

# EUROPEAN PARLIAMENT



## ***DIRECTORATE GENERAL FOR RESEARCH***

**Directorate A: Medium- and long-term Research  
Division for Industry, Research, Energy and Environment; STOA**

### ***BRIEFING***

**ENER 501 EN**

### **THE LIBERALISATION OF THE GREEK ELECTRICITY MARKET**

*The opinions expressed are the sole responsibility of the author  
and do not necessarily reflect the position of the European Parliament*

This document is only available in English.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

This publication is available electronically on intranet at the following address:

**[www.dg4.ep.ec](http://www.dg4.ep.ec)**

---

### Summary

The Greek electricity market has been traditionally shielded from liberalisation for various reasons, namely military security, long established policy of state intervention in economic planning, energy efficiency, nature of energy supplies and resources, isolation from Europe's major energy networks and existence of small autonomous systems in insular Greece.

Thus, the introduction of competition policy considerations in the Greek energy market is a relatively recent phenomenon, emanating from EU regulations and policies.

The aim of this paper is to examine the process of liberalising the Greek electricity market, in the light of EU regulations, in particular the so called electricity directive 96/92. The paper also tries to give a short overview concerning the Greek energy situation in general.

---

**Publisher**        European Parliament  
L-2929 Luxembourg

**Author:**         Dimitris Loukas (former Robert Schuman scholar)

**Editor:**         Peter Palinkas  
Directorate General for Research  
Division Industry, Research, Energy and Environment; STOA  
Tel: (00352) 4300-22920  
Fax: (00352) 4300-20016  
E-Mail: [ppalinkas@europarl.eu.int](mailto:ppalinkas@europarl.eu.int)

**TABLE OF CONTENTS**

	<b>Page</b>
1. Introduction .....	5
2. EU Liberalisation policy in the energy sector .....	5
2.1 Introducing Competition Parameters in EU Power Market: Towards an Internal Market in Energy .....	5
2.2 Directive 96/92 .....	6
3. Case study: Greece .....	8
3.1 Introduction to the Greek Electricity Sector: The Public Power Corporation of Greece .....	8
3.2 Greece's Energy Legal Framework: The Gradual Process of Liberalisation and the Implementation of Directive 96/92 .....	10
3.3 Considerations: The Political Background and the Deregulation in Practice ..	13
4. Conclusions.....	16
Annex 1 .....	17
Annex 2 .....	18
Bibliography .....	19



## **1. INTRODUCTION**

The aim of this paper is to examine the process of liberalising the Greek electricity market, in the light of EU regulations, in particular the so called electricity directive 96/92.

In the first part of the paper, EU deregulation policy in the energy sector is presented with reference to the Commission's initiatives, as well as to the implementation of EC Treaty regulations and the directive 96/92. In the second part of the paper, the Greek case is examined: Following an introduction to the Greek electricity sector, there is a description of Greece's legal framework in the field, focusing on the implementation of the directive 96/92 by the enactment of the legislative act 2773/21-22.12.99 and other relevant legislative initiatives. The presentation is supplemented by allusion to policy considerations arising from Greece's energy policy planning. Lastly, there is reference to the political background and the deregulation process in practice. In this context, recent developments directly connected to the liberalisation procedure are outlined.

## **2. EU LIBERALISATION POLICY IN THE ENERGY SECTOR**

### **2.1 Introducing competition parameters in the EU power market: towards an internal market in energy**

Electricity production in the EU has for years been based on monopolistic policies and practices in 15 separate national markets. This was due to the technical characteristics of electricity as a good as well as due to the diversity and monopolistic nature of national systems. The adoption of the community directive 96/92<sup>1</sup> signals the consolidation of competitive norms for electricity trade and production across the EU. The 19th February 1999, time stipulated for the implementation of the directive, is described by the Commission as a milestone for the single market of electricity in the European Union.

There is a plethora of reasons behind the Commission's initiative to inaugurate a new era in the electricity sector by opening up the markets to competition: competitive forces in the electricity market is expected to increase efficiency and ensure consumers low prices, freedom of choice and better services. The lower prices for electricity will result in lower production costs and, consequently, European industries are bound to become more stable and competitive in global markets. The process of liberalisation and the creation of an internal electricity market will remove inter-state barriers, thus fostering economic growth and trade. A new interconnected market requires less expensive reserve capacity. Moreover, the establishment and maintenance of the internal market has indubitably been the corner-stone of EU's legislation, policy and practice.

Competition and internal market rules of the EC-Treaty, namely Art.81, 82 and 86 ECT as well as Arts.28 et seq.<sup>2</sup>, applicable also to the electricity sector, define the legal framework for the

---

<sup>1</sup> OJ 1997 L 27.

<sup>2</sup> Art.81 ECT (ex Art. 85), Art.82 (ex Art.86), Art.86 (ex Art.90) applying to undertakings (rules on competition) and Arts.28 et seq on prohibition of quantitative restrictions between Member States.

function of all 15 electricity markets<sup>3</sup>. In respect to the application of competition provisions to electricity supply undertakings, the Commission has in many cases, such as the Scottish Nuclear<sup>4</sup>, the Jahrhundertvertrag-decision<sup>5</sup> and the Ijsselcentrale-decision<sup>6</sup>, demonstrated its determination to enforce these rules in the electricity market, while being reluctant to accept a wide interpretation of the derogation clauses Art. 86(2)<sup>7</sup>. In this context, exclusive purchasing obligations and import/export monopolies are often considered by the Commission as infringements of the Treaty. The European Court of Justice (ECJ), although proclaiming the general applicability of the Treaty provisions in the electricity sector, seems more willing to accept "deviations" on the basis of Art.86(2) (ex Art.90(2)) or Art.30 (ex Art.36). In C-72/83 *Campus Oil et al v. Minister of Industry and Energy* [1984] ECR 2727 and C-393/92 *Almelo v. Usselmij* [1994] ECR I-1477 the ECJ invoked security of supply as a reason to mitigate market liberalisation<sup>8</sup>.

