24

---

21 Dieter Helm, Tim Jekinson, Competition in Regulated Industries, Oxford University Press, p.1
22 Alison Jones and Brenda Sufin, EU Competition Law, Text, Cases, Materials, Fifth Edition, Oxford University Press, 2008, p.25
2.1) Articles 102& 106 TFEU- Greek “lignite case”

In the Greek lignite case, the issues of equality of opportunity and the strengthening or extension of a dominant position over another market were examined. Lignite is the primary type of coal for the production of electricity. This material is the cheapest for electricity production in the Greek territory and the extensive lignite deposits are owned by the State. PPC, that was a former monopoly generator of electricity in Greece before the liberalization (currently a limited liability company in which the State had a controlling shareholding) has obtained rights to explore and exploit approximately half of the lignite deposits. The above exploitation rights were granted by the Greek government exclusively to PPC. No one else could exercise exploitative rights over the remaining deposits, despite competitor’s interest in access to lignite resources. Accordingly, the Commission came to the conclusion that the above concession to PPC by the Greek government constitutes an infringement of Article 106 par.1 TFEU in conjunction with Article 102 TFEU. Because of granting and maintaining quasi-monopolistic lignite exploration rights for PPC, the Greek State had caused a situation of unequal opportunity among economic operators on the wholesale electricity market. The above situation created distortion of competition through reinforcement of PPC’s dominant position in the market. Therefore, on 5 March 2008 (see IP/08/386), the Commission ruled that Greece had infringed European competition rules.25

The Commission’s decision on the case reflected accurately the problem: the situation of the Greek electricity market was rather disappointing even after the liberalization Directives of the EU. The Commission could not address directly to the Greek government’s incapacity to grant exploitation licenses for the remaining deposits to PPC’s competitors, therefore referred to the “equality of opportunity” issue, although it did not identify the exact abuse PPC was being lead to commit.

Following the above, the Greek government submitted an appeal and annulled the decision arguing that it was not enough to establish that a State measure simply distorted competition, causing inequality of opportunity. The present case was not similar to other relevant cases according to the Greek State, because in the other cases the way in which the undertaking was led or would or could be led to abuse its rights was identified. In the discussed case it was held by the Commission that there was an infringement only because PPC maintained a dominant position, although, the exercise of its licencing solely could not be considered as an undertaking extending its dominant position. The Commission failed to establish the particular abuse to which PPC had been induced or to which it could have been induced by the grant of privileged access to lignite deposits in Greece. Moreover, the General Court underlined that large reserves of lignite had remained unexploited in Greece. Accordingly, the failure to exploit could not be imputed to PPC, as far as the Greek state was responsible for granting the relevant lignite extraction licenses. In light of the above, the General Court annulled the Commission’s decision under the reasoning that the General Court seemed to be severely limiting the application of article 106(1), by appearing to equate the standard of proof for the establishment of an infringement under article 106(1) TFEU with the standard of proof which the Commission is expected to discharge in an action under article 102 TFEU for a firm’s alleged abuse of a dominant position (insofar as it seemed to be expected by the General Court that proof of likely anticompetitive effects was required to flow from the grant of exclusivity).  

However, the ECJ set aside the Greek government judgment following an appeal by the Commission.26 The ECJ held that the legal standard established by the General Court was incorrect, as the Commission was not obliged to identify or establish that an actual abuse had occurred or a specific abuse could have occurred as a result of the state measure at issue. The ECJ, thus, repeated its well established case law, according to which a member state may infringe article 106(1) TFEU in case that its measures create a situation in which a public undertaking or an undertaking on which it has conferred special or exclusive rights, merely by exercising the preferential rights conferred upon it, is led to abuse its dominant position, or when those rights are liable to create a situation in which that undertaking is led to commit such abuses. As a result, the ECJ repeated that it is not necessary that any abuse should be found to have actually occurred, but merely that a clear inducement to so act was available. Additionally, according to ECJ, the existence of an equality of opportunity between the economic operators is a fundamental element of the principle of undistorted competition. Therefore, any measure that creates such inequality will be regarded as giving rise to an infringement of article 106(1) TFEU, read together with article 102 TFEU.

The ECJ’s judgment has left no doubt that, as long as the potential anticompetitive effects can be identified from the existence of such privileged access, the Commission is not obliged to establish the existence of actual anticompetitive harm. The structure of article 106, read in conjunction with article 102, does not suggest that an effects-based test is the best for its application, as had been suggested by the General Court. Article 106 TFEU is tantamount to the censure of a “by object” infringement, whose structure flows directly from the fact that the conferred exclusive right (or the comity of interests between the state and the beneficiary) is significant vis-a-vis other markets in which the beneficiary operates. Those markets could be upstream, downstream, neighbouring or ancillary to the principal market in which the right is granted, but they are all potentially prone to the beneficiary firm leveraging its undisputed market power into those other related market areas. A state measure (in this case, the grant of exclusivity) might create merely unequal conditions which is sufficient to establish a presumption that the firm in question is in breach of article 106(1) TFEU, in case that it is in some way given the incentive to engage in anticompetitive behaviour. In markets economically related, it will be logical assumption to conclude that the “unequal conditions of competition” that have been affected by the state measures are capable of triggering the presumption under article 106(1) TFEU. Consequently, the sole real link necessary to be drawn is that between the market in which the right is conferred and a commercially related market. It will not be common in sectors characterised by monopoly rights or state affiliations that those causal links will not be as obvious as they are material. The above analysed presumption of such a causal link lies at the heart of the presumptions found in the RTT, ERT, Porto di Genoa and Höfner judgments of the European Courts over the years that more or less repeat the same conclusions. In this sense, the ECJ in Greek Lignite is a case that has driven us back to the familiar territory of ECJ judgments.27

