



# **Liberalisation of the Electricity Industry in the European Union**

-LL.M. in Natural Resources Law and International Environmental Law -

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**HÁSKÓLI ÍSLANDS**

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## LIST OF ABBREVIATIONS

MS	Member States
EEC	European Economic Community
EC	European Community
EU	European Union
TFEU	Treaty on the Functioning of the EU
ECJ	European Court of Justice
UK	United Kingdom
US	United States
TSO	Transmission System Operator
DSO	Distribution System Operator
ISO	Independent System Operator
ITO	Independent Transmission Operator
ACER	Agency for cooperation for Reconstruction, Development and Stabilisation
CPUC	Californian Public Utility Commission
FERC	Federal Energy Regulatory Commission
OPEP	Organisation of the Petroleum Exporting Countries

## Introduction

The European quest for electricity liberalisation is not one loaded with success stories. Compelled by the Commission, MS slowly overcame their reluctance towards opening their energy industry and have restructured the sector so as to introduce competition with the aim of achieving cheaper electricity and improving the efficiency of the public services. However, at the end of the day, it is clear that liberalisation is not delivering the results expected. Moreover, it is in increasing tension with other Community objectives, such as sustainable development and the fundamental freedoms of the internal market. In this regard, it is doubtful to what extent is liberalisation the appropriate system to organise such a complex commodity as electricity.

The working hypothesis of this research is hence the liberalisation of the electricity industry and its suitability as a model to order the sector. The focus is specifically placed in assessing the effects of liberalisation, *i.e.* whether it has effectively lowered the price of electricity and whether consumers enjoy public services of better quality, and in highlighting the reasons why the electricity industry should be kept isolated from the market forces.

Having in mind the development of the liberalisation process and the three generation of electricity directives, this thesis will show that liberalisation is neglecting social and environmental considerations and that the precedent of the Californian electricity crisis is fully applicable to the European venture.

Concerning the structure of the thesis, it is divided in six parts. Part I, sets forth the background dealing with network industries and natural monopolies. Part II, titled ‘the road towards liberalisation’, depicts the evolution of the electricity sector from the Treaty of Paris until the Second Electricity Directive, and establishes the legislative framework according to which the liberalisation has been undertaken in each stage. Particular mention is given as regards the origin of liberalisation and how it stemmed from the national sphere and fructified in the European institutions. Likewise, it is detailed how the Commission engaged in adopting liberal legislation in spite of a blunt lack of competency in energy and how it further challenged traditional monopolies by borrowing legal bases from the Treaty Articles in competence or on the functioning of the internal market. Part III focuses on the actual legal

regime, *i.e.* the Third Electricity Directive. It portrays the electricity industry, while outlining where competence has been introduced, as well as the newest unbundling measures. Part IV studies whether the objectives which ultimately drove the liberalisation process have been achieved after 25 years of legislation in that regard or not. As explained below, it is contrasted with evidence that electricity prices have not only not decreased but augmented at a higher rate than the Harmonised Index of Consumer Prices. Similarly, it is established that vulnerable customers are much more exposed in a market industry and that, in spite of the ambitious EU Climate policy, there are still tangible barriers to the use of renewable sources. Acknowledging that the aims of the liberalisation project have not been met, Part V tackles three issues that alert on further opening of the electricity market: i) the achieving of sustainable development, ii) the violation of the free movement of capital and even of the general principle of equality, and iii) the precedent of the California blackout of 2000.

Finally, the concluding part provides some general remarks and comments on the interplay between liberalisation and the electricity industry, and why the story will not have a happy ending.



## Chapter I: Foreword on Network Industries

The expression ‘network industries’ refer to those economic sectors in which the products or services are delivered to the final consumers via a network infrastructure.<sup>1</sup> There are currently eight industries commonly considered as network industries: telecommunications, postal services, energy (namely, electricity and natural gas), transport (embracing urban, air and railways) and waters;<sup>2</sup> and they come to share the following features:

### *Public utilities*

It is undisputed that these industries have a strategic role within the economy of a domestic system, considering they consist of prime public utilities that are essential inputs for the functioning of both the general public and the business sector.<sup>3</sup>

In particular, electricity cannot be economically substituted by any other commodity and since its utilisation is entrenched in the more basic processes of modern society on a daily basis, there is a general interest in guaranteeing its constant supply, *i.e.* a universal service obligation. Examples of these obligations include the need to provide minimal services, good quality services at a reasonable or affordable price and uniform prices across regions or consumer groups, etc. In this context, considering the unequal bargaining power between electricity providers and small consumers as well as the scarcity of resources, such supply must be protected not only with passive measures but through positive action.<sup>4</sup>

Indeed, providing public utilities of general interest means, above all other considerations, ‘ensuring that the end consumer benefits from the widest possible range of

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<sup>1</sup> Directorate General for Enterprise and Industry – Observatory of Small and Medium Enterprises (SME), ‘*SMEs and the Liberalization of the Network Industries: Telecommunications and Electricity Markets*’, num. 3, 2003, p. 9.

<sup>2</sup> *Ibid.*, p. 10.

<sup>3</sup> KAROVA, R., ‘*Liberalization of Electricity Markets and Public Service Obligations in the Energy Community*’, Wolters Kluwer, Alphen aan den Rijn, 2012, p. 10.

<sup>4</sup> BALDWIN, R., and CAVE, M., ‘*Understanding Regulation: Theory, Strategy and Practice*’, Oxford University Press, Oxford, 1999, p. 14.

services of the best possible quality at the cheapest price. Increasing consumer or user satisfaction is the *raison d'être* of public services'.<sup>5</sup>

### *Natural monopolies*

Network industries involve a number of activities which, at least some of them, constitute a natural monopoly. For a monopoly to be found to exist in a certain industry, there has to be a single seller for the whole market, no alternative has to exist for the product and substantial barriers of entry and exit of other firms have to be present in the relevant market. Additionally, for a monopoly to be considered natural, the relevant market can be better served at minimum cost by one instead of by many companies.<sup>6</sup>

In this regard, in the electricity sector, the bulk transfer of electrical energy from generating power plants to electrical substations located near demand centres, and the local distribution from these substations to customers require the use of certain networks whose duplication, even if legally permitted as to allow room for competition, is extremely costly or technologically unfeasible.<sup>7</sup> Surely, it would be cheaper for a single distribution company to deliver electricity to all houses in an area instead of having multiple competing undertakings each serving portions of it by utilising their own parallel distribution networks, for that would require unnecessary and anti-economic replication.<sup>8</sup>

Thus, in spite of the generation of electricity in power plants and the final supply of the service –which includes billing, metering and marketing operations- being *a priori* open to competition, the electricity industry as a whole has traditionally been considered to be a natural monopoly due the fact that its transmission and distribution stand natural monopolies and that the four functions have often been carried out by the very same company.

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<sup>5</sup> VAN MIERT, K., 'Public utilities, Liberalization and Consumers: Comprehensive explanation of the Commission's position', International Forum on Public Utilities, Liberalization and Consumers [conference], Rome, 24 Oct. 1996.

<sup>6</sup> KAROVA, R., *op. cit.*, p. 11.

<sup>7</sup> CAMERON, P. (ed.), 'Legal Aspects of EU Energy Regulation: Implementing the New Directives on Electricity and Gas Across Europe', Oxford University Press, Oxford, 2005, p. 42.

<sup>8</sup> JONES, C. and WEBSTER, W., 'EU Energy Law: The Internal Energy Market', Vol. I, 2<sup>nd</sup> ed., Claeys & Casteels, Cornwall, 2006, p. 4.

Hence:

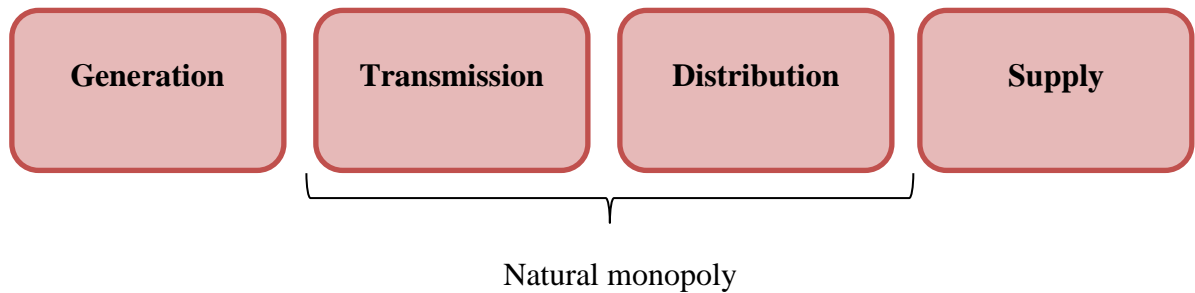


Figure 1<sup>9</sup>

### *Regulation of the market*

Acknowledging that network industries are public goods and recognising the need to provide the service to everyone who requests it at a uniform and affordable price, the involvement of the national government in this context is often great. Certainly, states constantly attempt to intentionally control or influence the free play of market forces to lessen the burden of capitalism on their citizens.<sup>10</sup>

In this regard, two models of regulating a natural monopoly can be distinguished:

- a) Public ownership: represents regulation in its most complete and radical form. The means of production and distribution are removed from private hands (thus eliminating the contradiction of forcing private interest to serve public goals)<sup>11</sup> and national governments, either by themselves or through public enterprises or other public institutions (*i.e.* municipalities), reassume such activities. This type of regulation was mainly adopted by European countries after the Second World War in the belief that such an important monopoly could only be properly managed within the institutional framework of state ownership. It was feared that private firms, even when subsidised, would not appropriately cover the public aspirations of energy distribution, such as

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<sup>9</sup> Diagram depicting the electricity industry before liberalisation.

<sup>10</sup> MACGREGOR, L., PROSSER, T., and VILLERS, C. (eds.), *'Regulation and Markets Beyond 2000'*, Ashgate, Aldershot, 2000, p. 3.

<sup>11</sup> OGUS, A., *'Regulation: Theory, Strategy and Practice'*, Clarendon Press, Oxford, 1994, p. 265.

affording social services, investing in technical innovation or supplying low-income customers.<sup>12</sup> In this regard, there was no doubt that public policy objectives were more easily achieved through direct state intervention rather than through market mechanisms.

- b) Command and control regulation: under this approach, the electricity industry remains in the private sector but national authorities adopt a variety of systems to regulate their activities and, as a result, market structures are most of the time far away from free competition. Precisely, in those cases where public ownership is not considered appropriate means to order the electricity sector, there is still the necessity to regulate privately owned electricity companies.<sup>13</sup> The rationale behind this need for regulation lies in the fact that competition is, as mentioned above, inefficient in the context of a natural monopoly and that customers can only be thoroughly protected by controlling private activities. In this context, command and control regulation refers to a system in which a regulator makes rules and then enforces them.<sup>14</sup> The strengths of this model are the use of the force of the law in order to prohibit some forms of conduct, to ask for certain actions or to lay down conditions for entry in the sector, *e.g.*, price regulation or securing electricity supply.<sup>15</sup> Conversely to public ownership, command and control was extensively adopted by the US, which already in the late 1860s established independent agencies to scrutinise the fulfilling of public policy objectives by the private monopolies.<sup>16</sup>

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<sup>12</sup> OGUS, A., *op. cit.*, p. 267.

<sup>13</sup> KAROVA, R., *op. cit.*, p. 14.

<sup>14</sup> BALDWIN, R., SCOTT, C., and HOOD, C. (eds.), *'A Reader on Regulation'*, Oxford University Press, Oxford, 1998, p. 25.

<sup>15</sup> Directorate General for Enterprise and Industry – Observatory of Small and Medium Enterprises (SME), *op. cit.*, p. 9.

<sup>16</sup> *E.g.* the 1869 American model of 'sunshine regulation', whereby regulators, despite lacking substantive powers, improved the quality of the service by exposing companies to the public opinion through their technical reports (hence the 'sunshine' character). See HENRY, C., MATHEU, M., and JEUNEMAÎTRE, A. (eds), *'Regulation of Network Utilities: The European Experience'*, Oxford University Press, Oxford, 2001, p. 3.

## Chapter II: The road towards an Energy Internal Market

### 1.- Early steps

#### *1.1.- Lack of competence in energy*

Back in the 1950s the European energy sector was viewed as an area requiring rather urgent development of common policies and coordinated actions.<sup>17</sup> This much is reflected to some extent by two treaties establishing supranational communities for certain aspects of the energy sector. Indeed, the Treaty of Paris, signed in 1951 and now expired, founded a coal and steel regime for a 50-year period through the establishment of the European Coal and Steel Community, while the Euratom Treaty, signed in Rome in March 1957, created the European Atomic Energy Community for an unlimited period. Nevertheless, contrary to this overall recognition, the 1957 Treaty establishing the European Economic Community contains not a single word on energy policy.<sup>18</sup> Whether such omission was to implicitly treat energy in the same manner as any other economic sector under the new-fangled common market or a mistake to be corrected in following treaty amendments remains still unclear.<sup>19</sup>

At the time, MS retained tight control over the electricity industry, which was typically structured as a vertically integrated company -meaning that all activities from generation to supply to the final consumers were provided by the same firm- and under public ownership. The EEC Commission,<sup>20</sup> especially aware of the MS' reliance on oil imports, tried to put forward several proposals for a common European energy policy, with particular emphasis on

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<sup>17</sup> See *Comité Intergouvernemental Créé par la Conférence de Messine*, 'Rapport des Chefs de Délégation aux Ministres des Affaires Etrangères', Brussels, 1956.

<sup>18</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), '*Energy Law in Europe: National, EU and International Regulation*', 2<sup>nd</sup> ed., Oxford University Press, Oxford, 2007, p. 227.

<sup>19</sup> CAMERON, P., '*Competition in Energy Markets: Law and Regulation in the European Union*', Oxford University Press, Oxford, 2002, p. 42.