## 2.2 Directive 96/92

The electricity directive 96/92 sets out the legal framework for the liberalisation of the electricity market allowing a large latitude of choice to the member states. The promotion of an internal market in the electricity sector is pursued by putting forward minimum conditions under which fair and transparent competition could develop, rather than establishing a single market structure.

The main provisions of the directive 96/92 comprise: a) the abrogation of exclusive rights in electricity generation, b) the designation of a transmission system operator, c) the gradual liberalisation of the market, achieved through the definition of "eligible customers", d) the regulation of access to the system, e) the unbundling and transparency of accounts presented by electricity undertakings.

Arts. 4-6 of the directive regulate the construction of new generating capacity. Member States may choose between two different procedures or mixes of the procedures, namely the authorisation process or the tendering process. Any procedure chosen should be conducted in accordance with objective, transparent and non-discriminatory criteria. Under an authorisation procedure, any firm may build and operate a new generation plan, provided that it complies with the authorisation rules specified by the member state in question. Alternatively, under a tendering procedure, an independent body shall draw up an inventory of new means of production, based

<sup>3</sup> For an analysis of the EC-Treaty application to the electricity sector see E.Pfrang, "Towards liberalisation of the European electricity markets", *Schriften zum Staats- und Völkerrecht*, Band 80, 1999, p.23 et seq.

<sup>4</sup> OJ 1991 L 187.

<sup>5</sup> OJ 1993 L 50.

<sup>6</sup> OJ 1991 L 28.

<sup>7</sup> Art. 86(2) -ex Art. 90(2)- reads as follows: Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in this Treaty, in particular to the rules on competition, insofar as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Community. According to Art.30 -ex Art.36- restrictions may be "justified on grounds of public morality, public policy or security".

<sup>8</sup> For a presentation of relevant ECJ case law see E.Pfrang, "Towards liberalisation of the European electricity markets", *Schriften zum Staats- und Völkerrecht*, Band 80, 1999, p.40 et seq.

on long-term forecasting of electricity demand and replacement capacity, and the requisite capacity will be allocated by a tendering procedure as outlined in Art.6.

Bearing in mind that the European markets are largely dominated by vertically integrated electricity companies that generate, transport and sell electricity, the smooth transition from centralised monopolies to deregulated markets requires the establishment of unbundling procedures in order to separate the production and supply of electricity from the transmission and distribution operations. In order to avoid cases of discrimination, the directive encourages the member states to promote measures, which ensure management unbundling of the transmission system operator, accounting separation of transmission and distribution activities from the rest of the company's services and confidentiality of information between the parties involved.

The ability of the agents and eligible customers to access the electricity lines is a prerequisite for competition to function in practice. The transmission and distribution networks are treated as natural monopolies. The grid administrator and system operator must be independent of generation undertakings and access to the grid should be fair, transparent and non-discriminatory. The directive regulates (Arts 16-18) third party access (TPA) to the network, by providing for negotiated or regulated third party access and by adopting the single buyer concept as an alternative. In the spectrum of Negotiated TPA, each generator negotiates the terms of access to the network with the system operator in order to sell its electricity directly to eligible customers. The contracts are concluded on the basis of voluntary commercial agreements. Under Regulated TPA, tariffs for network access are set by the designated authorities and apply to all interested parties. Lastly, according to the single buyer alternative, only a single body can purchase and sell electricity within an area covered by the system operator. Germany, Greece and Denmark have opted for the Negotiated TPA system while all other member states have applied the Regulated TPA procedure.

The liberalisation process is gradual and is promoted by the application of the "eligible customer" concept. The policy objective is to open up in a step by step approach the electricity market to large and medium-sized electricity consumers, who will be able to choose their electricity supplier. The process will be initiated by granting very large consumers the above mentioned right to choose their supplier. The directive stipulates that from February 19th 2000 at least 26% of the national electricity demand must be liberalised. The percentage will be raised to 28% by the year 2000 and it will eventually reach 33% of national electricity demand by February 19th 2003. Thus, the directive allows member states a large margin of choice in terms of deregulation time-planning, accommodating and compromising in this way different tendencies inside the Union. In practice, the liberalisation proceeds faster than envisaged and the average EU percentage of electricity market opening is calculated at 65% (see annex).

Certain stipulations of the directive, namely Art.19(5), Art.3(3) and Art.24(3), provide member states with the possibility of exempting certain undertakings from the application of its rules. The exemption clauses of Art.19(5) and 24(3) are respectively of transitional nature and of limited significance to the overall output. Art.3(2), by invoking the notion of "general economic interest", provides for a permanent exemption of certain electricity undertakings from the application of the directive's provisions, thus mitigating the liberalisation process and raising concerns over the distortion of internal market practices. However, the approach of Art.3(2) is justified in the context of the EU's attempt to compromise all different interests of the member states and is

consistent with similar exemption provisions of the Treaty, such as Art.90(2) ECT. Furthermore, Greece, Belgium and Ireland were granted transitional exemption clauses: Greece was granted a special derogation of two years due to the specific technical characteristics of its electricity system which is made up of several isolated island systems, operating independently of the national grid.

Art.26 provides for a review of the directive's application on the basis of the experience gained on the functioning of the internal electricity market in an attempt to further open the electricity sector to competition.