27 Peter Alexiadis and Ilias Georgiopoulos, The Greek lignite case, Article 106 TFEU rebooted against firms with special exclusive rights, Competition Law Insight, 14 October 2014, p.16, 17
2.2) A liberalized energy market - the UK example

As indicated in recent researches, the UK’s energy market remains the most competitive market in the EU and G7, since it altered from pure monopoly to a market economy. Customer engagement is a clear success story of energy liberalisation in the UK.\textsuperscript{28} The level of consumer participation in UK energy supply markets is one of the highest of any retail energy market throughout the world. It is impressive that the annual switching rate of 18% is comparable with other retail services in the UK, such as fixed and mobile telecommunication, insurance products, mortgages, and personal current accounts. By 2008, at least 75% of customers had switched energy supplier at least once. This is equivalent to just under 20 million households.\textsuperscript{29} As far as the consumers are concerned almost all of them (96%) are fully aware that they can change energy suppliers and most (70%) feel confident enough to do this by themselves.\textsuperscript{30} Until today switching levels remain high, despite the more stable prices experienced over the last two years. The latest figures provided by Ofgem show that switching in 2009 was 17% for gas customers and 18% for electricity customers.\textsuperscript{31}

The United Kingdom nationalized its electricity industry with passage of the Electricity Act of 1947 and the formation of the Central Electricity Generation Board (CEGB) in 1957. But in the 1980s, under Prime Minister Margaret Thatcher, it did a dramatic change. Contrary to France and Germany, by its Energy Acts of 1983 and 1989,\textsuperscript{32} the U.K. had already liberalized its electricity market, opening it to third parties by privatizing the CEGB through a series of restructuring actions undertaken before the European Union Directives enter into force, thereby becoming the European pioneer in introducing competition into its electricity supply industry.

An essential element of the liberalization was, besides the privatization of the CEGB, the establishment of the so called Electricity Pool of England and Wales on the wholesale sector that centrally transmitted generation. In addition, post-liberalization regulation was taking place through a license procedure. In order to be able to determine network access charges for the remaining businesses, transmission and distribution, that continued to operate as monopolies; price-cap regulation was applied. It is notable that the transformation from monopoly to competition was nearly complete in the United Kingdom before the European liberalization was undertaken. As a result, there was no British resistance against similar European legislation.

\textsuperscript{28}“Energy Supply Probe”, Ofgem (October 2008) p43.
\textsuperscript{29}“Energy Supply Probe”, Ofgem (October 2008) p43.
\textsuperscript{30}Mehmet Baha Karan and Hasan Kazdag’li, The Development of Energy Markets in Europe, chapter 2, p.16
\textsuperscript{31}Frontier economics, Competition and entry in the GB electricity retail market, A REPORT PREPARED FOR ENERGY UK, January 2011, p.4
3) The regulatory framework towards a liberalized market

3.1) EU level

- First Electricity Directive

In order to harmonise and liberalize the EU energy market, three consecutive legislative packages of measures were adopted between the period of 1996 and 2009. These legislative measures were addressing market access, transparency and regulation, consumer protection, supporting interconnection and adequate levels of supply. Therefore, under these measures, new electricity suppliers can enter Member States’ markets, and on the same time industrial and domestic consumers may chose freely their own suppliers.\(^{33}\)

The European Commission first produced a draft directive on electricity liberalisation in 1991 (Eising, 2002), but only on December 1996 the Directive 96/92/EC was adopted. This directive was a compromise between countries that were already in the course of liberalisation, or were planning to start soon, and those that had been content with their existing systems. As indicated in its title the first set of legislation on electricity liberalization designated progressive market opening and also established for the first time some common rules for the organisation of the sector.\(^{34}\) This directive was aiming to create competition in generation and supply to the largest consumers. Article 15 of the Directive introduces requirements for separation of operations for vertical integration companies.\(^{35}\) Furthermore, the Directive also set out key rules on unbundling the idea that a supply company cannot also own an entity that operates a network and rules for TSOs (Transmission System Operators) and DSOs (Distribution System Operators). However, the Directive did not address sufficiently the issue of dominance of incumbent market actors. There was nothing within it to create obligations for countries to form a competitive field of companies in generation or retail, and as a consequence the sectors remained highly concentrated.