<sup>20</sup> Until the Merger Treaty of 1965, there was a separate Commission for the ECSC and the EEC. See CRAIG, P. and BÚRCA, G., '*EU Law: Text, Cases, and Materials*', 5<sup>th</sup> ed., Oxford University Press, Oxford, 2011, p. 6.

securing the supply of hydrocarbons,<sup>21</sup> but they were consistently rejected by the national governments. The key reason for this was, then again, that MS conceived the energy sector as a field of strategic geopolitical and economic importance, even military, and ultimately an essential public service which would fall directly under the purview of their sovereign faculties.<sup>22</sup>

More than expected, the blunt lack of a special chapter on energy in the EEC Treaty steadily stalled the progress of Community energy law. In particular, the period from 1958 to 1972 is notable for the absolute absence of development of an effective common policy for energy, despite sufficient attention to the topic and ample ground for concerns. Not even after the OPEP oil embargo of 1973-1974, which quadrupled gasoline prices in just a few months, were the European States –world’s biggest oil importers-<sup>23</sup> ready to shed a bit of their sovereignty in exchange for boosting their negotiating leverage.<sup>24</sup> Certainly, the response of the MS to the oil crisis was primarily focused on protecting national interest, and measures from one state to another differed considerably.<sup>25</sup> Nonetheless, oil shortages somewhat prompted domestic governments to reconsider at the Community level the urgent need for a common energy strategy and, concerning this, MS did agree upon particular policies and initiatives required to achieve Community objectives, such as a desired energy balance or the establishment of emergency mechanisms to reduce consumption and enable the transference

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<sup>21</sup> EC Commission, ‘*First Guidelines for a Community Energy Policy the Commission*’, Brussels, 1968; European Commission, ‘*Communication: Necessary Progress in Common Energy Policy*’, COM (72) 1200; and European Commission, ‘*Guidelines and Priority Actions under the Community Energy Policy*’, SEC (73) 1481, April 1973.

<sup>22</sup> PADGETT, S., ‘*The Single European Energy Market: The Politics of Realization*’, *Journal of Common Market Studies*, Vol. XXX, Num. 1, 1992, p. 55.

<sup>23</sup> See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, ‘*Energy 2020 A strategy for competitive, sustainable and secure energy*’, COM (2010) 639 final, p. 17.

<sup>24</sup> See MOUSSIS, N., ‘*Access to European Union: Law, economics, policies*’, 16<sup>th</sup> ed., European Study Service, Rixensart, 2007.

<sup>25</sup> Considering that MS publicly owned vertically integrated companies, *i.e.* legalised monopolies, the differences in the measures adopted essentially related to natural endowments and institutional structure rather than to the economic management of the markets.

of oil saved between countries in case of further crises.<sup>26</sup> Moreover, the Council adopted some additional legislative measures relating to the rational use of energy –specifically, oil and gas-, although most of them were in the form of non-binding recommendations.<sup>27</sup>

### *1.2.- Conceiving liberalisation*

It was not until the 1980s that European governments, faced with increasing competition by newly industrialised countries and emergent markets, came across the idea that the energy sector and, in particular, the electricity industry could be better –more efficiently- carried out by the private sector. High public expenditure and much interference with the market were thought to cut productivity in many instances and to blur the European capabilities of engaging in prosper international competition. In addition, from a macroeconomic perspective, there was significant theoretical and empirical evidence suggesting that liberalisation of the electricity market would bring positive effects to network industries in terms of lower prices and better service levels.<sup>28</sup> Likewise, textbook microeconomic theory suggested that liberalisation and competition would result in internal (production) and external (market) efficiency and that the benefits would be passed on to customers and the economy in the form of lower prices and better allocation of costs.<sup>29</sup>

Especially relevant for the settlement of liberalisation as a desirable objective of the Community was also the attitude towards opening the market of certain MS. Certainly, the good results of the reforms undertaken by the Thatcher administration on the UK electricity sector, addressing the introduction of competition and the privatisation of its electricity vertically integrated company, led other governments, very especially those of Nordic

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<sup>26</sup> DAINTIHT, T., and HANCHER, L., *‘Energy Strategy in Europe: The Legal Framework’*, Walter de Gruyter, Berlin, 1981, p. 27.

<sup>27</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 228.

<sup>28</sup> Directorate General for Enterprise and Industry – Observatory of Small and Medium Enterprises (SME), *op. cit.*, p. 9.

<sup>29</sup> JAMASB, T. and POLLITT, M., *‘Electricity Market Reform in the European Union: Review of Progress toward Liberalization & Integration’*, The Energy Journal, Vol. XXVI, Special Edition, Massachusetts, 2005, p. 12.

countries, to replicate such operations.<sup>30</sup> Spilling over from technologically advanced sectors, e.g. telecommunications, global privatisation and liberalisation began to seize other infrastructures and networks industries.<sup>31</sup>

Eventually, a stronger legal basis for European economic integration was achieved in 1987 with the entry into force of the Single European Act, which amended each of the treaties for the three Communities. Without a doubt, the most important of these changes were made to the EEC Treaty. Indeed, the objective of establishing an internal market<sup>32</sup> by the end of 1992 was set and, more importantly, Article 100a removed unanimity regarding related legislation and adopted instead qualified majority in cooperation with the European Parliament.<sup>33</sup>

Under this *in crescendo* influence and ultimately encouraged by the success of American neoliberal policies, the Commission crafted the idea of a common European market embracing energy and issued in 1988 the first concrete proposal on liberalisation: a working document called ‘The Internal Energy Market’.<sup>34</sup> This document reflected the Commission’s commitment to a more competition-oriented approach to energy market integration by progressive removal of the existing obstacles, and, other than hydrocarbons, it included the electricity and gas sectors for the first time in the discussions concerning a Community energy

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<sup>30</sup> NEWBERY, D., ‘*Electricity Liberalisation in Britain: The Quest for a Satisfactory Wholesale Market Design*’, Cambridge Working Papers in Economics, Cambridge, 2004, p. 2.

<sup>31</sup> EBERLEIN, B., ‘*The Making of the European Energy Market: The Interplay of Governance and Government*’, Journal of Public Policy, Vol. XXVIII, Num. 1, Cambridge University Press, Cambridge, 2008, p. 75.

<sup>32</sup> Defined in Article 8a EEC Treaty as an ‘area without internal frontiers in which the free movement of goods, persons, services and capital

<sup>33</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 228.

<sup>34</sup> European Commission, ‘*Commission Working Document on Internal Energy Market*’, COM (88) 238, May 1988.



policy.<sup>35</sup> Still, any further Commission's attempts to pass legislative measures concerning electricity and gas were firmly clogged by the Council.<sup>36</sup>

### *1.3.- Challenging monopolies*

During the 1990s, the Commission began to challenge the existence of monopolies and exclusive rights, first in the telecommunications industry and then in the gas and the electricity sectors, on the grounds that they made the existence of an European market –an integrated market- for these goods impossible. Nevertheless, at the time there was no realistic chance of getting the agreement of all or probably even a qualified majority of MS to convene to liberalise the energy or other markets at the Community level and, for that reason, the Commission decided to use the Articles of the Treaty relating to competition law and the rules on free movement to force MS to abandon these monopolies.<sup>37</sup>

Surely, while there were no special provisions on energy policy, various EEC Treaty rules –for instance, those relating to approximation of laws, the common commercial policy, consumer protection, economic and social cohesion, environment, taxation, and, once again, competition, free movement and the internal market- were either applicable to the energy sector or provided scope for Community instruments capable of triggering significant effects on its administration.<sup>38</sup>

Nevertheless, Article 90 (2) EEC Treaty stated that

[u]ndertakings 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

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<sup>35</sup> VAN MIERT, K., 'Engineering Competition: The European Approach', in WUBBEN, E., and HULSINK, W. (eds.), 'On Creating Competition and Strategic Restructuring: Regulatory Reform in Public Utilities', Edward Elgar Publishing, Cheltenham, 2003, p. 31.

<sup>36</sup> A proposal for an electricity directive (which included the abolition of the exclusive rights of the national electricity companies, unbundling and introduction of third party access) was already drafted in 1992, but neither it nor its revised version could gather the support of some MS.

<sup>37</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 2.

<sup>38</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 234.

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.

In this context, the Commission argued that monopoly rights were contrary to the Treaty requirements on the free movement of goods and establishment where they could not be justified on the grounds of public service obligations.<sup>39</sup> What's more, it further alleged that monopolies were not even necessary to achieve essential public service objectives.<sup>40</sup> Eventually, MS' vertically owned companies' rights were successfully challenged.

### 1.3.1.- *Porto di Genova*

The *Porto di Genova* case<sup>41</sup> concerns a preliminary ruling requested by an Italian court in a dispute between the company organising dock work at the Port of Genoa and an importer of steel in connection with a claim for compensation for delays resulting from an industrial dispute with dock workers. There was an Italian law reserving the organisation of dock work to specific companies and to Italian workers. The questions from the Italian court were whether Article 90 (1) EEC<sup>42</sup> precluded the application of Italian law restrictions on dock work, and whether Article 90 (2) EEC could provide a justification based on entrustment with the provision of services of general economic interest.

In response, the ECJ asserted that an undertaking having a statutory monopoly over a substantial part of the common market enjoys a dominant position within the meaning of Article 90 (2) EC Treaty -which is not *per se* incompatible with the aims of the Treaty-,<sup>43</sup> and held that, in such circumstances, a MS will be deemed in breach of its obligations if

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<sup>39</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 2.

<sup>40</sup> By flexibly interpreting Article 86 (2) above: 'They did not obstruct the performance, in law or in fact, of the particular [public service] tasks assigned to them'.

<sup>41</sup> Case C-179/90, *Mercati Convenzionali Porto di Genova SpA v Siderurgica Gabriella SpA* [1991] ECR I-1979.

<sup>42</sup> Which reads as follow: 'In the case of public undertakings and undertakings to which Member States grant special or exclusive rights, Member States shall neither enact nor maintain in force any measure contrary to the rules contained in this Treaty (...)'.  
<sup>43</sup> Case C-179/90, *Mercati Convenzionali Porto di Genova SpA v Siderurgica Gabriella SpA* [1991] ECR I-1979, para. 14.

[the] undertaking in question, merely by exercising the exclusive rights granted to it, cannot avoid abusing its dominant position or when such rights are liable to create a situation in which that undertaking is induced to commit such abuses.<sup>44</sup>

Hence, Italy was sought to have created a situation against Article 90 (2) for adopting rules creating a situation in which an abuse of the exclusive rights was possible. In this case, the ECJ adopted the so-called ‘absolute competition approach’, under which the mere creation of a legal monopoly was contrary to Article 90 (1). The rationale underlying such approach follows from the fact that the grant of special or exclusive rights does, by definition, place the undertaking concerned in a dominant position in which it could pursue anticompetitive practices (without being required to do so).<sup>45</sup>

### 1.3.2.- *Corbeau*

The aforementioned approach was revisited in future case-law and eventually limited in the *Corbeau* case.<sup>46</sup> Belgian law granted a legal monopoly to the *Regie des postes*,<sup>47</sup> under which it enjoyed an exclusive right to collect, transport and deliver all forms of correspondence throughout Belgium. Mr Corbeau provided his own form of postal services in Liège and neighbouring areas by collecting mail from the sender's residence and either delivering it before noon the next day if the destination was within the Liège area or dispatching it by the normal postal services if the destination was outside that area. When Mr Corbeau was prosecuted, he challenged the legality of the Belgian postal monopoly under Community law. The Court of Justice observed that Article 90(1) must be read in conjunction with Article 90(2), in relation to which it observed that the latter provision permits

Member States to confer on undertakings to which they entrust the operation of services of general economic interest exclusive rights which may hinder the application of the rules of the Treaty on competition in so far as restrictions on

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<sup>44</sup> *Ibid.*, para. 17.

<sup>45</sup> EDWARD, D., and HOSKINS, M., ‘Article 90: Deregulation and EC Law Reflections: Arising from the XVI Fide Conference’, Common Market Law Review, Num. 32, Kluwer Academic Publishers, Alphen aan den Rijn, 1995, p. 162.

<sup>46</sup> Case C-320/91, *Corbeau* [1993] ECR I-2533.

<sup>47</sup> Belgium postal service monopoly.

competition, or even the exclusion of all competition, by other economic operators are necessary to ensure the performance of the particular tasks assigned to the undertakings possessed of the exclusive rights.<sup>48</sup>

On the facts of the case, the Court held that the obligation to ensure universal supply of basic postal services throughout Belgium at uniform tariffs and under similar conditions did constitute a service of general economic interests. Nevertheless, it further declared that it was for the national court to consider whether it was in fact necessary to exclude all competition in order to achieve this objective.<sup>49</sup> In this case, ‘limited competition approach’ was adopted by the Court (as opposed to the ‘absolute competition approach’ discussed above) and the creation of a legal monopoly was allowed as long as it complied with the following requirements: a) it was justified by a legitimate national objective; and b) satisfied the principle of proportionality, that is to say, that the consequent restriction of competition did not exceed what was necessary in order to attain the objective. The rationale behind this approach was that the creation of a legal monopoly would necessarily produce restrictive effects on competition and hence should only be permitted where there was a particular justification for their existence.<sup>50</sup>

At this point, it seems that the political resistance of some MS towards liberalisation had become too heavy for the ECJ to keep on bending the Treaty rules at the will of the Commission and put a stop to further challenging of monopoly rights with basis on the competition law. The Commission realised that it could not press ahead any more on these grounds and, as it had done previously in the telecommunications sector, it opted to try the ‘internal market’ route.<sup>51</sup>

### 1.3.3.- Commission v Italy

Concerning the application of the rules on the internal market the first and most significant case -moreover relating to the electricity sector- is, without a doubt, the

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<sup>48</sup> Case C-320/91, *Corbeau* [1993] ECR I-2533, para. 14.