The Commission in its recent communication to the Council and the European Parliament on progress with building an internal electricity market<sup>9</sup> suggests mechanisms to facilitate the functioning of the market and encourages member states to step up their efforts in this direction. Non-discriminatory cross-border transmission pricing and an effective congestion management system are considered crucial for the further development of the internal market. The report welcomes the efforts of the so called "Florence Process"<sup>10</sup>, which have already led to an agreement on cross-border pricing and have laid the foundation for addressing congestion issues. Lastly, the report underlines that the liberalisation process does not impair the provision of electricity as a public service and that employment prospects need to be taken into consideration.

### **3. CASE STUDY: GREECE**

#### **3.1 Introduction to the Greek Electricity Sector: The Public Power Corporation of Greece (PPC)**

The introduction of competition policy considerations in the Greek energy market is a relatively recent phenomenon, emanating from EU regulations and policies, as well as from Greece's determination to converge with EU economies and to participate actively in the Economic and Monetary Union<sup>11</sup>.

The Greek electricity market has been traditionally shielded from liberalisation for a plethora of reasons, namely military security, long established policy of state intervention in economic planning, energy efficiency, nature of energy supplies and resources, isolation from Europe's major energy networks and existence of small autonomous systems in insular Greece. The electricity sector is dominated by the Public Power Corporation of Greece (PPC), a vertically-integrated monopoly, who has, since its founding 1468/50 legislative act, the exclusive right of producing electric energy from any source, as well as transmitting and distributing it in the entire

---

<sup>9</sup> COM (2000) 297 final.

<sup>10</sup> The "Florence Process" is a forum with representatives of the Commission, the national administrators, the council of European regulators and the association of transmission system operators set up to facilitate the transition to a competitive electricity market.

<sup>11</sup> Greece has been accepted as the 12th member of the Eurozone at the Feira EU Council on June 19th, after meeting all the Maastricht treaty convergence criteria.

country. The history and operation of the enterprise reveal the determinative state involvement in many areas of economic activity in Greece, an economic model followed since the Second World War in an attempt to reconstruct the economy. Central energy planning was necessary to ensure efficiency of supplies and fast expansion of the network. The role and structure of the PPC can be understood only in relation to Greece's public social policy at the time, a policy aiming at the modernisation of the economy and at the raising of standard of living. In this context, it is obvious that any assessment of the company's course was made on the basis of social policy criteria, rather than of sound economic performance. Bearing in mind the country's economic instability, limited natural resources, lack of modernised administration and special geographic conditions, it is tenable that PPC managed to fulfil successfully its tasks and the role entrusted to her by the state and public opinion: the dynamism of the Greek economy after the Second World War was considerably fostered by PPC's energy planning and activities.

The preferential status of PPC and its dependence on government administration is apparent in Greece's energy policy and legal framework<sup>12</sup>, arising from numerous cases and examples. Even nowadays, although the Public Power Corporation of Greece (PPC) owns and operates the power units all over Greece, its tariff policy and development programme are defined by the government. The annual budget is also approved by the Ministry of National Economy. In this context, tariff policy does not reflect the company's operational costs and financial situation, but it becomes yet another tool of state anti-inflation and general economic policy. Until recently, the legal entity of PPC has been doubled-natured, operating both as a company and a social security organisation for its employees, a structure that vividly underlines the integral linking between PPC and the state. In fact, the Greek electricity market is relative to the French one and may be characterised as a closed and centralised system, where monopoly structures are still existent. Greece, as France, belongs to the EU group of states, which are still in the process of scrutinising their domestic electricity markets in an attempt to develop strategies as to how elements of competition could be introduced<sup>13</sup>.

Greece's main energy policy objective has been to limit dependency on imported oil, by increasing its installed capacity based on indigenous resources, mainly lignite and secondly hydro-electricity. The promotion of renewable energy and the introduction of natural gas for domestic use and for electricity generation has also been the focal point of the country's energy planning. In this context, agreements regarding the introduction of natural gas were signed with Russia and Algeria and the Public Gas Corporation of Greece (DEEP) was established in order to develop a high pressure transmission network. The use of renewable resources, a largely unexplored area in Greece, is promoted by the Centre of Renewable Energy Sources (CRESS) and specific legislative acts give incentives for preference to the use of renewable energy. It is estimated that energy produced from renewable sources will grow by 400% over the next few years<sup>14</sup>. The contribution of the oil field (Prunes) in the North Aegean Sea to the country's energy balance is limited.

---

<sup>12</sup> Indicatively mentioned: laws 1468/50, 1559/85, 2165/93, 2244/94, presidential decree 360//91 e.t.a. For an analysis of Greece's energy legislation see also : A.Papaioannou, "Reshaping Greece's Energy Legislation", *Journal of Energy and Natural Resources Law*, 1996, p.37.

<sup>13</sup> For an analysis of the liberalisation process in EU member states see: E.Pfrang, "Towards Liberalisation of the European Electricity Markets", *Schriften zum Staats- und Völkerrecht*, Band 80, 1999.

<sup>14</sup> Reuters Business Briefing, source: Petroleum Economist 10/1999 p.20.

The generation system of PPC, covering 98% of the total demand, consists of the following independent electric systems: a) mainland generation system (8242 MW), b) generation system of Crete (410 MW), c) generation system of Rhodes (147,3 MW), d) generation systems of small islands (399 MW)<sup>15</sup>. The transmission system in Greece consists of lines at the high voltage level of 66 kV, 150 kV and 400 kV. 70-75% of the electric generation takes place in Northern Greece, whereas 65-70% of the electricity sales are realised in South and Central Greece. The distribution system consists of medium and low voltage lines, the total length of which is 169.359 km. Both transport energy use and electricity consumption have grown at a faster pace compared to GAP than in most other YEA countries<sup>16</sup>. The permanent personnel of the utility is estimated to about 30.000 employees (excluding temporary personnel). Following government's plans for the privatisation of the company and the relevant preparatory reports, it was estimated by Goldman Sashes that PCP's "stock-exchange value" amounts to more than 2 trillion drachmas. PPC is considered the largest public utility and one of the largest state employers in Greece.