- Second Electricity Directive

On 26 June 2003 the Commission issued two Directives that took significant steps towards liberalisation in aligning the frameworks for electricity. This Second Electricity Directive set out common rules for the generation, transmission, distribution and supply of electricity, provisions on ownership/ unbundling and consumer protection, aiming to improve and integrate competitive electricity markets in the EU. This Directive set down rules for the organisation and functioning of the electricity sector, open access to the market, extended rights of the electricity consumers and competition requirements. In addition, under the provisions of this Directive, negotiated third party access to networks was replaced by regulated access under which third parties may utilize the network in a non- discriminatory manner based on Published Tariffs\(^{36}\). Furthermore, the Commission’s powers over mergers are more recent than those over other

\(^{33}\) www.europarl.europa.eu/atyourservice/en/displayFtu.html?fulid=FTU_5.7.2.html

\(^{34}\) Rafael Merino, Liberalization of the Electricity Industry in the European Union, Faculty of Law, School of Social Sciences, Haskoli Islands, January 2013, p.22

\(^{35}\) Richard Green, EU Regulation and Competition Policy among the Energy Utilities, Institute for Energy Research and Policy, University of Birmingham, December 2007, p.7

aspects of competition policy, but cross-border mergers in the utility sector were very uncommon before liberalisation initiated. However, post liberalisation; there has been a steady stream of cases which qualify for Commission review, and the Commission begun to negotiate pro-competitive changes to the companies’ structures or operations in return for allowing the mergers.

- Third Energy Package

The Commission unveiled its Third Energy Package in September 2007 (European Commission, 2007b). In the above legislation the Commission is not insisting on ownership unbundling, allowing Member States to set out an independent system operator instead. This decision reflects the political realities of the situation. In the area of regulatory reform, the Commission has chosen the more ambitious proposal, and announced plans to establish an Agency for the Cooperation of Energy Regulators. 37 The Third Energy Package that was adopted in 2009 consisted of five primary documents: two Directives and three regulations. The primary aspects of the policy included within the package were related to unbundling of energy supply and network distribution, increased transparency of retail markets and more effective oversight by independent market supervisors, the national regulatory authorities and better cross-border collaboration and investment between Member States. 38 The transposition deadline for the Third Package in the national law of Member States was originally 3 March of 2011. However, complete and timely transposition was proved to be a challenge for the majority of Member States, since none of them had accomplished full transposition by deadline.

3.2) National level

National legislation (implementing the EU Directives)

Following the above presentation of EU directives, further analysis the national laws would arguably be redundant, since national laws are implementation of the EU Directives. What is worth analysing though, is the obligations of Greece deriving from the 2012 & 2015 Memorandum of Understanding signed between Greece and Troika. Therefore we will mention briefly the existing national legislation.


Before this Law entered into force, the regulatory framework of the internal market was granting to PPC almost exclusive rights for production, transmission, supply and distribution of electricity. Other than PPC, only few industries were allowed to produce electricity, mainly for private consumption, while private commercial production was allowed only from Renewable Energy Resources, as well as for co-production of electricity and heat. The Greek government regulated the tariffs that PPC was charging to clients whilst the increase of tariffs was taking place after the approval of the Minister of Finance. Furthermore, PPC was responsible for the management of the Transmission and Distribution System.

37 Richard Green, EU Regulation and Competition Policy among the Energy Utilities, Institute for Energy Research and Policy, University of Birmingham, December 2007, p.7
The first Greek law for liberalization of the energy market was set into force in the framework of harmonization of the Greek legislation to the First Electricity Directive. The main regulations of the law are the following:

- The establishment of an independent Regulatory Authority with main obligation to control and supervise the liberalized market
- Obligation of the Minister of Development and the Regulatory Authority to act in order to promote the competition in the sectors of production and supply of electricity
- Any operation in the sector of electricity which is further separated into production, transmission, distribution and supply of electricity, requires prior license from the Minister of Development
- PPC as vertical intergraded company should keep separate accounts for activities of product, transmission, distribution.

- Law 3175/2003 and Law 3462/2005

The second Law regarding electricity was the Law 3175/2003 that preludes a wholesale market development through the establishment of a mandatory day-ahead market. It also extends the notion of ‘suppliers’ to include traders (not only generators) and initiates a balancing mechanism. Under the influence of this Law, competition in the retail supply has been extended since all customers became eligible by 1 July, 2004, except for the households. This Law also introduced a mechanism for tenders on capacity of generation to ensure security of the system. A further Law 3426/2005 that introduced new substantial amendments to the main legal framework was adopted in 2005. According to this Law, as of the 1st of July 2007, all household customers became eligible.

- Law 4001/2011

The Third Package Directive 2009/72/EC was introduced through the Greek law 4001/2011. Among other targets of this law, was the provision of real alternative choices for all consumers, new business opportunities on the sector and the increase of cross-border trade in order to achieve significant profits, competitive prices and higher standards of services. In addition it reinforced the security of energy supply and its sustainability. Law 4001/2011 constitutes the basic Greek legislation for the Energy Sector. It determines the operation of the Regulatory Authority for Energy (RAE), the rules concerning generation of electricity transmission, constitution and operation of the Transmission System Operator, the issuance of the Transmission System Code, the rules regarding distribution of electricity, the responsibilities of the Distribution System Operator, the administration of non-interconnected islands, the rules for setting of tariffs and their legal functional and accounting unbundling. Furthermore, the above law transfers the provisions of the Third Liberalization Package to the national system.