<sup>49</sup> *Ibid.*, para. 20.

<sup>50</sup> EDWARD, D., and HOSKINS, M., *op. cit.*, pp. 165-166.

<sup>51</sup> EBERLEIN, B., *op. cit.*, p. 75.

*Commission v Italy* case.<sup>52</sup> On this occasion the Commission observed that ENEL, a national monopoly of commercial character with exclusive import and export rights in the electricity industry in Italy, prevented producers in other MS from selling their production to Italian customers and potential Italian customers from freely choosing their sources of supply for electricity from other MS. The exclusive import rights of ENEL were argued to be liable to restrict trade and being measures having an effect equivalent to quantitative restrictions on imports.<sup>53</sup> Furthermore, the Commission felt that they constituted discrimination as regards exporters established in other MS and also, *mutatis mutandis*, to foreign customers, acknowledging that the holder of exclusive export rights naturally tends to allocate national production to the national market to the detriment of demand from other MS.<sup>54</sup>

The ECJ dismissed the Commission's application because it found that it had not proved that the application of the rules on the internal market would not obstruct the performance of the services of general economic interest assigned to ENEL. Consequently, it confirmed that MS do not bear the burden of proving that no other conceivable measures could enable such services to be performed under the same conditions. Furthermore, the Court held that an undertaking must be able to perform its tasks under economically acceptable conditions, which presumably would imply a normal rate of return on capital invested.<sup>55</sup> Nonetheless, it asserted that

[to apply for a derogation of Article 90 (2) EC] it is not sufficient for a Member State to have entrusted to an undertaking the operation of a service of general economic interest but it is also necessary (...) for the interests of the Community not to be affected.<sup>56</sup>

#### 1.3.4.- Remarks

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<sup>52</sup> Case C-158/94, *Commission v Italy* [1997] ECR I-5789.

<sup>53</sup> *Ibid.*, para. 11.

<sup>54</sup> *Ibid.*, para. 12.

<sup>55</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 272.

<sup>56</sup> Case C-158/94, *Commission v Italy* [1997] ECR I-5789, para. 36.

These judgements, together with further litigation, are of utmost importance because the Court of Justice opened the door towards assessing monopoly rights under competition law and the rules of the internal market and afforded the Commission competence to take action under the Treaty framework to prohibit exclusive rights as long as a high burden of proof was met to demonstrate that the existence of such privileged faculties was not essential to achieve legitimate public service obligations. Likewise, the Court confirmed that in certain circumstances the Commission had actual power to abolish monopoly rights, and this much was what ultimately brought the MS to the negotiating table. Domestic governments agreed that it was better to participate on elaborating the text of a Directive requiring progressive market opening rather than to leave it to the Commission to engage in wild initiatives and to the ECJ to sanction them.<sup>57</sup>

## 2.- The Maastricht Framework

Indisputably, the process of constructing competitive Europe-wide electricity market began slowly but has, since the adoption of the Treaty on European Union, signed in Maastricht in February 1992, accelerated very rapidly. Finally, measures ‘in the sphere of energy’ were listed for the first time among the various Community activities.<sup>58</sup>

This foundation of sorts for achieving future progress in European energy law led to the immediate opening of consultations by the Commission. The process of negotiation in the electricity sector took place against the background of a long period of sectorial stability in all the MS and of the sudden emergence of a legal-regulatory framework for sectorial competition at the European level, which truly represented a major departure from traditional ways of thinking and doing business in this sector.<sup>59</sup> In spite of the Commission’s obvious lack of material power and resources,<sup>60</sup> the officials in Brussels compensated for it by developing a coherent display of normative arguments in favour of liberalisation and by carefully

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<sup>57</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 3.

<sup>58</sup> Article 3 EC Treaty.

<sup>59</sup> JABKO, N., ‘*Playing the Market: A Political Strategy for Uniting Europe, 1985-2005*’, Cornell University Press, New York, 2006, p. 93.

<sup>60</sup> ‘Measures in the sphere of energy’ are included as general goals, but these themselves do not create any competences *per se*. See CAMERON, P. (ed.), *op. cit.*, p. 63.

constructing alliances within the domestic political arenas of the MS. Over time, the Commission effectively eroded the dominance of well-fortified lobbies at the national level and slowly but surely built significant political momentum that considerably enhanced the initially dim prospects of liberalisation in the electricity sector.<sup>61</sup> As regards of the obvious deadlock in the Council negotiations, a Franco-German agreement accepting the principle of market opening and the need for common rules in a European market overcame the blockade to liberalisation.<sup>62</sup>

Finally, after four years of negotiations on energy policy guidelines, the decisive breakthrough was achieved with the adoption in 1996 of the Directive 96/92/EC, concerning common rules for the internal market in electricity.<sup>63</sup>

## *2.1.- The First Directive*

### *2.1.1.- Preface*

Consequent with its title,<sup>64</sup> the first set of legislation on electricity liberalisation not only prescribed progressive market opening but further established, for the first time, some common rules for the organisation of the sector. In this regard, Chapter II of the Directive affirms that

*‘1. Member States shall ensure that (...) electricity undertakings are operated in accordance with the principles of this Directive, with a view to achieving a competitive market in electricity, and shall not discriminate between these undertakings as regards either rights or obligations.*

*2. (...) Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and to environmental protection. Such obligations must be clearly defined, transparent, non-*

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<sup>61</sup> JABKO, N., ‘*Playing the Market: A Political Strategy for Uniting Europe, 1985-2005*’, p. 94.

<sup>62</sup> EBERLEIN, B., *op. cit.*, p. 76.

<sup>63</sup> Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996, concerning common rules for the internal market in electricity, OJ L27/20.

<sup>64</sup> ‘Concerning common rules for the internal market in electricity’.

*discriminatory and verifiable; they, and any revision thereof, shall be published and notified to the Commission by Member States without delay.*<sup>65</sup>

In like vein, the broad aims of the Directive cleverly combine the possibility for electricity undertakings to provide public service obligations with a MS obligation to achieve a competitive market in energy.<sup>66</sup>

#### 2.1.2.- Main features of the legislation

The measures aimed at opening the market which introduced are as follow:

##### A) Restructuring

##### A.1.- *Competitive and non-competitive areas*

As indicated previously,<sup>67</sup> the electricity industry has important physical characteristics that shape its optimal regulatory design. Indeed, network infrastructures are natural bottlenecks and competition is simply not possible at two stages of the electricity industry chain, *i.e.* transmission and distribution.

Aware of such circumstance, in devising liberalisation measures the Commission distinguished between competitive and non-competitive areas.<sup>68</sup>

Thus,

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<sup>65</sup> Article 3 of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>66</sup> Recital 9 of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>67</sup> See *Foreword on network industries* above, at p. 3.

<sup>68</sup> Directorate General for Transport and Energy, '*Report: Electricity Liberalization Indicators in Europe*', 2001, p. 12.



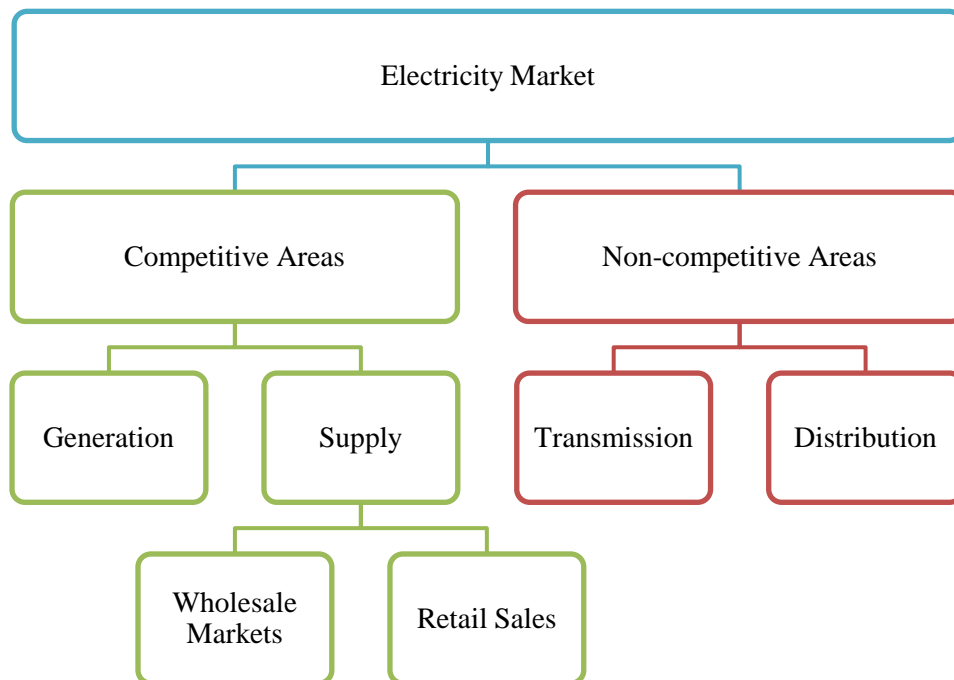


Figure 2<sup>69</sup>

Apparently, to obtain a market structure within which effective competition could be fostered, general restructuring of the sector needed to be done, and so the Commission engaged in isolating non-competitive areas from competitive ones.

#### A.2.- Vertical unbundling

The aim of vertical unbundling is to separate potentially competitive generation and retail supply from the natural monopoly activities of transmission and distribution networks.<sup>70</sup> The motivation underlying vertical unbundling is that electricity vertically integrated companies, if the market is open to other firms, will have an inherent interest in retaining their customers, market share and profitability. Hence, it is likely that the ex-incumbent monopoly will endeavour to prevent any loss and, in the case of network industries, it would mean that there is a natural incentive to make third party access to the network as difficult as possible *e.g.* by setting discriminatory tariffs or manipulating the availability of capacity to ensure that lines required by competitors are ‘congested’.

<sup>69</sup> Diagram indicating the competitive and the non-competitive areas of the electricity sector.

<sup>70</sup> *Ibid.*, p. 13.

The myriad possibilities for a vertically integrated company to discriminate against competitors combined with a clear economic incentive to discriminate, has led to an understanding that unless a network company is effectively separated from its competitive activities (generation and supply) effective competition simply will not emerge.<sup>71</sup> Definitely, non-discriminatory behaviour of the controllers of this monopolistic core of the energy chain is necessary for achieving supply competition.<sup>72</sup>

Concerning this, the First Directive was pioneer in introducing some measures addressed towards achieving a separation between competitive and non-competitive sectors.

Regarding substantive measures, the new legislation required MS to designate transmission and distribution system operators (TSOs and DSOs respectively), which would determine access to the networks. According to Articles 7 to 12 of the First Directive, undertakings which owned transmission and/or distribution systems would be responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area in order to guarantee security of supply. When doing so, they could not discriminate between system users or classes of system users, particularly in favour of its subsidiaries or shareholders.

Similarly, the Directive adopted a somewhat conservative approach to transparency and merely provided for accounting and management unbundling.<sup>73</sup> On one hand, accounting unbundling referred to the obligation for vertically integrated undertakings to keep separate accounts for its networks assets and, on the other, management unbundling to additionally handle them separately from the retail and generation operations. The aim was to force network companies to demonstrate that any generation or retail activities were not being unfairly benefited by their transmission and distribution operations. Aside from this call to

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<sup>71</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 70.

<sup>72</sup> EHLERS, E., 'Electricity and Gas Supply Network Unbundling in Germany, Great Britain and The Netherlands and the Law of the European Union: A Comparison', *Energy & Law*, Vol. IX, Intersentia, Oxford, p. 50.

<sup>73</sup> Articles 13 and 14 of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

transparency, however, companies were allowed to run its various activities as a single business.<sup>74</sup>

## B) Introduction of competition

### B.1.- *Generation*

Concerning generation, the first Directive adopted a cautious stance and merely set forth the principle that generation should in future be open to competition. The Directive did not, however, go as far as implementing the precept that any undertaking should have the right to freely construct generating facilities in any EU country when and how they considered appropriate to do so. Certainly, Article 4 of the Directive left it to the MS' discretion whether to apply an authorisation procedure or a more interventionist tendering procedure as the main route for the construction of new electricity generation capacity. Both types of procedure had to be conducted in accordance with objective, transparent and non-discriminatory criteria.<sup>75</sup> The principal difference between them was that authorisation procedures left investment decisions to market participants, allowing them entering into business at their own free will provided there was compliance with planning law and its specifications, while tendering procedures allowed MS to estimate their needs for future generating capacity and invite tenders for that capacity accordingly, thus maintaining the electricity system centrally planned.<sup>76</sup>

Since the choice of procedure was left to MS, it can be inferred that the aim of the Directive was to ensure that electricity producers enjoyed freedom of establishment on objective, transparent and non-discriminatory terms.<sup>77</sup>

### B.2.- *Transmission and distribution system access*

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<sup>74</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 6.

<sup>75</sup> Article 16 of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>76</sup> THOMAS, S., *'The European Union Gas and Electricity Directives'*, PSIRU, Greenwich, 2005, p. 9.

<sup>77</sup> BJØRNEBYE, H., *'Investing in EU Energy Security: Exploring the Regulatory Approach to Tomorrow's Electricity Production'*, Law & Policy series, Kluwer Law International, Alphen aan den Rijn, 2010, p. 198.

In the earlier stages of negotiation, third party access to transmission and distribution networks was considered. However, MS were not ready to surrender their competences on networks and no final agreement was reached on this basis.

As a result, the First Directive provided for a multiple choice system in which MS could pick between nationally regulated access to the electricity network, granted at published tariffs, or, alternatively, the so-called ‘single buyer system’.