In this way, Greece's policy of structural reform of the economy, followed since 1990 in an attempt to improve the functioning of product, labour and financial markets, enhance the efficiency of public administration and reduce the role of state<sup>17</sup>, was bound to comprise initiatives for the modernisation of the utility. The agreement of July 30th 1999 between the PPC Personnel Union and the government over the social security of PCP's personnel paved the way for the reform of the company's role and structure. Furthermore, it was considered to have a positive impact in the government's overall policy of public reform, a view that demonstrates once more the weighty status of the utility in Greece's public administration status quo.

Notwithstanding the need of PCP's modernisation in the light of competitive globalise economy and Greece's EU obligations, it is to be expected that the relevant reform process will be faced with concerns related to national security, energy supplies, employment vested rights and public order.

(Note: charts regarding the status of Greece's electricity sector are presented in Annex 2).

### **3.2 Greece's energy legal framework: The gradual process of liberalisation and the implementation of directive 96/92**

Greece's contemporary energy legal framework is harmonised with EU regulations. The late introduction of liberalisation policies features, however, the reluctance of the Greek state to embark on a drastic deregulation of the electricity market, following the monopolistic tradition of the past and concerns on national security and sufficiency of supplies<sup>18</sup>. The modernised regulatory framework in the energy sector comprises the legislative act 2244/94 on electricity generation from renewable energy sources, the legislative act 2364/95 on natural gas and the

<sup>15</sup> Public Power Corporation of Greece, Production Overview, [www.dei.gr](http://www.dei.gr)

<sup>16</sup> IEA Country Reviews: Greece, [www.iea.org](http://www.iea.org).

<sup>17</sup> 1997 OECD Economic Survey of Greece, p.58-63.

<sup>18</sup> For an analysis of Greece's legal framework in the energy sector before the enactment of law 2773 see A.Papaioannou, "Reshaping Greece's Energy Legislation", *Journal of Energy and Natural Resources Law*, 1996.

legislative act 2273/99 on the deregulation of the electricity market. The legal framework is supplemented by the acts 1769/88, 2008/92 and 2289/95 with regard to the organisation and function of the petroleum market<sup>19</sup>.

The legislative act 1559/85 allowed the existence of auto-producers, mitigating for the first time the exclusive right of PPC in electricity generation. However, the electricity produced by auto-production was to be used for the auto-producer's needs only, while all unused supplies should be exclusively sold to PPC. Local governments were granted auto-production rights as well, on condition that renewable energy sources would be used and that the generated capacity would be sold exclusively to PPC. Law 2244/94 endorsed the concept of "independent producers" parallel to "auto-producers". Nevertheless, independent producers were not allowed to sell their output to third parties and all their electricity had to be exclusively sold to PPC. Furthermore, independent production was allowed under the term that certain forms of renewable energy would be used. Consequently, PPC retained the monopoly in the area of production, transmission and distribution of electric energy.

The enactment of law 2773/21-22.12.99, implementing the electricity directive 96/92, constitutes a breakthrough in Greece's energy policy. The legislative act shapes the country's electricity market on the basis of competition parameters, in an attempt to modernise the sector and converge with analogous developments in the EU markets.

The introductory report of the legislative act 2773/99 depicts in an eloquent way the intentions of the government and the model chosen for the liberalisation of the Greek energy market: the act acknowledges the need to maintain, for the time being, PPC as a powerful vertically integrated undertaking even in competitive conditions, by invoking manifold arguments pertaining to the special characteristics of the Greek energy market. At the same time, however, the report adopts the view that any delay in reshaping Greece's legal framework could result in non-transparent and discriminatory conditions, leading to possible distortions of EU competition policies and regulations. Thus, the report suggests the modification of the present status quo, by the establishment of an independent regulatory body to supervise the function of a liberalised market, by the implementation of the EU provisions and by the restructure of the Public Power Corporation of Greece (PPC)<sup>20</sup>. It is, therefore, apparent that the legislative act opts for a gradual liberalisation of the market, while the reform of the PPC is considered a vehicle in this direction. The policy objective is to introduce competition in such a way that a shock to the market is averted. The complete deregulation of the market is envisaged achievable through the modernisation of the present structures. Like Ed's role in France, PCP's contribution to the liberalisation of the electricity market is to be decisive. Nevertheless, Greece, while introducing the law 2773/99, avoided divergences from the scope and content of the directive 96/92 and did not make use of the "general economic interest" exemption clause<sup>21</sup>.

The new law puts an end to PCP's exclusive rights on electricity production. Arts 9-11 of the act,

---

<sup>19</sup> The 1992 law was enacted in order Greece to comply with a ECJ decision requiring the adjustment of the state's oil monopoly to Art.31 (ex Art.37). The act 2289/95 referring to prospecting, exploration and exploitation of hydrocarbons.

<sup>20</sup> See chapter 3.3. In this context, relevant the presidential decree 360/91, which marked the exit of PPC from the public sector, although state control was maintained.

<sup>21</sup> Art. 3(3) directive 96/92.

in accordance with Art. 4-6 of the directive, regulate electricity generation by implementing, as a general principle, the authorisation procedure. Authorisation for the construction of generating units is granted to eligible candidates on the basis of requirements and criteria set by the Code of Authorisation. The authorisation to generate electricity is distinct from the authorisation to supply that electricity to eligible consumers, for which another procedure is necessary. Holders of "generation authorisation" in Greece or in another EU member state are eligible for "supply authorisation" upon compliance with relevant regulations. For insular networks<sup>22</sup>, not connected to the main grid, Art.11 provides for a tendering process in accordance with Art.6 of the directive. In this case, PPC is the exclusive buyer of the generated electricity and, therefore, no supply permission is requested, in contrast to what is requested for producers connected to the main grid. The above mentioned mixed approach is justified by the special geographic characteristics of the country.