- Memorandum of Understanding 2012

---

39 Α. Ντερκούμας, Δ. Λαμπιρίδης, Π. Μπιτκάς, Π. Ντοκόπουλος, Η αγορά Ηλεκτρικής Ενέργειας της Ελλάδας, Τεχνικά Χρονικά, Σεπτέμβριος-Οκτώβριος 2004, σελ.4-5
41 Μιχαήλ Λ. Πολέμης, Ανταγωνισμός στις σχετικές αγορές Ηλεκτρικής Ενέργειας στην Ελλάδα: Ουτοπία ή Πραγματικότητα; Ενέργεια, Δίκτυα και Υποδομές, Νομική Βιβλιοθήκη, 2014, σ. 7
In 2012 the Greek government signed with Troika a Memorandum of Understanding that became also national law of the country (Law 4046/2012). According to the provisions of the MoU of 2012, regarding measures to increase competition on the generation of electricity the Greek government undertook the following obligations:

- To finalise the remedies in order to ensure access of third parties to lignite- fired electricity generation
- To start implementing measures that safeguard the access by third parties to lignite-fired electricity generation
- To implement measures in order to ensure access by competitors of PPC to lignite- fired generation in the Greek Market (November 2013)

As far as the privatization of PPC is concerned, the government was obliged to take the necessary steps in order to be able to sell hydro capacity and other generation assets to investors. The sale should be separate from divestiture of lignite capacity provided for in the Commission’s decision on the Greek lignite case. However, investors could be given the possibility to buy hydro- capacity/ other generation assets jointly with the lignite capacity, provided that in that decision the sale of hydro- capacity will: a) not delay the sale of lignite assets beyond the time frame provided for in the relevant Commission Decision and b) not prevent the sale of lignite assets without minimum price.42

- Memorandum of Understanding 2015

Following the 2012 Memorandum of Understanding the Greek government signed another MoU in the summer of 2015 and under the provisions of the latter undertook further measures regarding the liberalization of electricity market. According to the provisions of the MoU 2015, the authorities should implement a scheme for the temporary and permanent capacity payment system and should also modify electricity market rules in order to avoid that any plant is forced to operate below their variable cost, and to regulate according to the final decision of the Council of State on the netting of the arrears between PPC and the market operator. Furthermore, interruptible contracts as approved by the European Commission should be implemented and PPC tariffs should be revised based on costs, including replacement of the 20% discount for energy-intensive users with tariffs based on marginal generation costs. On the same time the consumption characteristics of customers that affect costs should be taken into account. A discussion with the European Commission was also scheduled on September 2015, in order to design the NOMEx system of auctions, with the objective to lower by 25% the retail and wholesale market shares of PPC, and to bring them below 50% by 2020, while having reserve prices that capture generation costs and being fully compliant with EU rules. In any case, by 2020 no undertaking should be able to produce or import, directly or indirectly, more than 50% of the total amount of electricity produced and imported in Greece. The authorities should by October 2015, a) take irreversible steps (including announcement of date for submission of binding offers) in order to proceed to privatization of the electricity transmission company, ADMIE, provided that no alternative scheme is provided, with equivalent results in terms of competition and prospects for investment, in line with the best European practices and agreed with the institutions to provide full ownership unbundling from PPC. To this direction, the authorities have already submitted the first proposal to the institutions in August 2015; b) strengthen the electricity regulator’s financial and operational independence. In addition, it is necessary to introduce a new plan for upgrading the electricity grids to improve performance,

42 Memorandum of Understanding 2012

14
enhance interoperability and reduce costs for consumers. The authorities should also commence the implementation of the EU target model for the electricity market, aiming to complete it by December 2017.43

- Supplemental Memorandum of Understanding 2016

In June 2016 the Greek government signed a supplemental Memorandum of Understanding, undertaking among others further obligations regarding the national energy markets. Consequently, the authorities should in accordance with prior agreement on ADMIE, and on the basis of a positive feasibility report prepared by independent advisors, conclude an agreement with the Institutions, endorse in KYSOIP a detailed action plan, including a timeline, for proceeding to the full ownership unbundling of ADMIE from PPC. The above should be completed by the end of 2016. Furthermore, the provisions of the supplemental MoU of 2016, also make a reference to the NOME system of auctions. More specifically, the authorities should agree with the Institutions, endorse in KYSOIP and publish the design of the NOME system of auctions, with the objective of lowering by 20 percentage points the retail and wholesale market shares of PPC by 2017, and to bring them below 50 percentage points by 2020. Before the above, relevant legislation should be adopted introducing the NOME mechanism in the Greek electricity market, including all relevant powers for LAGIE and RAE. The first auction will be held in September 2016. By June 2016 the Hellenic Republic was obliged to propose and vote in a General Assembly of PPC cost- and consumer profile-based tariffs. PPC would conclude the negotiations on HV tariffs with all its customers by signing contracts, and adopting tariffs that would be cost-based, taking also into account consumption characteristics. The authorities were also obliged to regulate according to the final decision of the Council of State on the netting of the arrears between PPC and the market operator by June 2016. The roadmap for the implementation of the EU target model for the electricity market should also be concluded by December 2017. Aiming to this purpose, the required legislation on the transposition of the high-level market design in June 2016 should be passed. The authorities should use the technical assistance, provided by the SRSS of the European Commission, in order to implement all energy market reforms.44