The single buyer system, despite never being properly implemented, was intended to create an artificial central intermediary between electricity producers and final consumers.<sup>78</sup> Conscious that consumers may choose their eventual supplier of electricity but that such supplier would nonetheless be obliged to purchase electricity from a network owner, the single buyer system pretended to create a ‘pool’ of electricity to which generators would be forced to sell all their electricity to.<sup>79</sup> Thus, there would be a single buyer.

Notwithstanding this, practice proved that most of the time states bypassed the single buyer system through especial bilateral arrangements commonly known as ‘contracts for differences’. Moreover, since network operators could refuse access on grounds of lack of capacity,<sup>80</sup> there was no real liberalisation of the transmission and distribution stages.

### B.3.- *Supply*

The Directive required MS to solely introduce competition in the wholesale market, that is to say, only for large users and distributors. As regards of the means to achieve it, although discretion was left to domestic governments, a set of objectives were laid down:

- By February 1999, about 26% (40 GWh/year) of the market had to be open,
- by February 2000, about 28% of the market had to be open (20 GWh/year) and
- by February 2003, about 33% of the market had to be open (9 GWh).<sup>81</sup>

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<sup>78</sup> Article 18 of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>79</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 9.

<sup>80</sup> Article 17 (5) of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>81</sup> Article 19 (5) of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

Thus, at its worst, the Directive will only reach one third of non-household customers.

### C) Regulation

The First Directive did not provide for effective regulation: neither did it require the appointment of a regulator nor that the tariffs publicly set by the transmission or distribution companies were verified. Instead, as with the introduction of competition in the supply phase, it attempted to address these vital issues by providing general objectives to be achieved, without further specifying the manner in which they were to be attained.<sup>82</sup> They were as follow:

- A general obligation not to discriminate.<sup>83</sup>
- A general obligation to preserve the confidentiality of commercially sensitive information.<sup>84</sup>
- A general obligation to negotiate in good faith.<sup>85</sup>
- An obligation to submit whatever disputes may arose to a commonly agreed dispute settlement authority.<sup>86</sup>

A common criticism to this model of (lack of) regulation is that the role of governments, instead of decreasing by transferring the important decisions to customers and other market participants, did in fact increase.<sup>87</sup>

### D) Ownership

The First Directive remains silent regarding the issue of granting monopoly rights. Aware that an agreement on this point would be impossible, the Commission chose to remain neutral. However, it did reduce the monopoly to the network operation. Furthermore,

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<sup>82</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 10.

<sup>83</sup> Article 3 (1) of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>84</sup> Articles 9 and 12 of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>85</sup> Article 20 (2) of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>86</sup> Article 20 (3) of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>87</sup> LITTLECHILD, S., 'Beyond Regulation', in COLINSON, R. (ed.), 'Utility Regulation in Competitive Markets: Problems and Progress', Edward Elgar Publisher, Cheltenham, 2007, pp. 9-10.

transparency was increased in the relations between national governments and the companies, as well as in the conditions of access to the regulated markets.<sup>88</sup> This is coherent with the possibility to require from private companies the obligation to provide public service obligations.<sup>89</sup>

### 2.1.3.- Remarks

Upon closer look of the substantive elements of the Directive, the progress made towards liberalisation appears to be half-hearted. Certainly, the principle of liberalisation was partially accepted, but the traditional utility structure for the management of the technical network was only gradually reformed.<sup>90</sup> When redacting the First Directive, the Commission, rather than attempting to follow an optimum reform path towards liberalisation, adopted instead a pragmatic approach towards a collective agenda to avoid sovereignty issues.<sup>91</sup> Resulting from their character as a delicate compromise, the Directive, more than usual for this legal instrument, set out a very broad framework that left MS an exceptionally large margin of discretion regarding crucial issues.<sup>92</sup> Namely, the access to monopoly networks and the degree of required unbundling of monopoly activities in vertically integrated companies are left to national governments' will.<sup>93</sup> Furthermore, technical and regulatory issues arising from the very idea of cross-border trade in an integrated European market were simply not addressed.<sup>94</sup> Likewise, exclusive rights granted to state energy monopolies were left untouched and, in the end, some sceptical observers came to note that the result of the 1996 compromise was to legitimate rather than remove the pre-existing obstacles to market competition.<sup>95</sup>

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<sup>88</sup> KAROVA, R., *op. cit.*, p. 24.

<sup>89</sup> Article 3 (2) of the Directive 96/92/EC, 19 December 1996, OJ L27/20.

<sup>90</sup> JABKO, N., *op. cit.*, p. 112.

<sup>91</sup> JAMASB, T. and POLLITT, M., *op. cit.*, pp. 17-18.

<sup>92</sup> A regime often described as “à la carte” when compared to other more sweeping examples of EU-level reforms. See JABKO, N., ‘*The Reform of Energy Regulation in the EU: The Market as a Norm*’, Paper prepared for the third General Conference of the European Consortium for Political Research, Budapest, 10 Sept. 2005, p. 12.

<sup>93</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 344.

<sup>94</sup> CAMERON, P. (ed.), *op. cit.*, p. 64.

<sup>95</sup> JABKO, N., ‘*The Reform of Energy Regulation in the EU: The Market as a Norm*’, p. 12.

In this regard, there had been an unexpected outcome: the pro-liberalisation coalition of industry consumers and potential competitors had resulted to be weaker than the incumbent utilities.<sup>96</sup>

Nevertheless, the picture after the First Directive had changed from an industry owned by a single vertically integrated company in each MS:

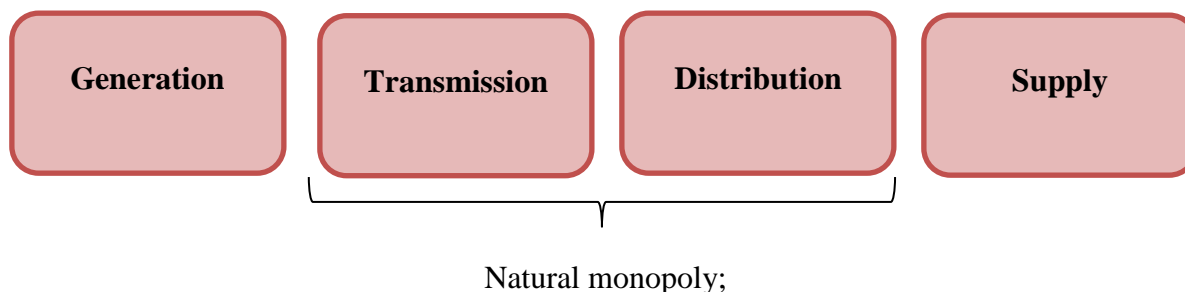


Figure 3<sup>97</sup>

to:

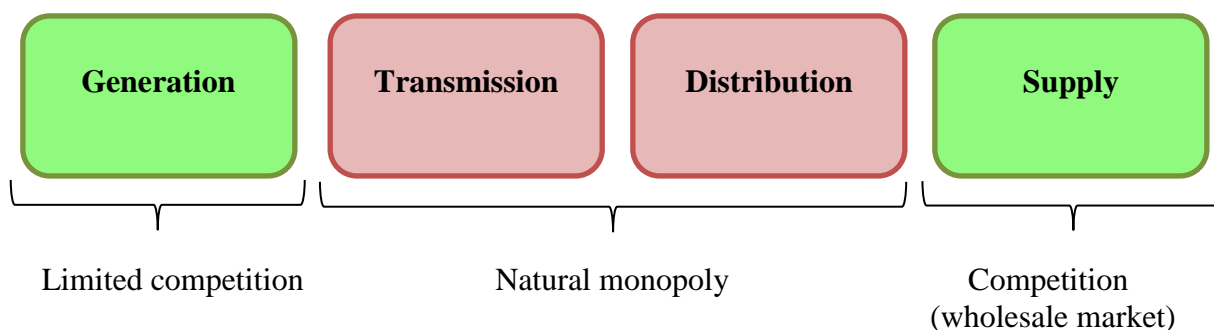


Figure 4<sup>98</sup>

## 2.2.- Interlude I

As expected, the discretion left to MS when implementing the First Directive soon led to the situation where some MS' markets were more open to effective competition than others

<sup>96</sup> EBERLEIN, B., *op. cit.*, p. 75.

<sup>97</sup> Diagram depicting the electricity industry before the implementation of the First Directive.

<sup>98</sup> Diagram depicting the electricity industry after liberalisation the implementation of the First Directive.

and consequently created distortions of competition.<sup>99</sup> Given the tremendous leeway bestowed on MS, the lack of coordination at supra-state level constantly undermined the establishment of a truly integrated European Market.<sup>100</sup> National governments pursued different liberalisation and regulatory strategies and, instead of levelling the playing field, the Directive resulted into a convoluted patchwork, *i.e.* instead of a single market, many individual liberalised markets developed.<sup>101</sup> This issue led the Commission to establish alternative, informal avenues of regulatory coordination and harmonisation, in an attempt to address the regulatory needs. Thus, the Electricity Regulatory Forum, or ‘Florence Forum’, was established in 1998.<sup>102</sup>

### 2.2.1.- The Florence Forum

The forum idea emerged as the main institutional expression for providing a platform for cooperation between national ministries and regulators, Community organs and industry stakeholders. Such cooperation was intended to be entirely voluntary and was based essentially on the good faith of the participants to jointly identify appropriate solutions to the regulatory challenges of creating an internal market in energy. Thus, the decisions adopted in the meetings were not binding. The Florence Forum was intended to provide for ‘regulation by cooperation’.<sup>103</sup>

It is important to understand the strategic situation of the Commission in 1998, and its double role in a principal-agent perspective. As an agent of MS governments and the Parliament, it had only a very weak legislative mandate: the First Directive. Furthermore, the Commission could not hope to draw much more on the shadow of ‘judicial integration’, *i.e.* the support of the European Court of Justice in infringement procedures against energy import

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<sup>99</sup> Communication from the Commission to the European Parliament, ‘*On the Common Position of the Council on the Adoption of a Directive of the European Parliament and of the Council Concerning Common Rules for the Internal Market in Electricity and Repealing Directive 96/92/EC*’, SEC (2003) 161, p. 3.

<sup>100</sup> The pronounced political resistance of some MS to upward delegation made impossible at the time to set a supervisory organ capable of hierarchical coordination.

<sup>101</sup> CAMERON, P. (ed.), *op. cit.*, p. 64.

<sup>102</sup> *Ibid.*, p. 65.

<sup>103</sup> *Ibid.*, p. 75.



and export monopolies of member states. Since the *Corbeau* case,<sup>104</sup> the Court had modified its pro-competition position to give much greater weight to public service obligations in energy supply. Worse still, the Court had explicitly rebuked the Commission for its strategy of instrumentalising infringement procedures to press for far-reaching policy reforms that cut deep into the social fabric of member states. These reforms, the Court argued, required political deliberation and decision and should not be made by themselves.<sup>105</sup>

Hence, the Commission was keen to build coalitions with and delegate policymaking responsibilities to public and private actors that could provide capacity and legitimacy outside the difficult legislative and judicial arena.<sup>106</sup>

#### A) Composition

The composition of the Forum represented the introduction to the habitual representatives of a novel element unknown to intergovernmental work so far: the regulatory stakeholders, *i.e.* producers, network operators, network users, industrial consumers and technical experts.<sup>107</sup> This broad participation, which included actors beyond MS and Community representatives, reflects the experimental character of the Forum, which, in the enterprise of electricity liberalisation, felt vital to consult widely and mobilised much-needed enterprise.<sup>108</sup>

The technical and regulatory integration of national electricity systems in a common market was entirely virgin territory. It was thus practically inconceivable to advance market-making policies without the participation of industry actors. The Commission devised an

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<sup>104</sup> Case C-320/91, *Corbeau* [1993] ECR I-2533.

<sup>105</sup> HÉRITIER, A., and MORAL SORIANO, L., ‘*Differentiating and Linking Politics and Adjudication: The Example of European Electricity Policy*’, *European Law Journal*, Vol. VIII, Num. 3, 2002, p. 379.

<sup>106</sup> EBERLEIN, B., *op. cit.*, p. 77.

<sup>107</sup> See Minutes of the 2<sup>nd</sup> meeting of the Florence Forum, available at: [http://ec.europa.eu/energy/gas\\_electricity/electricity/forum\\_electricity\\_florence\\_en.htm](http://ec.europa.eu/energy/gas_electricity/electricity/forum_electricity_florence_en.htm).

<sup>108</sup> CAMERON, P. (ed.), *op. cit.*, p. 67.

untried mechanism that reflected its high degree of dependence on expertise. It involved not simply consultation but delegation to a new body that was supposed to develop new policy.<sup>109</sup>

However, proof of the remarkable success and validity of this approach is that it managed to increase the number and diversity of its participants during the functioning of the forum.

## B) Agenda

The program of the Florence Forum gathered on two main concerns: a) the adoption of an effective regulatory framework for the introduction of competition, and b) the harmonisation of the emerging differences in domestic approaches resulting from the separate liberalisation efforts.

This agenda put the TSOs as the principal regulatory addressee of a third party access and, as will be later examined, it informed following legislative packages. The voluntary character of the meetings of the Forum allowed for tension between participants to be relieved when building consensus and the reaching of an understanding was facilitated. Under these conditions, it was agreed that, like in other network industries, the key issue for effective competition was to ensure non-discriminatory third party access to the natural monopoly of transmission networks. In other words, the road towards a European energy market was to be achieved by furthering the unbundling of the bottlenecks on the electricity industry.<sup>110</sup> Efficiency was the goal, competition the means, open access, restructuring and deregulation the tools to achieve it.<sup>111</sup>

## C) Status

The Forum has been criticised, for example by industry representatives, as being ineffective when it comes to adopt and enforce compliance with decisions. Likewise, agreements are said to emerge after a long and tedious process at an ineffective pace. Considering the agreements reached are not binding upon negotiating parties, the general

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<sup>109</sup> EBERLEIN, B., *op. cit.*, p. 78.