The legislative act (Arts.4-8) establishes the Energy Regulatory Authority (ERA), an independent body to supervise the competitive function of the electricity market, cooperate with the EU authorities on issues of its competence, opine on granting generation and supply authorisations and monitor the operation of undertakings in the electricity market. The central System Operator, in accordance with Art. 7-9 of the directive, shall oversee the system of electricity transmission and allocate the electricity demand to the available generators, while ensuring the confidentiality of commercially sensible information obtained in the course of carrying out its business. The ownership of the transmission network remains at the PPC, however, the administration and exploitation of the network is entrusted to the Transmission System Operator, a société anonyme, where the state participates with a 51% stockshare and electricity producers, namely the PPC and other private undertakings, are represented by a 49% stockshare. PPC retains ownership and management of the distribution system (medium and low voltage lines) and is to be granted a special authorisation to perform that operation. The control, monitoring and competency to apply penalties for infringements of the market regulations are all tasks entrusted to the Energy Regulatory Authority (ERA). The Transmission System Operator is responsible for drafting a Transmission Network Management Code, on the basis of which it will perform its operations in a transparent and non-discriminatory way. PPC is responsible for preparing a similar Code for the management of the distribution network. The Energy Regulatory Authority will submit its consultative response on the two Codes before approval by the Ministry of Development and promulgation to the Official Government Journal. The duties of the ERA, the System Operator and the PPC are extensively described by the legislative act, in an attempt to separate their tasks and avoid any possible conflicts. The Ministry of Development is ultimately responsible for defining the criteria, required by the law 2773/99, when granting generation, ownership and system management concessions.

Following the provisions of Art.19 of the directive 96/92, the act determines who is to be considered as "eligible customer" with the right to choose its electricity supplier by a free commercial contracting process. Par.1 of Art.25 law 2773/99 defines the above mentioned category of eligible customers, by including those consumers with a level of 100 Gwh and more annual electricity consumption, as well as those recognised by the Energy Regulatory Authority as such on the basis of criteria set by the Ministry of Development, always taking into consideration the shares of market opening required by the directive each year.

---

<sup>22</sup> Like Rhodes, Crete, Kos e.t.a..

In order to secure unbundling and transparency of the accounts and avoid discrimination, cross-subsidisation and competition distortion, the legislative act requires, in compliance with Art. 13-14 of the directive, that the PPC, as a vertical integrated undertaking, and all other similar undertakings, performing two or more of the functions of generation, transmission and distribution of electricity, keep separate accounts for their activities, as they would be required to do if the activities in question were carried out by separate undertakings. Companies must specify in notes to the annual accounts the rules for the allocation of assets and liabilities and expenditure and income.

The presidential decrees, envisaged by the law 2773/99 and needed for the implementation of the new regulatory framework, are at the moment prepared and will be examined by the High Administrative Court (Conseil d'État) in due time<sup>23</sup>. They refer to the statutes and operation schemes of the PPC, of the Transmission System Operator and of the new PPC Personnel Social Security body<sup>24</sup>.

### 3.3 Considerations: The political background and the deregulation in practice

Greece's approach to the electricity sector, marked by the enforcement of the directive 96/92 and the announced plans for the privatisation of PPC, is consistent with its overall approach to structural reform of the economy in the spectrum of the country's participation in the European Union. The policy objective is to reduce the role of the state, introduce private capital, introduce competition at a rate consistent with market growth and improve the functioning of the state-owned Public Power Corporation of Greece (PPC)<sup>25</sup>. It is argued that the implementation of these measures will maximise recent economic achievements and consolidate the country's position in the Economic and Monetary Union. The deregulation of the electricity market may be characterised as gradual and cautious, as a result of concerns pertaining to the notion of public interest and as a result of the government's declared intention to avoid social conflicts.

Following the introduction of law 2773 / 21-22.12.99 (art. 4-8), the Ministry of Development appointed on May 29th 2000 the members of the new, independent authority to oversee the deregulation and transition of the country's energy sector to competition. The establishment of the authority falls within the context of the country's harmonisation with directive 96/92 and is considered a prerequisite for structural changes. The Energy Regulatory Authority (ERA), comprising a five-member committee chaired by P.Kapros, is envisaged as a body that will facilitate and supervise the energy sector's liberalisation, while serving the public interest and safeguarding quality services to consumers. Committee members are energy experts

<sup>23</sup> Reference to the Greek press of June 27th 2000, namely *Eleftherotypia*, *Kathimerini*, *Naftemporiki* and *In.gr-News*

For criticism on the delay of the decrees' enactment see financial review *Oikonomikos Tahidromos* of May 13th 2000 p.23 et seq, for criticism on the government's overall policy in the electricity sector see *Rizospastis* and *Eleftheros Typos* of June 11th 2000.

<sup>24</sup> The introduction of the decree, regulating the new PPC Personnel Social Security body, followed an agreement reached on July 30th 1999 between the Ministry of Development and the General PPC Personnel Union.

<sup>25</sup> IEA Country Reviews: Greece, [www.iea.org](http://www.iea.org)

G.Koutzoukos and G.Argyropoulos as well as energy professors G.Siouti and M.Papadopoulos<sup>26</sup>. Meanwhile, D.Papoulias was appointed the new president of the Public Power Corporation of Greece and A.Papathanasiou first president of the Transmission System Operator.