43Memorandum of Understanding between the European Commission acting on behalf of the European Stability Mechanism and the Hellenic Republic and the Bank of Greece, 2015 p.25
44Supplemental Memorandum of Understanding between the European Commission acting on behalf of the European Stability Mechanism and the Hellenic Republic and the Bank of Greece, 2016. p.27
4) Barriers in achieving the liberalization of the electricity market

Although, the Greek market is taking steps towards a more liberalized market and the private companies are supporting their entrance to the market with dynamic advertising campaigns, offers and promotions there are certain barriers of the market that hinder the competition.

First of all availability of electricity is a necessary pre-requisite for any new entry to the electricity retail market, weather it is by a small or larger player. In case that new entrants are unable to secure access to electricity to match their potential customers’ load profile at a competitive price, that would constitute a significant barrier. For small suppliers it is difficult to secure adequate access to wholesale electricity supplies, because they find it hard to access contracts of a small quantity, in the proper shape, for the long duration that they are seeking, at a price competitive with the large vertically integrated suppliers.45

Another reason for little entry into this market could be the expectation of low, or negative, margins, since suppliers’ net margins on customer bills have generally been low and evidence that suggests energy companies have been making excess profits has not been registered.46 Consequently, there has been little entry from small scale retail, only businesses in recent years. It should be noted that although margins across the vertically integrated businesses in aggregate have recently been higher than in the retail-only business, there has been no entry at this level either (by larger entrants entering at scale as a vertically integrated player), suggesting that, even though margins are higher, they are still low enough to act as a barrier.47

An additional barrier is the complexity of industry arrangements and the fact that they change with remarkable frequency since this is extremely costly for all suppliers to manage. The element of fixed cost associated with dealing with these arrangements and processes, is a heavier burden on small suppliers. The license is only one of many other industry agreements, codes and rules that suppliers have undertaken, thus, the burden is substantial. Another issue that we should take into account is that suppliers should offer customers stable prices and any possible change to their cost base will increase their risk. Although network charges are regulated and subject to a long term price control, they have been unstable as a result of regulatory policy changes. However, suppliers should offer customers stable prices and any unexpected shift to their costs will increase their risk. The lack of transparency regarding these charges has aggravated these problems along with a number of costs associated with entering this market, and then expanding to reach scale.

The costs contain investment in IT systems and call centres and costs associated with building a brand and acquiring customers, therefore they can be expected to act as a barrier to smaller suppliers. 48 Connection charges are also considered a major barrier in most of the Member States according to the conducted survey.49 In Greece connection charges are relatively high, particularly when based on deep connection costs and this indicates a possible discrimination of new market entrants. DSO in particular has a lot of freedom in determining the connection and use of system charges. The number of procedural barriers to network access

45 Frontier economics, Competition and entry in the GB electricity retail market, A REPORT PREPARED FOR ENERGY UK, January 2011, p.12
47 Frontier economics, Competition and entry in the GB electricity retail market, A REPORT PREPARED FOR ENERGY UK, January 2011, p.18
48 supra note 39, p.19
49 DG-Grid Project’s homepage: http://www.dg-grid.org/
connected with delays, longevity and complexity of authorization procedures might also hinder new market entrants. Another major issue is the limitation in the network’s capacity to absorb new generation, because problems of voltage control may arise in Greece, when new units are connected to the grid. Weak balancing mechanisms should also be taken into account as they eventually may endanger the short-term security of supply in the event of interruptions due to failures, in addition to technical difficulties that might lead to network connection delays.50

Electricity sector is capital intensive, however there is a high cost for new entrants in the market (sunk cost) although demand of electricity grows fast in Greece (at levels that exceed the increase in GDP), under the current liberalisation scheme. The current, low-regulated tariffs set by the Ministry of Development in the supply market, do not fully contemplate the long-run marginal costs and as a consequence they act as barriers to entry. Additionally it should be noted that tariffs have not increased significantly within the last few years after liberalisation, in contrast to the wholesale price which has been increased (System Marginal Price or SMP) acutely. This inconsistency between the wholesale price and retail tariffs can consist an important barrier for the weak interest of electricity suppliers other than PPC to enter the market.

The privileged rights granted to PPC, for the exploitation of lignite in Greece, produces discrepancies of opportunities among the economic operators regarding their accessibility to primary fuels for the production of electricity. Consequently, the hindered incentives for entering the Greek wholesale electricity market lead to the dominant position of PPC maintained or even reinforced.