<sup>110</sup> KAROVA, R., *op. cit.*, p. 37.

<sup>111</sup> HUNT, S., *'Making Competition Work in Electricity'*, John Wiley & Sons, New York, 2002, p. 5.

concern is that they are useless and that at the end of the day voluntary soft consensus does not stand up to hard conflict of interests.<sup>112</sup>

Still, a sceptical interpretation does not fully capture the contribution and significance of the form. Indeed, the Forum has performed extraordinarily well in data-gathering, elaboration of regulatory proposals and institution-building. It is difficult to see how the Commission would have achieved further opening of the markets without involving the industry and national regulators. Moreover, the fact that the Forum generated expertise and that the participants shared a common professional education created a strong counter-weight to politicisation, hence downplaying the populist conflicts surrounding liberalisation. In this perspective, the Florence Forum can be seen as a pioneer of new forms of EU governance.<sup>113</sup>

## 2.2.2.- Towards the Second Directive

The factors leading to the adoption of a second electricity legislation package can be categorised as the combination of two key circumstances:<sup>114</sup>

### A) A stronger conception of the EU Commission

Strategically, the position of the Commission in the legislative arena had improved: while national implementation was very uneven and cross-border market integration largely absent, some MS had actually opted to open their markets more quickly than required. This encouraged the Commission to bring forward new legislative measures. It could count on MS that had liberalised more fully to express concerns that laggards would use the asymmetric playing field to their advantage.<sup>115</sup>

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<sup>112</sup> CAMERON, P. (ed.), *op. cit.*, p. 77.

<sup>113</sup> European Commission, '*European Governance: A White Paper*', COM (2001) 428 final, Brussels, July 2001, p. 11.

<sup>114</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 344.

<sup>115</sup> This was clearly the case for French electricity monopolist EDF, which went on an acquisition spree abroad while its domestic market remained protected.

Moreover, the expertise generated at the Florence Forum renovated confidence in a professionalised Commission.<sup>116</sup>

#### B) Adequate macro-political climate

Profiting from the momentum generated at the meetings of the Florence Forum and the stronger stance of the Commission, the time to address the distortions appeared during the transition phase of the First Directive had come. This much was recognised at the European Council in Lisbon in March 2000, which called for rapid work and asked the EU institutions, each in accordance with their respective powers, to speed up the liberalisation process and complete the internal market of electricity. Likewise, the Energy Council of May 2000 invited the Commission to present proposals for further action in this area.<sup>117</sup> Thus, at the next meeting of the Florence Forum, in March 2001, the Commission urged participants to reach a rapid agreement on a transitory solution for cross-border tariffication –the Forum, it was argued, needed to refute accusations that ‘it was just a talking shop that never respected deadlines’.<sup>118</sup> The new political context gave impetus to the Commission’s aspirations, which incentivised Forum actors to arrive at an agreement, and they successfully resulted in new legislation.<sup>119</sup>

#### C) An acute necessity to overcome the limitations of the First Directive

In sum, three following problems deriving from the electricity legislation were identified:

- Uneven implementation among the MS.
- Use of discriminatory methods to manage access to networks and especially interconnectors, and

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<sup>116</sup> CAMERON, P. (ed.), *op. cit.*, p. 76.

<sup>117</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 10.

<sup>118</sup> EBERLEIN, B., *op. cit.*, p. 81.

<sup>119</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 10.

- High levels of market power of incumbent electricity companies.<sup>120</sup>

As a framework directive, the Electricity legislation aimed at tackling the basic structural reforms that were required in the sector. The strategy was to set a timetable for gradual market opening and set minimum levels of opening for each stage. In doing so, it allowed for the possibility to MS to elect to go faster and further in achieving the objectives of the Directive. The result was a patchwork of multiple markets liberalised to a different extent.<sup>121</sup> Precisely, resistance towards liberalisation started generating when MS in the vanguard of taking measures in this context felt ‘naive’ *vis-à-vis* other countries which proved to be laggards, whether by calculation or incompetence.

Regarding the access to networks and interconnectors, evidence accumulated showing that the regime was not working properly in some MS such as Germany or in the north of Italy, which had a strategic position with respect to energy trade in EU due to the significance of their market and their geographical location.<sup>122</sup> As can be seen in the map:

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<sup>120</sup> Directorate General for Transport and Energy, ‘*Third Benchmarking Report on the Implementation of the Internal Electricity and Gas Market*’, Draft Working Paper, 2004, p. 5.

<sup>121</sup> KAROVA, R., *op. cit.*, p. 37.

<sup>122</sup> CAMERON, P. (ed.), *op. cit.*, p. 10.

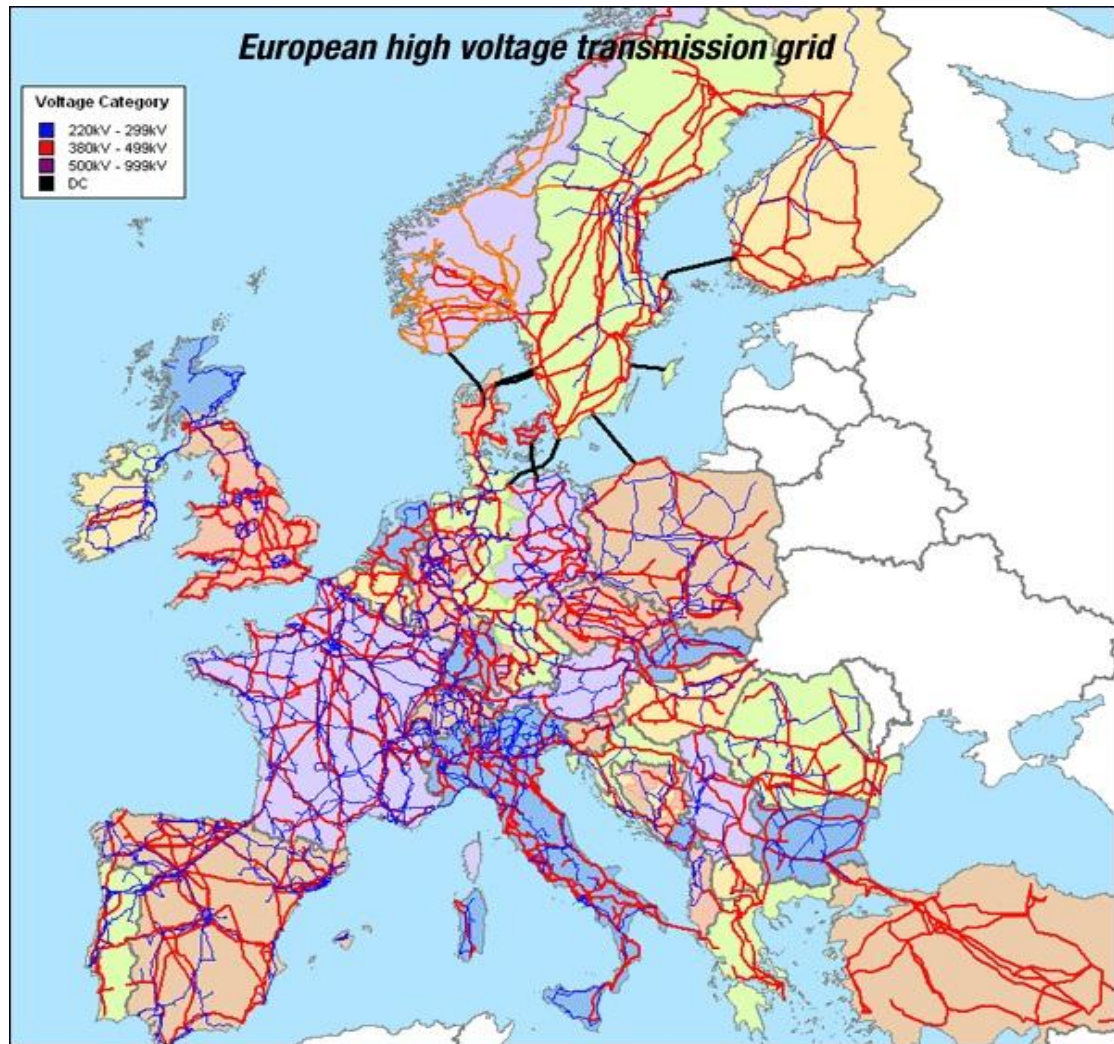


Figure 5<sup>123</sup>

In this regard, access tariffs were not well defined; access to auxiliary storage facilities was highly variable, and there was increasing scepticism with respect to certain long-term contracts awarded to private undertakings.<sup>124</sup> Additionally, access models, both nationally regulated access and the single buyer system, were deemed useless and meant no market opening at all. Moreover, some MS led by Germany refused to even appoint an independent regulatory body and chose to rely instead on *ex post* action by the competition authorities.

<sup>123</sup> Picture portraying the European high voltage transmission grid. Source: Global Energy Network Institute. Updated to 2004.

<sup>124</sup> CAMERON, P. (ed.), *op. cit.*, p. 9.

Finally, the high levels of market power of the former vertically integrated companies were far from decreasing.

### *2.3.- The Second Directive*

#### *2.3.1.- Preface*

In response to calls for the completion of the internal market of electricity, the Directive 2003/54/EC of the European Parliament and of the Council, concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, was adopted the 26<sup>th</sup> of June 2003.<sup>125</sup>

In this regard, the Directive provided for a quantitative market opening, pursuing to achieve full liberalisation by 2007, and equally sought to enhance qualitative regulation in an attempt to bring coordination to the national sphere. With this aim, it established these measures:

#### *2.3.2.- Main features of the legislation*

##### *B) Introduction of general rules for the organisation of the sector*

The Second Directive sets forth various rules on public service obligations and customer protection to ensure that issues such as social exclusion, universal service, security of supply and environmental considerations were taken into account by private companies operating in a liberalised market.<sup>126</sup> Acknowledging these concerns, the following rules were included in the legislation:

- *Fulfilling EU objectives:* MS must ensure that electricity undertakings operate with a view to achieve a competitive, secure, and environmentally sustainable market in

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<sup>125</sup> Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>126</sup> Report of the Committee on Industry, External Trade, Research and Energy, '*On the Proposal for a Directive of the European Parliament and of the Council amending Directives 96/92/EC and 98/30/EC Concerning Common Rules for the Internal Market in Electricity and natural gas*', COM (2001) 125, p. 9.

electricity. Precisely, the three core objectives of the EU's energy policy are competitive energy systems, security of supply, and sustainable development.<sup>127</sup>

- *Public service obligations*: MS are allowed to impose public service obligations on electricity undertakings, but such mandate must be clearly defined, transparent, non-discriminatory and verifiable. In order to carry on these public service obligations, long-term planning is allowed. Nonetheless, MS must take into account at all times the possibility of third parties seeking access to the system.<sup>128</sup>
- *Universal service*: MS must ensure universal service for all household customers.<sup>129</sup> This has been defined as the right to be supplied with electricity of a specified quality at reasonably, easily comparable and transparent prices.<sup>130</sup> This 'easily comparable' clause is intended to facilitate the liberalisation of the market for domestic customers by enabling them to benefit from increased competition.<sup>131</sup>
- *Consumer protection*: In order to protect final customers and in particular vulnerable customers, the Directive contains specific measures aiming to allow such customers with the possibility of switching suppliers easily while at the same time being protected from disconnection.<sup>132</sup>
- *State aid*: To achieve the objectives of social and economic cohesion, as well as those of security of supply and environmental protection, economic incentives can be granted for the maintenance and construction of the necessary network infrastructure.<sup>133</sup>
- *Potential abuse of public service obligations*: Repeating almost *ad verbum* Article 90 (2) of the late EEC, MS may decide not to apply the rules on generation or on third party access if the application of those provisions would obstruct the performance, in law or in fact, of public service obligations, but only insofar as the development of trade is not adversely affected to an extent contrary to the interest of the community.<sup>134</sup>

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<sup>127</sup> Article 3 (1) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>128</sup> Article 3 (2) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>129</sup> Article 3 (3) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>130</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNÉ, A. (eds.), *op. cit.*, p. 345.

<sup>131</sup> *Ibid.*, p. 346.

<sup>132</sup> Article 3 (5) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>133</sup> Article 3 (7) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>134</sup> Article 3 (8) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.



Public service obligations have been the subject of scrutiny by the ECJ, which in its *Altmark* case<sup>135</sup> ruled that financial compensation for the cost of carrying out those obligations is not a form of state aid as long as it meets for conditions: i) the public service obligations exist and are clearly defined; ii) the parameters on the basis of which the compensation is calculated are established in advance; iii) the compensation cannot exceed what is necessary to cover all of the costs incurred in the discharge of the public services; and iv) if the correspondent undertaking was not chosen pursuant to a public procurement procedure, the level of compensation must be determined according to an analysis of the costs that a typical undertaking would occur.<sup>136</sup>

## B) Restructuring the sector

### *B.1.- Vertical unbundling*

Experience indicated that the ultimate goal of non-discriminatory access to the transmission and distribution grid and other essential infrastructure could not be fully achieved by the unbundling rules of the First Directive.<sup>137</sup> Aware of this, the 2003 Directive provided for stricter unbundling requirements for TSOs and DSOs than was required previously. In this regard, it commanded that both TSOs and DSOs, when part of a vertically integrated company, must be independent at least in terms of their legal form, organisation, and decision making from other activities not relating to transmission.<sup>138</sup> In addition to this new form of unbundling, accounting and functional unbundling measures were maintained.

Nevertheless, the Directive was careful to distinguish between legal unbundling and ownership unbundling. Indeed, there was still no requirement to transfer ownership of the assets of the TSOs or DSOs.<sup>139</sup> Furthermore, legal unbundling only concerned the network

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<sup>135</sup> Case C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft ltmark GmbH*, [2003] ECR I-7747.