The above mentioned developments were welcomed by the European Commission<sup>27</sup> and the OECD<sup>28</sup>. However, both institutions expressed some concerns regarding the function of the competitive market in practice, bearing in mind PPC's dominant position, Greece's electricity market characteristics and the existence of energy company oligopolies. As mentioned in the recent Commission's report<sup>29</sup>, experience has shown that the degree of liberalisation provided for in the legislation is not necessarily matched by actual developments on the market. Initiating a procedure of "benchmarking", the Commission, with the support of EUROSTAT, will, therefore, develop indicators to assess the degree of true competition on the national markets as well as on the Community market as a whole. In the case of Greece, such a process could reveal the specific technical and other particularities that render the deregulation of the Greek electricity sector difficult in practice.

Irrespective of Greece's legal framework for the liberalisation of the electricity market and the compliance with EU rules, the serious question remaining is how the liberalisation will be implemented in practice. According to the expressed criticism<sup>30</sup>, PPC has been effectively inert and largely ignorant of the directive for four years. The required legislation (law 2773 and implementation decrees) was introduced less than a year before the deadline of February 19th 2001<sup>31</sup> and warnings of a serious jolt are increasing daily. Aside from concerns over the implementation process, Greece's special energy sector characteristics point towards a delay in the functioning of an open and competitive electricity market. According to recently published reports<sup>32</sup>, PPC is expected to retain its dominant position in the electricity market. This is due to PPC's technical expertise and ownership of natural resources, the heavy investment required to initiate electricity generation and its long term depreciation, the relatively small size of Greece's energy market, geographic conditions and the consequent existence of small autonomous systems in islands, the fact that there is no connection with European networks, the internal energy supplies and balance, as well as the lack of sufficient natural gas supplies to sustain private initiatives in electricity generation.

Nevertheless, the gradual liberalisation of the electricity market in connection with positive estimations on its continuing growth<sup>33</sup>, the impending awarding of contracts to create natural gas networks in a number of cities and Greece's high-powered presence in the Balkans have

---

<sup>26</sup> Details on the government's announcements presented in Greek press of May 30th 2000.

<sup>27</sup> Commissioner Loyola de Palacio expressed the Commission's satisfaction over the Greek programme of electricity liberalisation and the relevant government initiatives on June 18th 2000 at an Athens Ministerial Conference.

<sup>28</sup> OECD -EU Meeting on the recent developments in the European energy markets, Paris, 17th June 2000.

<sup>29</sup> COM (2000) 297 Final, "Communication from the Commission on recent progress with building the internal electricity market", 16.5.2000.

<sup>30</sup> Business & Finance pages, *Kathimerini*, May 12th 2000.

<sup>31</sup> Greece was granted a special derogation of two years in order to comply with the EU electricity directive 96/92.

<sup>32</sup> I.e. Merrill Lynch report on the liberalisation of the Greek energy market for the Ministry of National Economy, presented in the financial review *Oikonomikos Tahidromos* of June 24th 2000.

<sup>33</sup> Annual growth of 4,6 % during the past 20 years.

mobilised the private sector<sup>34</sup> and company alliances have emerged. In electricity generation, the participation of Prometheus Gaz (Copelouzos Group and Russian Gasprom) and Enercom (Intracom, Elliniki Technodomiki and Aktor) is considered almost certain. Exxon-Mobil, Chevron, Eni, Enel, Italgas, National Power, Shell and Bechtel Power have already expressed their interest. The signing of a deal between Latsis Group and Gaz de France, preceded by the agreement between construction companies Aktor and Avax, on one side, and the Italian power utility Enel on the other, are indicative of these tendencies as well. The Energy Regulatory Authority (ERA) approved on July 10th 2000 the construction of the first private generation unit by Solinourgia Korithos in Central Greece<sup>35</sup>. Although the capacity of the new oil-generated power unit is limited (15MW), the decision, if ratified by the Ministry of Development, will mark the end of PPC's monopoly in electricity production. On July 24th 2000, the Energy Regulatory Authority (ERA) decided on the guidelines and requirements that prospective electricity generators need to address when applying for generation authorisation. The relevant application shall include a technical description of the project in question, a project viability report, an estimate on the use and demand of the generated capacity and the operational schema of the new unit.

The modernisation of the Public Power Corporation of Greece (PPC) has been always deemed a milestone in state's plans of structural reform of the energy sector. The intention of the government to partly privatise the utility by introducing stocks in the Athens Stock Exchange was repeated at the government's 4-year action plan in Parliament<sup>36</sup>. However, no deadline was set up and the process was presented as contingent upon global market conditions. Merrill Lynch and Dresdner Kleinwort Benson in their recent reports, prepared for the Ministry of National Economy, emphasised the need for a rapid restructuring of the company. According to their estimations<sup>37</sup>, the debt of the company amounts to 1,5 trillion drachmas, the utility's operational costs are considered very high, while PPC's net yield of capital seems low in comparison with other electricity corporations. The reports raise concerns over the company's tariff policy, still defined by the government, as well as over the modernisation action plan. Notwithstanding the above mentioned data, the dominant presence of the utility is underlined.

The restructuring of PPC<sup>38</sup>, as announced by the Ministry of Development and presented in Greek press, entails the conversion of the corporation into a holding company with subsidiary firms (introducing a split in the utility's activities and services). 51% of the holding company will remain under state control and a percentage (up to 48%) will be privatised. The legal status of the controlling and the daughter companies will be the one of société anonyme (joint-stock company). The plan provides for the formation of 4 basic enterprising units and of 4 supportive enterprising units. The framework of the subsidiary firms comprises a company of lignite mines and generation, a company of transmission and distribution, a company of commerce and construction, a company of units operation - dispatching, a company of consultancy and investment, a real estate company and a telecommunications company. At the end of 2001, the

<sup>34</sup> For details see *Reuters-Kathimerini* (6.12.1998 p.69), *To Vima* (12.6.2000), *In.gr-News* (3.6.2000), *Ta Nea* (15.7.2000).