Another issue that does not favour competition in the electricity market and constitutes a significant barrier that should be taken into account by the regulators is the limited interconnection capacity. Greece is geographically isolated from other member states (Spain, Portugal, France, Germany, Belgium, etc.), located at the periphery of the EU internal electricity market. Accordingly, aiming to satisfy the increasing demand of electricity, Greece maintains interconnectors to its Northern borders (i.e. Albania, FYROM and Bulgaria) and Italy, through an underwater cable connection of maximum capacity of 500 MW. The total capacity of northern interconnectors is 600 MW, so in total the interconnector’s capacity is 1,100MW. However, the interconnection capacity of the electricity grid is comparatively diminutive, thus the electricity imports that play a major role in the integration of the market are restricted 51

There are also obstacles that have political and economic nature and slow down the attempt to achieve a single market and for this reason governments are directly or indirectly maintaining their control on market competition. The rationale that justifies the intervention of the State is the security of supply and the complexity of this energy product, since energy security is the most significant barrier for the single market target of Europe and is often related to other economic and political ones. Member States keep holding considerable national control over national energy markets and external relations with energy producing countries because of energy security issues. The energy sector plays a remarkably significant role in the economic development of many sectors. Consequently, the above situation has led to the absence of economic incentives for efficiency and therefore direct and indirect state subsidies have been obliged to uphold a stable industry. A number of problems, including the overcapacity of generators did not enhance competition but led to the absence of incentives for innovation in conjunction with the fact that the type of energy source selected for use in the electricity production process was not based on being the cheapest available but on internal resources and

50 S. Ropenus, and K. Skytte, Risø National Laboratory, Regulatory Review and Barriers for the Electricity Supply System for Distributed Generation in EU-15, p.5
deliberations of security of supply. Although the majority of electricity markets in Europe have opened competition in retail at a very high level, according to the EC Benchmarking Report, the openness of the market does not contemplate the effectiveness of the competition. Neelie Kroes, who had been serving as European Commissioner for Competition Policy, had addressed that 10 years after the Lisbon Treaty the energy markets of Europe were significantly far from the unique energy market target. As indicated by the findings on the level of energy market competition, there are serious defects in Europe’s energy markets, as a result of the barriers that were discussed above. More specifically the EU has found some significant indications that wholesale markets continue to be at a very high level of concentration, choices of consumers are rejected because of the impediments that new suppliers confront when trying to enter the markets, there is no considerable cross-border competition, a severe absence of transparency hinders new entrants from competing efficiently, and after all, prices often are not defined on the basis of effective competition.52

A significant impediment to the achievement of the liberalization of the electricity market is the reluctance of the consumers because of prior private energy companies that collapsed (Energa and Hellas Power) and the lack of confidence of Greek people to the private sector in comparison with public owned companies, even if they complain about the malfunctioning of the public sector. Consumer’s skepticism is the result of political instability, lack of transparency and inability of the Greek government to control efficiently private-owned companies functioning in the neuralgic sector of electricity.

The outstanding debts that make the consistent consumers a minority could also be a barrier towards the liberalization of the electricity market. A characteristic of the retail market of 2014 was the continuing growth of consumer’s liabilities against their electricity suppliers. This is the outcome of the difficulties faced by consumers during the deep economic decline. The excessive charges mounted on the electricity bills because of high taxes on energy, in combination with the inclusion in the electricity bill of other taxes and fees, unrelated to electricity (e.g. property tax, local authority tax, television fee etc.) forced a significant number of consumers to the edge of their budget confluence, hence resulting in either a reluctance to pay or factual frailty to do so. The collection rates of the suppliers or the clearing of previous accumulated bad debt was not improved, even though the special property tax was removed from electricity bills in 2014. The rest of the taxes and fees remain until today within electricity bills and this a significant barrier in achieving the liberalization of the electricity market, since PPC obliges the consumers to pay all prior debts in order to be able to change the supplier of electricity. As a result, because of the number of unpaid bills there are only few customers that are able to change supplier.53


53 Energy press, Λασιτική ρέματος: Το ποτάμι του ανταγωνισμού δεν γυρίζει πίσω, Greek Energy, Ειδική έκδοση για τους κλάδους και τις επιχειρήσεις Ενέργειας στην ελληνική αγορά, 2016, p.50
5.1) Options for change

Following the above analysis it is important that market designs of EU retail energy sector are harmonized, in order to diminish impediments to entry and expansion. The areas that should be harmonized are: market entries and exits, the concerned legal frameworks, the licensing procedures, the reporting obligations and the supplier processes. Therefore, it is crucial to define general principles regarding licensing procedures and to establish common requirements of switching procedures in a simple and transparent way. Additionally, it is necessary for the Greek authorities to have strong commitment to privatisation of energy suppliers, unbundling and price liberalization so that political influences on retail energy markets are prevented, since they are running contrary to economic facts. In parallel a solid regulatory environment should strongly support market entries into retail energy markets. Regarding electricity markets, an establishment of power exchanges and forward trading should definitely promote more market entry. The barriers concerning illiquid markets may be eliminated with further market coupling and liquidity should be increased as a result of obligatory stock jobbing and expansion of transport capacities or interconnectors. The implementation of network codes that would lead to a competitive wholesale market design and a market opening should be further facilitated. The already existing standards should become the starting point for achieving liberalization. However the EU should take into consideration that every state and especially Greece is in need of different arrangements in order to handle local circumstances such as different market structures and high absolute consumption.54