<sup>136</sup> CAMERON, P. (ed.), *op. cit.*, p. 28.

<sup>137</sup> Report of the Committee on Industry, External Trade, Research and Energy, ‘*On the Proposal for a Directive of the European Parliament and of the Council amending Directives 96/92/EC and 98/30/EC Concerning Common Rules for the Internal Market in Electricity and natural gas*’, COM (2001) 125 final, pp. 36 and 37.

<sup>138</sup> Article 10 of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>139</sup> Moreover, TSOs and DSOs are not necessarily the owners of the network assets.

business as a natural monopoly, which meant that all the other activities, namely supply and production, could continue to be operated in one single company.<sup>140</sup>

Whilst in theory this may add little to management unbundling, experience has shown that a legally separate company tends to act more independently than one in which only management unbundling takes place.<sup>141</sup>

### *B.2.- Horizontal splitting*

The aim of horizontal separation is to create enough effective competition in generation and retailing where economies of scale favour competition. It refers to the splitting of generation firms or the merging of retailing firms to change market concentration to theoretically and empirically competitive levels.<sup>142</sup> Certainly, there is sound evidence that, in order to facilitate competition in generation in the short run and to encourage new entry in the long-term, it is important to prevent high levels of concentration in existing markets.<sup>143</sup>

Concerning the breaking up of dominant companies, the Directive is ground-breaking in speaking for the first time of the need ‘to reduce the risks of market dominance and predatory behaviour’.<sup>144</sup> To this purpose, it requires MS to ‘provide, by 31 July of each year, in conformity with competition law, the Commission with a report on market dominance, predatory and anti-competitive behaviour.’ This report shall, in addition, review the changing ownership patterns and any practical measures taken at national level to ensure a sufficient variety of market actors or practical measures taken to enhance interconnection and competition. Thus, the Commission is also required to play a role: other than receiving testimonies from the MS, the Commission must equally submit an annual report to the European Parliament that would, amongst other things, cover ‘the experience gained and progress made in creating a complete and fully operational internal market in electricity and

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<sup>140</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 350.

<sup>141</sup> CAMERON, P. (ed.), *op. cit.*, p. 18.

<sup>142</sup> It is generally accepted that a market becomes competitive when the number of effective competitors is at least five. On this topic, see JAMASB, T. and POLLITT, M., *op. cit.*, pp. 12-15.

<sup>143</sup> JAMASB, T. and POLLITT, M., *op. cit.*, p. 13.

<sup>144</sup> Preamble 2 of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

the obstacles that remain in this respect, including aspects of market dominance, concentration in the market, predatory or anti-competitive behaviour and the effect of this in terms of market distortion'.<sup>145</sup>

It is debateable how far the Directive requires the Commission and the national regulatory authorities to break up dominant companies and how far it just asks them to take measure that mitigate the effects of their dominance. The wording suggests that national authorities, who have to 'review changing ownership patterns', are required to more actively break-up dominant positions than the Commission, which merely has to report on 'aspects of market dominance'.<sup>146</sup>

### C) Enhancing competition

#### *C.1.- Generation*

Aware that in practice, apart from exceptional circumstances, all MS had already opted for the authorisation procedure, instead of the tendering one, the Second Directive provided only for an authorisation procedure as the normal manner for permitting new generation to be licensed. There was no longer the possibility for MS to centrally plan, on a year-to-year basis, future estimated generation needs and to tender for future capacity. It was the time for the market forces to ensure that supply met demand.<sup>147</sup>

The functioning of the authorisation procedure contained therein was simple: European countries were required to publish a list of criteria that had to be met by any undertaking wishing to establish new generation capacity, and any undertaking meeting them would henceforth have the right to build and operate generation capacity. Derogations from this system, by way of initiating tendering procedures, were only permitted very exceptionally when necessary to protect the security of supply or environmental interests.<sup>148</sup> Conversely, it

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<sup>145</sup> Article 27 (1) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>146</sup> THOMAS, S., *op. cit.*, p. 13.

<sup>147</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 14.

<sup>148</sup> The utilisation of the tendering procedure could be viewed as a safety net for MS in case the market failed to provide sufficient generation capacity. Indeed, the tendering procedure has the advantage of being relatively easy to organise and it ensures that investors will actually construct the tendered facility. In this regard, see

could be argued to some extent that derogations of the authorisation procedure by affording completely open access to power plant construction, *i.e.* no procedures at all, would be coherent with the rationale behind the whole Second Directive in spite of the strict wording of Article 7(1), which univocally signals that MS ‘shall adopt’ authorisation procedures.<sup>149</sup> Finland, for example, has adopted this approach by not requiring the fulfilment of a determined procedure for the building of new capacity in its electricity generation investments (with the exception of nuclear plants).<sup>150</sup>

From an economic point of view, the change from tendering to authorisation can be perceived as resulting from an alteration in the perception of MS. Investment in new electricity capacity had become a grave concern, more so than to centrally control the whole generation of electricity, and, by granting open access through a transparent and non-discriminatory procedure, European countries believed that investors would be definitely attracted.

### *C.2.- Transmission and distribution system operation*

Given that the construction of parallel electricity transmission and distribution networks by a new market entrant which has the same geographic and qualitative coverage of that of the incumbent’s network is not normally possible, third party access on a non-discriminatory basis to the existing network is a must if competition is to be motivated.<sup>151</sup>

Article 20 of the Second Directive sets forth a regulated system of third party access to the transmission and distribution systems based on published tariffs, applicable to all customers and applied objectively and without discrimination between system users. Additionally, these tariffs and the methodologies underlying their calculation must be

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Communication from the Commission to the European Parliament, ‘*On the Common Position of the Council on the Adoption of a Directive of the European Parliament and of the Council Concerning Common Rules for the Internal Market in Electricity and Repealing Directive 96/92/EC*’, SEC (2003) 161 final, p. 6.

<sup>149</sup> BJØRNEBYE, H., *op. cit.*, p. 198.

<sup>150</sup> See *Sähkömarkkinalaki* 386/1995.

<sup>151</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 5.

approved beforehand by an independent regulator and publish prior to their entry into force.<sup>152</sup> Moreover, TSOs and DSOs shall provide system users with the information they need for efficient access and such access cannot be denied unless there is a lack of the necessary capacity.<sup>153</sup> In that case, substantiated reasons must support the refusal or access will be granted nonetheless.

In comparison with the First Directive's regime, the new legislation tightens the reasons why access to the network can be denied and actually allows, for the first time, regulated access to the transmission and distribution networks. There is no longer negotiated access and the single buyer system option was withdrawn.<sup>154</sup>

### *C.3.- Supply*

In comparison with the complex compromise of the 1996 Electricity Directive, which progressively opened the market on the basis of the consumption of the final costumers, Article 21 of the Second Directive provided for a much modest system according to which:

- All non-household customers should be allowed to choose their retail suppliers from 1 July 2004.
- All customers were eligible to access retail competition from 1 July 2007.

For the EU's fifteen MS these deadlines had little practical relevance since energy consumers in most countries already enjoyed full freedom of choice before 2007.<sup>155</sup> In the electricity economy, only four out of the UE-15 group had not yet set a definitive date for full market opening prior to the Second Directive.<sup>156</sup>

### **D) Regulation**

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<sup>152</sup> Article 23 of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>153</sup> Articles 9 (f) and 14 (3) of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

<sup>154</sup> THOMAS, S., *op. cit.*, p. 11.

<sup>155</sup> CAMERON, P. (ed.), *op. cit.*, p. 56.

<sup>156</sup> Admittedly, this includes markets as significant as those of France and Italy. See the Directorate General for Transport and Energy, 'Third Benchmarking Report on the Implementation of the Internal Electricity and Gas Market', Draft Working Paper, 2004, p. 4.

Nowadays, it is undisputed that the creation of a competitive electricity market requires the effective regulation of the transmission and distribution networks for three essential reasons:

- Preventing discrimination: a regulatory authority needs to examine the terms and conditions offered by the network company for access to its grid carefully so as to ensure non-discrimination. Moreover, it has to deal quickly with the complaints regarding equality for unbundling measures to be effective.<sup>157</sup>
- Preventing cross-subsidies: a vertically integrated company has a commercial interest in ensuring that its prices for transmission and distribution, where no competition exists, are as high as possible. It is then in a position to reduce its margins on its generation and sales activities to increase its competitiveness in a sector where competition does exist whilst maintaining overall profitability. Therefore, a regulatory authority needs to ensure that these sort of operations, *i.e.* cross-subsidies, do not take place.<sup>158</sup>
- Preventing excessive pricing: electricity grids are an essential service and cannot be substituted by any other (at least in the short term). In this regard, there is not elasticity in demand and the network operator has considerable leverage power to increase prices without demand for network services reducing at all. Hence, irrespective of the level of unbundling, it is essential for a regulatory authority to ensure that tariffs are cost-reflective and do not lead to excessive monopoly profits.<sup>159</sup>

In this context, the Second Directive prescribed that MS must designate one or more competent bodies with the function of regulatory authorities, which will be wholly independent from the interests of the electricity industry.<sup>160</sup> These authorities were obliged to comply with a minimum set of standard competences which included, among others, monitoring and, if necessary, intervening in the: allocation of interconnection capacity, setting of mechanisms to deal with congested capacity, publication of appropriate information,

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<sup>157</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 7.

<sup>158</sup> *Ibid.*, p. 7.

<sup>159</sup> *Ibid.*, p. 7.

<sup>160</sup> Article 23 of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

effective unbundling of accounts to avoid cross-subsidies, connecting new producer to electricity, overall compliance of the TSOs and DSOs with the directive, etc.

The regulatory regime of the Second Directive, which has been defined as deregulatory,<sup>161</sup> eliminates all regulation no longer necessary and focuses on areas on which it is unavoidable, *e.g.* ensuring fair and non-discriminatory access for new entrants to the markets.<sup>162</sup>

#### E) Ownership

Identically to the First Directive, the Second Directive remains silent regarding the issue of granting monopoly rights. The Commission retains its neutral stance and in spite of providing for legal unbundling, it does outline that such separation does not imply the transferral of assets from the TSOs and DSOs.

#### 2.3.3.- Remarks

The 2003 Directive for Electricity made important progress towards establishing a more robust EU framework of rules designed to open and integrate national markets. Certainly, it set a non-flexible date for full market opening (July 2004 for non-household consumers, July 2007 for all consumers); put into place stricter rules for national network access regimes and the unbundling of vertically integrated utilities; and made it mandatory for member states to have regulatory authorities with minimum set of powers and responsibilities to regulate national markets. Moreover, it gave greater emphasis than its predecessor to public services measures over competition. Still, the common rules allowed considerable scope for diversity in implementation by MS. Politically, it was not an option to require full harmonisation or to delegate formal regulatory powers to the Commission, let alone to establish an independent EU energy regulator.<sup>163</sup>

Instead, the EU framework relied very much on national regulatory authorities to enforce existing EU-level rules, to develop new ones and to co-ordinate national

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<sup>161</sup> BALDWIN, R., SCOTT, C., and HOOD, C. (eds.), *op. cit.*, p. 195.

<sup>162</sup> KAROVA, R., *op. cit.*, p. 26.

<sup>163</sup> CAMERON, P. (ed.), *op. cit.*, p. 12.

implementation. The legislation required regulators to co-operate with each other and with the Commission in order to develop a level playing field.<sup>164</sup> To this effect, in November 2003, the Commission created the European Regulators Group for Electricity and Gas,<sup>165</sup> to give informal co-operation between national regulators a more formal status. The purpose of this advisory group is ‘to advise and assist the Commission in consolidating the internal energy market’. In particular, the group’s objective is to facilitate ‘consultation, co-ordination, and cooperation of national regulatory authorities, contributing to a consistent application’ of Community legislation.

In the end, the overall picture changed from:

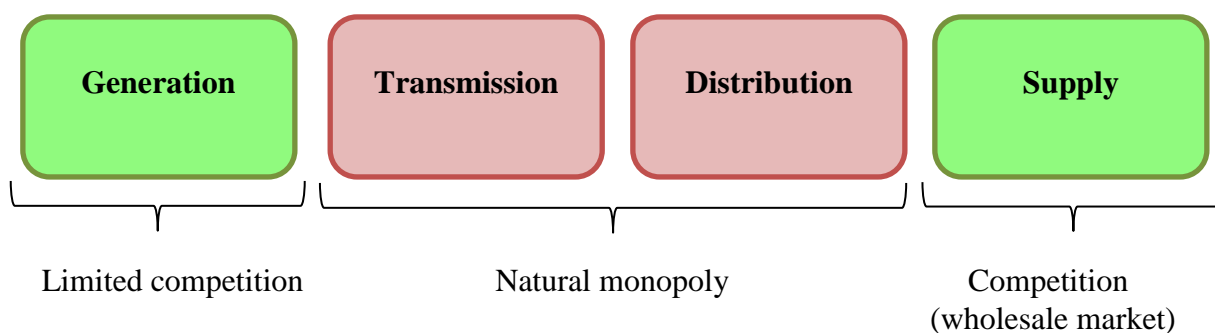


Figure 6<sup>166</sup>

to:

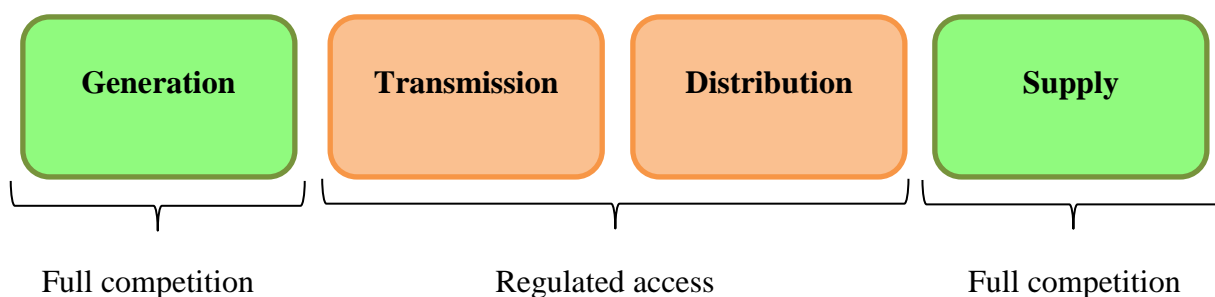


Figure 7<sup>167</sup>

<sup>164</sup> EBERLEIN, B., *op. cit.*, pp. 81-82.