<sup>35</sup> *In.gr-News* (13.7.2000).

<sup>36</sup> Monday, April 24th 2000.

<sup>37</sup> Presented by the financial review *Oikonomikos Tahidromos* of February 17th 2000 p.15 and June 24th 2000 p.88.

<sup>38</sup> The relevant presidential decree is currently examined by the High Administrative Court (Conseil d'Etat) and is expected to be published in the official journal of the government in due time.

subsidiary firms will be in turn privatised, introduced to the Stock Exchange or encouraged to participate in alliances with foreign corporations.

The general framework of perspectives for the Greek electricity market<sup>39</sup> are largely dependent on decisions and planning connected to: a) attempts to stabilise and develop the Greek economy in terms of converging with the EU economies, b) the evolution of EU competition, energy and environmental legislation, c) the structural reform of the Public Power Corporation of Greece (PPC), d) the introduction of competition policy considerations in the energy sector and e) political stability and economic co-operation in the Balkan region.

#### 4. CONCLUSIONS

European Union liberalisation policy in the energy sector, underpinned by the Commission's practices, policies and legislative initiatives, has been for years gradually introducing competition parameters in the European power market. The enforcement of the so-called electricity directive 96/92 marks a breakthrough in the EU energy policy, featuring competitive practices as the Union's priority, in an attempt to create an internal market in energy.

By the introduction of the legislative act 2773/99, Greece complied with the directive 96/92, thus harmonising its legal system with EU regulations and policies. Although the reluctance to proceed rapidly with the deregulation of the electricity sector, the new regulatory framework introduces cautiously competition in the electricity sector, trying to accommodate at the same time concerns based on public policy, Greek energy status quo and the country's special characteristics, without deviating from the scope and provisions of the directive and without making use of exemption clauses. In practice, the liberalisation process will be gradual and no vast alterations are expected, bearing in mind PPC's dominant position as well as the singularity of Greece's energy sector. However, these considerations do not, in any way, diminish the importance of the new legislative framework, which may be considered radical for the Greek energy market tradition and standards.

---

<sup>39</sup> For a presentation of the Greek electricity market before the implementation of directive 96/92 see also "Perspectives of the Greek electricity market", European Commission, DG XVII, contract no.2600/E/93-005.

**ANNEX 1****OPENING OF THE MARKET BY MEMBER STATE**

	Market Opening	Competition generation	Unbundling transmission	Network access
Austria	30%	Authorisation	Legal	Regulated
Belgium	35%	Authorisation	Legal	Regulated
Denmark	90%	Authorisation	Legal	Regulated
Finland	100%	Authorisation	Ownership	Regulated
France	30%	Authorisation	Management	Regulated
Germany	100%	Authorisation	Management	Regulated
Greece	30%	Authorisation	Management	Regulated
Ireland	30%	Authorisation	Legal	Regulated
Italy	30%	Authorisation	Legal	Regulated
Netherlands	33%	Authorisation	Legal	Regulated
Portugal	30%	Tendering	Legal	Regulated
Spain	45%	Authorisation	Legal	Regulated
Sweden	100%	Authorisation	Ownership	Regulated
UK	100%	Authorisation	Ownership	Regulated
EU	65%			

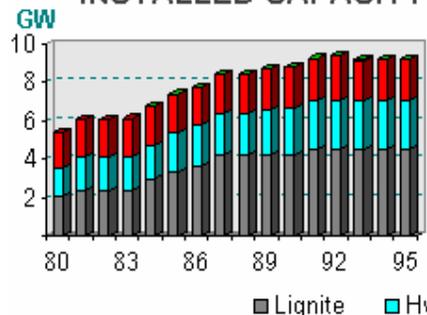
Note: When the table was drawn up Luxembourg had not yet implemented the Directive

Source: "Communication from the Commission to the Council and the European Parliament on the recent progress with building the internal electricity market", COM (2000) 297 final.

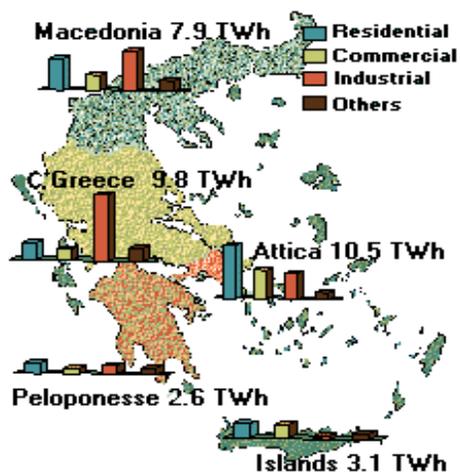
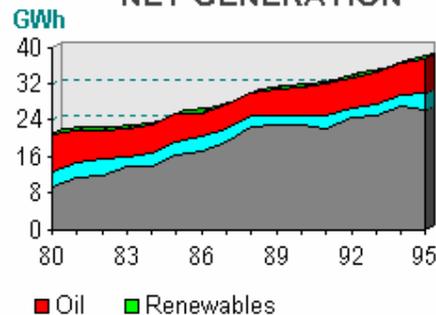
ANNEX 2