54 Martin Ahlert, Samuel de Haas, Prof. Georg Gotz, Thibault Henri, Christian Lebelhuber, Lazlo Szabo, STUDY ON “BARRIERS TO CROSS-BORDER ENTRY INTO RETAIL ENERGY MARKETS”, E-Bridge Consulting, Bonn, Germany. 23 July 2014, p.60
5) CONCLUSION

The nature of the energy markets presents some special characteristics that may impede, restrict or distort competition such as high entry costs, vertical market structure and complicated pricing mechanisms. In order to overcome the restraints in some cases a prior government intervention is required. For instance, transmission and distribution networks that operate currently as natural monopolies should be regulated adequately. There are also competition problems related to public ownership that include control issues, preferential access to capital distributions of competition both for and in the market which might be amplified by regulatory capture. It is also a matter of great importance for the well-functioning of the markets, to ensure the ability and willingness of consumers to switch in response to price signals. In every competitive market a determining consumer behaviour such as the threat of switching supplier exercise competitive pressure on suppliers. Accordingly in case that switching is hindered, new entrants would be prevented from entering the market, with the assumption that it would be very difficult to convince consumers to change their current provider. Hence the effectiveness of competition is diminished.\footnote{European Commission, The economic impact of enforcement of competition policies in the functioning of EU energy markets, Publication Office of the European Union, 2016, p. 76}

The necessity for efficient unbundling of networks as a requirement for properly functioning of EU energy markets is not a theoretical discussion but it was validated by the findings of the Sector Inquiry. The above findings verify that the vertical integration of network and supply business produces a conflict of interest that leads not only to distortion of investment incentives but also to discriminatory access for competitors to the networks. The current unbundling provisions required by the Second Electricity and Gas Directive are not sufficient, as it has become evident. This point of view was also shared among others by the European Parliament and the European Council. Although in some jurisdictions EU Regulations were fully transposed into national law, there is still a conflict of interest, which is at the bottom of many competition issues observed. The slow pace of market integration and the low development in cross border trade that is detected in EU electricity markets is the outcome of the inadequacy of the present unbundling demands.

The recent third legislative package of the Commission targets to encourage and develop competition in the energy markets competition by introducing ownership unbundling throughout the EU at the level of transmission systems. In accordance to the provisions of the articles of Third Package, unbundling is the most straightforward; most adequate and solid solution to refer to the deep-rooted conflict of interest that infects so deeply vertically integrated TSOs. In addition, it is a legislation that has already been effectively implemented by many Member States. Currently, there is no legal barrier that could hinder the Community from fully implementing it and as it has been evident by now it would be a considerable contribution to the integration of the European energy market, since it provides more investment into the network, a lower cost for network users, and more competition on the supply part. However, there is a growing perception that the effort to improve legal and management unbundling is condemned to be ineffective unless there is a minimum separation that at least bifurcates network ownership from every aspect of the operation of the network. In order to refer efficiently to the above issue, the alternative of a derogation from ownership unbundling was proposed, namely the "deep" form of ISO model containing all operations of the network operator, including investments. Following the above there is no doubt that the full
achievement of the ISO model should be assured by some more precise additional rules and continuing regulatory oversight that would both constitute heavy instruments aiming to achieve the same goal. The effective unbundling will answer many problems but certainly not all, since it is a crucial but not sufficient condition for establishing integrated and competitive markets. As mentioned above, solid and permanent regulation are also necessary to safeguard that unbundled TSOs, which after all until now operate a monopoly structure, enhance the efficiency of their operations and diminish tariffs. In national level, regulators of every country should have efficient powers and be totally independent, since it is important to have a framework within which they can collaborate and improve further the cross border cooperation that is currently unsatisfactory.

All the above measures are required in order to establish integrated and competitive energy markets in the EU for the benefits of its citizens. The present legal framework has generally discharged the vertically integrated energy companies from price regulation and other restrictions, however this has not resulted in effective competition as was expected by liberalization. The Target of the Commission is to assure that competition is actually established and as a result consumers would have the possibility to receive the expected benefits from liberalization.56