<sup>165</sup> Commission Decision of 11 November 2003 on establishing the European Regulators Group for Electricity and Gas (2003/796/EC).

<sup>166</sup> Diagram depicting the electricity industry after the implementation of the First Directive.



## 2.4.- Interlude II

### 2.4.1.- Electricity Regulation

The European reform of the electricity market was pursued through a twin-track approach. First, under EU Electricity Market Directives, member countries were required to take at least a minimum set of steps by certain key dates toward the liberalisation of their national markets. Second, the European Commission promoted efforts to improve the interfaces between national markets by improving cross-border trading rules,<sup>168</sup> and to expand cross-border transmission links. The underlying aim of both of these policies was to enable companies from across the EU to compete with national undertakings. In this sense, improved interconnection would reduce cross-border transport costs and increase competition.

Certainly, even with the implementation of the Second Directive, the cross-border trading in electricity, in terms of physical exchanges of electricity between MS, remained organisationally and economically difficult. Likewise, to guarantee that suppliers could bring their supplies to their consumers within the EU, irrespective of state borders, it had to be ensured a fair and unhindered use of networks.<sup>169</sup> In this regard, a few issues had been prone to stand out:

- Due to the differences in the structure of tariffication systems applied in MS, the actual amount payable for cross-border access could vary considerably and without necessarily a cost-reflective link.
- There was a risk of ‘pancaking of tariffs’ if all operators of the transited systems charged a tariff.
- Congestion on some borders often led to allocate the interconnection capacity to market operators upon unclear and discriminatory rules.<sup>170</sup>

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<sup>167</sup> Diagram depicting the electricity industry after the implementation of the Second Directive.

<sup>168</sup> Trading rules are being developed with industry agreement and the EU has subsidised some cross-border transmission link upgrades (such as between Ireland and Great Britain)

<sup>169</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 356.

<sup>170</sup> *Ibid.*, p. 357.

To overcome such problems, a harmonised Community framework in tariffs for cross-border transactions and on the allocation of available interconnection capacities was felt necessary. In view of this, the Regulation on conditions for access to the network for cross-border exchanges in electricity was adopted in 2003.<sup>171</sup>

To some extent, the Regulation was successful in ensuring a more efficient, transparent, cost-reflective and non-discriminatory cross-border trade in electricity. In this respect, the Regulation established a compensation mechanism for cross-border flows of electricity and harmonised the principles on transboundary transmission charges. Furthermore, some principles to allocate available capacities of interconnections between national transmission systems were laid down. Nevertheless, from another point of view, it remains quite uncertain whether these provisions were sufficient in any measure for effective cross-border competition.<sup>172</sup>

From the point of view of market liberalisation, the adoption of the Regulation was a necessary step towards achieving one fully open internal market instead of many unevenly liberalised markets.

#### 2.4.2.- Sector Inquiry

After a few years of experience with the second legislative package for the liberalisation of energy markets, the single energy market had not yet been established. As a consequence, the Commission undertook an Inquiry in the electricity (and the gas) market in June 2005,<sup>173</sup> with grounds on the implementation of the EC Treaty rules on competition,

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<sup>171</sup> Regulation 1228/2003/EC on conditions for access to the network for cross-border exchanges in electricity [2003] OJ L 176/1.

<sup>172</sup> See Communication from the Commission to the Council and the European Parliament, '*Prospects for the internal gas and electricity markets*', 10 January 2007, COM (2006) 841.

<sup>173</sup> Commission Decision (EC) Num. 1682, of 13 June 2005, *Initiating an Inquiry into the Gas and Electricity Sectors pursuant to Article 17 of Council Regulation EC Num. 1/2003*.

aiming towards assessing the prevailing competitive conditions and establishing the causes of the perceived shortcomings of the EU energy market.<sup>174</sup>

The Sector Inquiry examined five key areas of the European electricity market: 1) market concentration; 2) vertical foreclosure/inadequate unbundling; 3) lack of market integration; 4) lack of transparency; 5) price formation. Concerning these issues, the Final Report of the Inquiry<sup>175</sup> showed two predominant flaws of the Second Directive:

A) Uneven implementation of the unbundling requirements

As a consequence of the somewhat patchy implementation of the applicable unbundling provisions, the Final Report found that new market entrants often lacked effective access to networks in spite of all the existing unbundling provisions and that this phenomena was having negative repercussions on the functioning of the EU market as a whole and on incentives to invest in networks.<sup>176</sup> In particular, the following symptoms were identified:

- Market concentration: regardless of the liberalisation of the electricity market, the level of market concentration is still similar to that existing before the liberalisation. In particular, the French (single dominance), Spanish (duopoly) and German (oligopoly) markets are very concentrated.<sup>177</sup>
- Vertical foreclosure: network operators were suspected of favouring their own affiliates and thereby discriminating against other market participants. In those cases where an enterprise group held a continued vertical integration of energy undertakings,

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<sup>174</sup> Namely, the legal basis was Article 17 of the Council Regulation (EC) 1/2003, of 16 December 2002, on the implementation of the rules on competition laid down in Articles 81 and 82 of the EC Treaty, OJ L 1 of 4 January 2003.

<sup>175</sup> Directorate General on Competition, '*Report on Energy Sector Inquiry*', Brussels, 10 Jan. 2007, SEC (2006) 1724.

<sup>176</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), '*EU Energy Law and Policy Issues: Volume 3*', Intersentia, Cambridge, 2012, p. 10.

<sup>177</sup> Directorate General on Competition, '*Report on Energy Sector Inquiry*', Brussels, 10 Jan. 2007, SEC (2006) 1724, p. 7.

investment decisions were not taken in the interest of network operations but on the basis of the supply interests of the relevant integrated company.<sup>178</sup>

- Lack of cross-border integration: in spite of the 2003 Electricity Regulation, sales between MS simply do not happen and because of insufficient cross-border activity, there is a lack of cross-border integration. The Commission considered this to be a symptom and a cause of the persistence of national energy markets.<sup>179</sup>
- Lack of transparency: the Commission takes the view that more transparency for new entrants is needed.<sup>180</sup> At the time there was information asymmetry between vertically integrated incumbents and new entrants. Therefore, minimum transparency requirements laid down in the Second Directive were not sufficiently effective.<sup>181</sup>
- General distrust on price formation: the formation of the electricity price is unnecessarily complex.<sup>182</sup>

On the basis of these findings, the Commission concluded that, notwithstanding the EU's attempts to liberalise the electricity sector, competition in the energy sector was very limited, *i.e.* not 'healthy' enough to guarantee the proper operation of the market<sup>183</sup>. Its general conclusion in the Final Report was, then, that in order to address the malfunctioning of the markets, stronger remedies in competition and regulation issues were indispensable.<sup>184</sup>

## B) Security of supply

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<sup>178</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 11.

<sup>179</sup> Directorate General on Competition, '*Report on Energy Sector Inquiry*', Brussels, 10 Jan. 2007, SEC (2006) 1724, p. 22.

<sup>180</sup> Directorate General on Competition, '*Report on Energy Sector Inquiry*', Brussels, 10 Jan. 2007, SEC (2006), p. 24.

<sup>181</sup> SLOOTBOOM, M., '*Antitrust Rules and the Energy Sector Inquiry*', in ROGGENKAMP, M. and HAMMER, U., '*European Energy Law: Report V*' Energy & Law, Vol. 7, Intersentia, Oxford, 2008, p. 5.

<sup>182</sup> Directorate General on Competition, '*Report on Energy Sector Inquiry*', Brussels, 10 Jan. 2007, SEC (2006), p. 25.

<sup>183</sup> HAGHIGHI, S., '*Establishing an External Policy to Guarantee Energy Security in Europe? A legal analysis*', in ROGGENKAMP, M. and HAMMER, U., '*European Energy Law: Report VI*' Energy & Law, Vol. 8, Intersentia, Oxford, 2008, p. 177.

<sup>184</sup> *Ibid.*, p. 27.

Security of supply had received little attention so far. As explained above, the rationale behind liberalisation had been efficient competition, and not to directly improve public service obligations. With liberalisation there was a movement from a national to EU level energy market and from a state-driven to market-driven system.<sup>185</sup> When the energy market became more international, EU dependence on imports as well as interruptions in supply caused the European security of supply to be raised to the top of the EU agenda.<sup>186</sup>

Therefore, the Sector Inquiry arranged the adoption of a separate piece of EU legislation as necessary means to fix this issue and, in February 2006, the European Parliament and the Council enacted the Electricity Supply Directive.<sup>187</sup>

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<sup>185</sup> KAROVA, R., *op. cit.*, p. 43.

<sup>186</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 126.

<sup>187</sup> Directive 2005/89/EC of the European Parliament and of the Council, of 22 June 1998, concerning measures to safeguard security of supply and infrastructure investment, OJ 2006/L 33/22 of 4 February 2006.

## Chapter III: The New Regime

### 3.- A new Framework

The idea for the completion of the internal market influenced European energy policy despite the fact that there was no energy chapter in the EC Treaty. For a long period of European integration there was a lack of clear Community competence to take measures on energy matters and only with the Maastricht Treaty was the Community entitled to ‘take measures in the sphere of energy’.<sup>188</sup> Before that, measures were taken by borrowing the legal basis from other competences, such as the internal market or the competition policy.<sup>189</sup>

Finally, with the adoption of the Treaty on the Functioning of the European Union,<sup>190</sup> a precept has been entirely dedicated to energy. Indeed, Article 194 TFEU extends the EU policy competence to energy and allows to:

- a) Ensure the functioning of the energy market.
- b) Ensure security of supply in the Union.
- c) Promote energy efficiency and energy saving and the development of new and renewable forms of energy.
- d) Promote the interconnection of energy networks.

In addition, it provides a legal basis for the European Parliament and the Council, acting in accordance with ordinary legislative procedure, to establish the measures necessary for achieving those objectives.

### 4.- The Third Electricity Directive

#### 4.1.- Preface

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<sup>188</sup> Article 3 (1) (u) EC Treaty.

<sup>189</sup> KAROVA, R., *op. cit.*, p. 43.

<sup>190</sup> Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union, Official Gazette of the European Union (2008/C115/01), of 9 May 2008.

In sum, the Sector Inquiry made it clear the measures introduced in the Second Directive were insufficient to address the deficiencies of the internal energy market. By way of a legislative follow-up, the Commission published in September 2007 a proposal for a Third Directive which, after intense negotiations among MS and between the Council and the European Parliament was finally adopted on 13 of July 2009, and entered into force on 4 September 2009.<sup>191</sup>

After a transposition period of two years, expiring by March 2011, the provisions of the new Third Electricity Directive mark the latest regulatory stage so far in the EU's efforts to improve the operation of the internal energy market through the improvement and integration of competition in the electricity sector.

#### *4.2.- Main features of the legislation*

##### **B) General rules for the organisation of the sector**

The Third Electricity Directive confirms the trend initiated by the precedent 2003 Directive of setting general guidelines for the government of the sector and, other than confirming managerial procedures of previous legislation, further strengthens consumer protection, innovation, and makes an attempt to merge national systems into one European electricity market. In this regard, the following rules are included:

- Suppliers from other MS: Member States shall ensure that all customers are entitled to have their electricity provided by a supplier regardless of the Member State in which the supplier is registered, as long as the supplier follows the applicable trading and balancing rules. In this regard, Member States shall take all measures necessary to ensure that administrative procedures do not discriminate against supply undertakings already registered in another Member State.<sup>192</sup>

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<sup>191</sup> Directive 2009/72/EC of the European Parliament and of the Council, of 13 July 2009, concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC, OJ L 211/55 of 14 August 2009.

<sup>192</sup> Article 3 (4) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

- Consumer switching: MS shall ensure that when a customer wishes to change supplier, the change is effected, in a non-discriminatory manner as regards cost or effort, within three weeks.<sup>193</sup>
- Promote energy efficiency: MS shall strongly recommend that electricity undertakings optimise the use of electricity, for example by providing energy management services, developing innovative pricing *formulae*, or introducing intelligent metering systems or smart grids.<sup>194</sup>
- Establishment of points of contact: MS shall establish of single points of contact to provide consumers with all necessary information concerning their rights, current legislation and the means of dispute settlement available to them in the event of a dispute with their electricity supplier.<sup>195</sup>
- Energy ombudsman: MS shall ensure that an independent mechanism such as an energy ombudsman or a consumer body is in place in order to ensure efficient treatment of complaints and out of court dispute settlements.<sup>196</sup>

## B) Restructuring

### *B.1.- Vertical Unbundling*<sup>197</sup>

One of the most significant features of the New Electricity Directive is the unbundling regime, *i.e.* the separation of the operation of electricity networks at transmission level from the business of producing or supplying such commodity.

Whilst the Commission and European Parliament originally backed full ownership unbundling,<sup>198</sup> political pressure from MS opposing unbundling meant that a compromise had to be found. Under the agreement between the Council and the European Parliament, MS now

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<sup>193</sup> Article 3 (5) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>194</sup> Article 3 (11) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>195</sup> Article 3 (12) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>196</sup> Article 3 (13) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>197</sup> Applicable only from 3 March 2012 onwards.