ELECTRICITY IN GREECE: MAIN INDICATORS

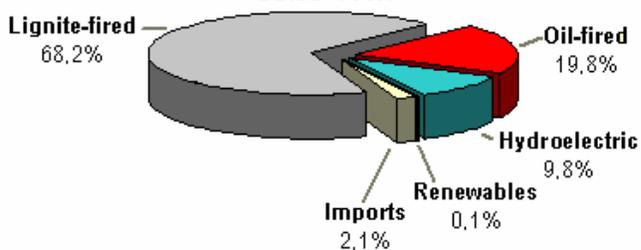
INSTALLED CAPACITY



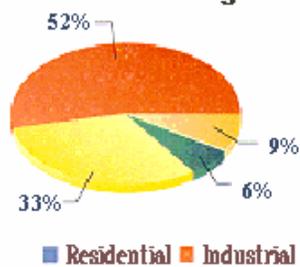
NET GENERATION



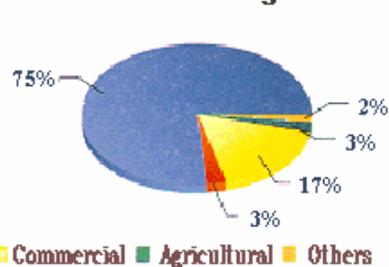
Electricity Supply



Medium Voltage



Low Voltage



## BIBLIOGRAPHY

1. Law 2773 / 21-22.12.99 & introductory report, Greek Parliament
2. Directive 96/92, European Commission
3. "Energy stock exchange", *Isotimia*, 3/6/2000
4. "Liberalisation of the markets; the new challenge", *To Vima*, 28/5/2000
5. "Government plans for electricity and gas", *Ingr-News*, 18/6/2000
6. "OECD concerned over liberalisation plans", *Ingr-News*, 8/6/2000
7. "EU satisfaction over liberalisation plans", *Ingr-News*, 2/6/2000
8. Speech of Development Minister in Greek Parliament, 24/4/2000
9. "New regulatory body to open energy market", *Kathimerini*, 30/5/2000
10. "Reforms in labour, energy", *Kathimerini*, 12/5/2000
11. "EU wants faster electricity market deregulation", *Kathimerini*, 12/5/2000
12. Speech of PM Simitis in the Development Ministry, 30/6/2000
13. Short evaluation Report of the former PPC Director General, Public Power Corporation of Greece, 2/6/2000
14. "Energy sector still under state intervention", *Oikonomikos Tahidromos*, 13/5/2000
15. "PM Simitis decided; Is PPC capable ?", *Oikonomikos Tahidromos*, 17/2/2000
16. "Privatisation of the Public Power Corporation", *Eleftherotypia*, 27/6/2000
17. "Privatisation of the Public Power Corporation", *Kathimerini*, 27/6/2000
18. "PPC is privatised", *Ta Nea*, 27/6/2000
19. "The new Greek energy map is ready", *To Vima*, 11/6/2000
20. "PPC is not ready to compete", *Eleftheros Typos*, 11/6/2000
21. "The EU and the government destroyed PPC", *Rizospastis*, 11/6/2000
22. "The PPC will privatise some of its power units", *Isotimia*, 10/6/2000
23. "PPC Overview", *Internet pages, www.dei.gr*
24. "Deregulation and regulation in the European Power Market", *EP Library MF-134839*
25. "Electricity Reform in Denmark", *EP Library MF-134166*
26. "Liberalisation, Reciprocity and Electricity in the EU", *EP Library MF-131936*
27. 2nd report from the Commission to the Council and the EP on the state of liberalisation of the energy markets, European Commission, COM/99/0198/FIN
28. "Situation and prospects of gradual realisation of common electricity market after the enforcement of the liberalisation directive", *EP Library MF-130248*
29. "Towards an Internal Market in Energy", *EP Library MF-129496*
30. "An overall view of energy policy & actions", COM/97/167/FIN, EP & ESC Opinion
31. "Effects of deregulation policies on electricity competition in the EU", *EP Library MF-121950*
32. Papaioannou A., "Reshaping Greece's energy legislation", *EP Library MF-117419*  
*Journal of Energy and Natural Resources Law*, 1996
33. "Liberalisation of regulated markets and its consequences for trade", *EP Library MF-117418*
34. "The EU power industry. Characteristics and scope for deregulation", *EP Library MF-938499*
35. "Competition and the Internal Energy Market", *EP Library MF-94675*
36. *Overview of Greece's electricity market*, Technical Chamber of Greece, 1999

37. Pineau P.O., Hamalainen R., "The restructuring of the Finnish electricity market", *Energy Policy* 28 (2000), p.181
38. Vehmas J., "Environmental taxes on electricity: the Nordic experience", *Energy Policy* 27, p.343
39. Skytte K., "Market imperfections in Northern Europe", *Energy Policy* 27 (2000), p.25
40. OECD Reports on Liberalisation / Deregulation & Competition Policy
41. "Greece's New- Eurozone Stability Programme: 2001-2004", Ministry of National Economy, 2/7/2000
42. "Energy file: liberalisation and challenges", *Oikonomikos Tahidromos*, 7/7/2000
43. "Electricity Market Reform", *IEA handbook*, 1998
44. "Recent developments in the Greek energy sector", *REUTERS-Business*, 29/10/1999
45. "Black Sea Energy Review - Greece", *BSREC*, 2000
46. *File: Liberalisation*, Economist Intelligence Unit, KHC6ZH 20000605
47. *Perspectives of the Greek Electricity Market-Summary*, EU Commission, DG XVII
48. "Energy Market Overview", *IEA review files - Greece*
49. Pfrang E., "Towards Liberalisation of the European Electricity Markets", *Schriften zum Staats - und Völkerrecht*, Band 80
50. "Communication from the Commission to the Council and the European Parliament: Recent progress with building the internal electricity market", European Commission, COM (2000) 297 final
51. "Private interest in the Energy and the Telecommunications sector", *Ta Nea*, 15/7/2000
52. "Electricity Energy; the presidential decrees", *Naftemporiki*, 27/6/2000
53. "Presidential decrees signed", *Eleftherotypia*, 27/6/2000