To sum up, taking into consideration the necessity of energy to modern life, it is crucial to ensure that every energy consumer has reliable access to supply at competitive prices. As discussed in the above chapter 2 of the present dissertation thesis, the current situation of Greek energy markets is not in compliance with EU competition law. However, small steps are taken and a slow transformation of the markets is noted. The element of competition is very important for every well-functioning market and monopolies create unequal conditions and distort competition. The conclusions of the Greek lignite case (as analysed in chapter 3.1) confirm the same. As a reference model, Greece could use the UKs’ energy markets example that commenced the liberalization process in 1980s’ and currently has one of the highest levels of consumer participation in the supply market in the world. Greece as member state of the European Union implemented the regulatory framework of the EU regarding electricity markets and the latest legislative package of the EU has been proved very effective as noted. Even though the EU took considerable effort in the direction of liberalizing the electricity market, there are some significant impediments towards this direction in Greece. Alongside the vague and unstable national regulatory framework and the low profit margins expected, consumers’ scepticism and lack of political will due to conflict interests deteriorate the situation. Therefore, the situation of Greek electricity market demonstrates that reform in Greece is still at initial stages and many steps should follow in the future. However, despite the discrepancies observed in the Greek regulatory framework, one by no means can establish the argument that the Greek electricity market performs badly.57 In order to perform even better to overcome the aforementioned barriers, aside from the need of strong commitment on behalf of Greek authorities, it is crucial to set a solid ground of requirements for switching procedures that would create confidence to consumers. Greece’s energy sector is considered an attractive domain for both domestic and foreign investment, a coefficient that could promote and develop the Greek economy’s competitiveness significantly, especially considering the present market

conditions. Therefore, the development of the energy market is crucial for Greece’s development model, which aims at creating wealth by maximizing domestic potential.\textsuperscript{58}

\textsuperscript{58} Euripides Ioannou and Dimitra Paclouti, Editor: David Schartz, The energy Regulation and Market Review- Greece, Chapter 9, Law Business Research Ltd, 2012, p.108
BIBLIOGRAPHY

Primary Sources


Secondary Sources

Books

Bausch Camilla, Netznutzungsregeln im liberalisierten Strommarkt der Europäischen Union, Eine rechtsvergleichende Untersuchung der europäischen Vorgaben sowie der Regime in Deutschland, Frankreich und England/ Wales unter besonderer Berücksichtigung der “Essential Facilities” Doktrin, Baden Baden, 2004


Helm Dieter, Jekinson Tim, Competition in Regulated Industries, Oxford University Press, 1998


Πολέμης Λ. Μιχαήλ, Ανταγωνισμός στις σχετικές αγορές Ηλεκτρικής Ενέργειας στην Ελλάδα: Ουτοπία ή Πραγματικότητα;, Ενέργεια, Δίκτυα και Υποδομές, Νομική Βιβλιοθήκη, 2014

Journals

Ahlert Martin, Haas de Samuel, Prof. Gotz Georg, Thibault Henri, Christian Lebelhuber, Lazlo Szabo, STUDY ON “BARRIERS TO CROSS-BORDER ENTRY INTO RETAIL ENERGY MARKETS”, E-Bridge Consulting, Bonn, Germany. 23 July 2014
Alexiadis Peter and Georgiopoulos Ilias, The Greek lignite case, Article 106 TFEU rebooted against firms with special exclusive rights, Competition Law Insight, 14 October 2014


Νταγκουμας Αθ., Δ. Λαμπιριδης, Π. Μπισκας, Π. Ντοκόπουλος, Η αγορά Ηλεκτρικής Ενέργειας της Ελλάδας, Τεχνικά Χρονικά, Σεπτέμβριος-Οκτώβριος 2004

Others

Case C-553/12 P

Deal News, To Deal Ήρων- Wind -“Ανακατατάξεις στα μερίδια”, Παρασκευή 29 Ιουλίου 2016


Frontier economics, Competition and entry in the GB electricity retail market, A REPORT PREPARED FOR ENERGY UK, January 2011

Merino Rafael, Dissertation thesis in Liberalization of the Electricity Industry in the European Union, Faculty of Law, School of Social Sciences, Haskoli Islands, January 2013


Electronic Sources

DG-Grid Project’s homepage: http://www.dg-grid.org/


www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuld=FTU_5.7.2html


MacroPolis, NOME auctions as a mechanism to strengthen competition in the Greek Electricity Market, 27.10.2016, http://www.macropolis.gr/?i=portal.en.legal.4603


POYRY, Greek electricity market design study, December 2014, http://eletaen.gr/wp-content/uploads/2015/11/20151103-%CE%95%CF%80%CE%B9%CF%83%CF%84%CE%BF%CE%BB%CE%B7-%CE%A5%CE%A0%CE%95%CE%9D-%CE%A3%CF%85%CE%BD%CE%B7%CE%BC%CE%BC%CE%AD%CE%BD%CE%BF-2-GreekMarketDesign_Report-Dec-2014.pdf

POYRY, Greek electricity market design study, December 2014, http://eletaen.gr/wp-content/uploads/2015/11/20151103-%CE%95%CF%80%CE%B9%CF%83%CF%84%CE%BF%CE%BB%CE%B7-%CE%A5%CE%A0%CE%95%CE%9D-%CE%A3%CF%85%CE%BD%CE%B7%CE%BC%CE%BC%CE%AD%CE%BD%CE%BF-2-GreekMarketDesign_Report-Dec-2014.pdf