<sup>198</sup> Ownership unbundling indicates that the vertically integrated company is obliged to sell its network assets so that it is controlled by shareholders not active in the generation, production and sale of electricity gas. See JONES, C. and WEBSTER, W., *op. cit.*, p. 6.



enjoy three options: a) full ownership unbundling, b) the independent system operator model (ISO), or c) the independent transmission operator model (ITO).<sup>199</sup>

### *B.2.- Full ownership unbundling*

The ownership unbundling approach entails a full separation between the operation of electricity transmission networks from supply and production/generation activities. Under this regime, operators transmission grids can no longer be affiliated or be part of an enterprise group which is also active in supply or generation.<sup>200</sup>

The operator of the network will be required to own and control the network.<sup>201</sup> However, in this regard, it can also be understood that a person or a company may still be able to hold shares in both a network and a supply or generation undertaking as long as these shares represent a non-controlling minority interest.<sup>202</sup>

### *B.3.- The ISO approach<sup>203</sup>*

In the ISO approach, vertically integrated companies may retain the ownership of their network assets, but the network is managed by an ISO. Such ISO has to be an entity completely separate from the vertically integrated company and must perform all functions of a network operator. Moreover, the ISO will need to comply with the same unbundling requirements as the other network operators. As such, the ISO may not hold any interest in a supply or generation undertaking.

Nevertheless, in order to strengthen the ISO model, additional regulatory controls are required:

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<sup>199</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 13.

<sup>200</sup> *Ibid.*, p. 13.

<sup>201</sup> Article 9 (1) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>202</sup> Although in that case the minority shareholder shall not be allowed to vote or to appoint members of the undertakings' boards.

<sup>203</sup> Article 13 of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

- The network owner which is still active in supply or generation will have to legally and functionally unbundle that part of its company which owns the network. Additionally, it will be required to finance the investment decisions made by the ISO.
- The identity of the ISO will have to be approved by the Commission.
- Once appointed, the ISO has to commit to complying with a ten year network investment plan agreed upon by a regulatory authority.

#### *B.4.- The ITO model<sup>204</sup>*

The ITO model was introduced as a compromise model after certain MS<sup>205</sup> felt that both ownership unbundling and the ISO approach were unsuitable for their national regulatory regimes. Concerning this, the ITO model preserves integrated supply and transmission companies in exchange for obliging such companies to comply with additional rules to ensure that the two activities are operated independently.<sup>206</sup> The rules are as follow:

- Managers of TSOs cannot have positions of responsibility, interest or business relationships, directly or indirectly, with the relevant vertically integrated undertaking.
- Before being appointed to the management of the TSO, a person may have not hold any management position or exercise any other relevant activity in the vertically integrated undertaking for 6 months.
- The network development and investment decisions taken by an ITO will be examined to ensure that they are consistent with relevant Community-wide plans.
- Penalties are defined in respect the turnover of the ITO is the ITO provisions are not complied with. Significantly, the ultimate penalty for a persistently non-compliant ITO model would be the mandatory introduction and designation of an ISO.

The ITO model will, nonetheless, be applicable only in MS where TSOs belong to a vertically integrated undertaking. MS that have already introduced the ISO model or mandatory ownership unbundling models will not be able to revert to an ITO model. Therefore, the ITO model constitutes the lowest threshold for network unbundling.

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<sup>204</sup> The ITO model is set out in Chapter V of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>205</sup> To name a few: France, Austria and Germany.

<sup>206</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 14.

Precisely, the ITO model has come to be known as the *status-quo-plus* model because it allows MS to cement arrangements previous to the adoption of the Third Directive, thus making it likely for further regulatory change to be required to make the internal market work.<sup>207</sup>

#### *B.5.- The Third Country Clause*

Interestingly, Article 11 of the Electricity Directive contains a so-called ‘third-country clause’, which requires non-EU entities to comply with the EU regime in case they wish to acquire a significant share of an EU transmission network. In such acquisitions, national regulatory authorities are to refuse certification of a TSO if: a) the relevant company does not comply with the unbundling requirements, and b) its market entry would jeopardise the MS’s or the EU’s security of supply. This assessment is to be carried out by the very same authority with the only limitation of having to take into account the international agreements between the Union and the relevant third country.<sup>208</sup>

Concerning the burden of proof, it is the third-country controlled TSO who has to show that it complies with the unbundling regime.

#### *B.6.- Horizontal splitting*

Concerning the breaking up of dominant companies in order to change the market concentration to competitive levels, the Third Directive merely replicates the obligation for MS to report on market dominance, predatory and anti-competitive behaviour to the Commission already contained in the precedent legislation.

### C) Introduction of competition

#### *C.1.- Generation*

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<sup>207</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 17.

<sup>208</sup> The Directive remains silent as to what facts and circumstances might be, from an EU perspective, relevant to the Union’s security of supply.

No new measures are introduced concerning the introduction of competition in the electricity generation phase. Thus, the authorisation procedures, according to which MS are required to publish a list of criteria that had to be met by any undertaking wishing to establish new generation capacity, are confirmed. Likewise, derogations from this system by way of initiating tendering procedures are permitted when necessary to protect the security of supply or environmental interests.

The only novelties introduced have nothing to do with liberalisation and only concern the utilisation of renewable sources. In this context, Article 7 (2) (j) indicates that, in determining appropriate criteria for the granting of authorisations, MS must take into account the contribution of the corresponding generating capacity to meeting the overall Community target of at least a 20% share of energy from renewable sources in the Community's gross final consumption of energy in 2020.<sup>209</sup>

#### *C.2.- Transmission and distribution systems*

Article 30 of the New Directive maintains the third party access to the transmission and distribution systems set forth in the Second Directive.<sup>210</sup>

#### *C.3.- Supply*

There is no further restructuring of the supply phase of the electricity industry. This responds to the fact that the Second Directive already provided for all household and non-household customers to have the right to choose final supplier by the end of 2007.<sup>211</sup> The only provisions of the New Directive concerning supply refer to the prevention of a disruption in supply. Nevertheless, such measures fall out of the scope of the present thesis and, in fact, have little to do with the liberalisation of the electricity market.

### **D) Regulation**

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<sup>209</sup> Referred to in Article 3(1) of the Directive 2009/28/EC of the European Parliament and of the Council, of 23 April 2009, on the promotion of the use of energy from renewable sources, OJ L 140, of 5 of June 2009, p. 16.

<sup>210</sup> See above, pp. 40-41.

<sup>211</sup> Article 21 of the Directive 2003/54/EC, 26 June 2003, OJ L176/37.

### *D.1.- National Regulatory Authorities*

Whereas the Second Directive acknowledged that the creation of a competitive electricity market requires the effective regulation of the transmission and distribution networks in order to prevent discrimination, cross-subsidies and, ultimately, excessive pricing, it failed to separate national regulatory authorities from public institutions. Surely, while regulatory authorities were required to be wholly independent from the interests of the electricity industry, and thus precluded from having any relationship with energy industry interests, political independence was not mandatory.<sup>212</sup>

On this ground, during the years following the implementation of the Second Directive, national regulatory authorities were established with different levels of authority and independence in various MS. Certainly, while in some MS national authorities had become bodies with substantial powers and resources, in some other countries they were created with an inherently weak command or with their faculties dispersed over different ministerial entities.<sup>213</sup> Concerned about this situation, the European Parliament already raised a question before the adoption of the Second Directive referring to whether it would be necessary to ensure political independence as well as independence from industry.

Subsequent to the adoption of the Electricity Directives, country reviews conducted by the Commission revealed that the effectiveness of national regulatory authorities was frequently hampered by a lack of autonomy from domestic governments and a worrisome lack of powers and discretion sufficient to fulfil its duties.<sup>214</sup> In this context, the Commission signalled its intention to propose a strengthening of the provisions, which was eventually

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<sup>212</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 22.

<sup>213</sup> This situation was already foreseen by the European Parliament, which in 2002 already highlighted the necessity to ensure not only industry independence but political too. See European Parliament legislative resolution ‘on the proposal for a European Parliament and Council directive amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal market in electricity and natural gas’, P5\_TA (2002) 0106, of 13 March 2002, p. 24.

<sup>214</sup> Commission Communication, ‘Prospects for the internal gas and electricity market’, COM (2006) 841 final, of 10 January 2007, pp. 12-13.

endorsed by the Brussels European Council.<sup>215</sup> As a result, the inclusion of a new chapter on national regulatory authorities, affecting both the institutional organisation and functions of these authorities by requiring stricter independence from government as well as greatly expanding the minimum set of tasks to be performed, made its way up to the proposal for a Third Electricity Directive.<sup>216</sup>

Consequently, under the New Electricity Directive, national authorities have to be legally distinct and functionally autonomous from any other public or private entity. In addition, their staff and any member of their decision-making body must act independently from any market interest, and must not seek nor take instructions from any governmental or private body. For that purpose, regulatory authorities shall be granted budgetary autonomy, legal personality and appropriate human and financial resources.

As regards market regulation powers, other than monitoring and intervening in the allocation of interconnection capacity, setting of mechanisms to deal with congested capacity, and ensuring compliance of TSOs and DOSs with the rules set forth in the Directive, regulatory authorities are required to:<sup>217</sup>

- Review the investment plans of the TSOs and provide an assessment as to how far such investment plans are consistent with the EU network development plan.
- Monitor network security and reliability.
- Monitor transparency obligations.
- Monitor the level of market opening and competition, promoting effective competition.
- Ensure that consumer protection measures are effective.

#### *D.2.- Transparency and record keeping obligations*

To guarantee the effective fulfilment of national regulatory authorities' tasks, the New Electricity Directive sets out a number of record keeping obligations on electricity generators

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<sup>215</sup> Presidency Conclusions from the Brussels European Council held on 8 and 9 March 2007, of 2 May 2007, (7224/1/07), Annex I, European Council Action Plan (2007-2009), Energy Policy for Europe, p. 16.

<sup>216</sup> See Article 35 of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>217</sup> Article 37 of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

and supply undertakings that will be required to keep evidence of all data relating to operational decisions and trades. The rationale behind such obligations lies in the hope that such requirements enable regulators to better assess allegations of market abuse and to study past behaviour of market participants. In this regard, it is believed that a review of the relevant documentation will enable national authorities to investigate whether operational decisions were based on sound economic reasoning rather than attempts to manipulate the market.

### *D.3.- Agency for the Cooperation of Energy Regulators (ACER)*

Since the adoption of the First Electricity Directive, the lack of coordination at supra-state level has constantly undermined the establishment of a truly integrated European Market. Aware of this, in an attempt to reinforce the position of regulators at the European level and to institutionalise their cooperation, additionally to the New Electricity Directive, the ACER Regulation created the Agency for Cooperation of Energy Regulators.<sup>218</sup>

ACER is governed and its institutional setting is based on the standard rules and practices for Community regulatory agencies. Nevertheless, to ensure the necessary independence of regulators at the EU level, ACER will be unique in that it will have a separate board of regulators, *i.e.* solely responsible for regulatory matters and decisions and with no control over administrative and budgetary issues.

Among other competences, ACER will be generally in charge of:<sup>219</sup>

#### a) Consultative tasks

- Issuing opinions addressed to TSOs.
- Issue opinions addressed to national regulatory authorities.
- Issue opinions and recommendations addressed to the Commission.
- Take individual decisions on technical issues.

#### b) Substantive tasks

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<sup>218</sup> Regulation (EC) Num. 713/2009 of the European Parliament and of the Council of 13 July 2009, establishing an Agency for the Cooperation of Energy Regulators, OJ L211, of 14 July 2009, P. 0001-0014.

<sup>219</sup> Articles 9 (1) and 21 of Regulation (EC) Num. 713/2009, OJ L211.

- Adopt, in accordance with its own work programme or at the request of the Commission, non-binding guidelines to assist regulatory authorities and market players in sharing good practice and promote cooperation.<sup>220</sup>
- Decide the regulatory regime for infrastructure connecting at least two MS and grant exceptions from the third party access where the relevant infrastructure concerned is located in the territory of more than one MS.<sup>221</sup>
- Participate in the development of European network codes.
- Monitor the development of the energy markets, in particular in relation to electricity prices.
- Establishing non-binding framework guidelines on conditions for access to the network for cross-border electricity exchanges.

#### *4.3.- Remarks*

After three Directives, it can be asserted that the European model of electricity market liberalisation has not followed the sequencing of the reforms as expected by the liberalisation textbook model. Indeed, generation and retail supply markets have been opened to all customers before finishing the restructuring of the industry and even before having institutionalised the cooperation of national regulatory authorities and the TSOs.<sup>222</sup>

In this regard, further unbundling has been tackled in the New Regime and full ownership separation between the operation of electricity transmission networks and supply and production/generation activities has been for the first time considered. However, the ITO model of unbundling still allows for MS to maintain arrangements where transmission system operators belong to a vertically integrated undertaking, and so uneven implementation of the Directive is expected.

Conversely, the chapter on national regulatory authorities combined with the ACER Regulation demonstrates the apparition of a new European institutional dimension to energy

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<sup>220</sup> Articles 7 (2) and 7 (3) of Regulation (EC) Num. 713/2009, OJ L211.

<sup>221</sup> Articles 9 (1) of Regulation (EC) Num. 713/2009, OJ L211.

<sup>222</sup> KAROVA, R., *op. cit.*, p. 47.



regulation which is likely to increase the EU's role in day-to-day energy management and ultimately lead to the building of an integrated internal energy market.<sup>223</sup>

Notably, the Third Directive has focused on further unbundling and regulatory issues, and no more competition has been introduced. Thus, the picture concerning the access to the electricity market remains like this:

			Prior to 1996	First Directive	Second Directive	Third Directive
Competitive areas	Generation		Monopoly	Authorisation	Authorisation	Authorisation
				Tendering		
	Supply	Wholesale	No choice	Choice for 1/3	Choice by 2004	Free choice
		Retail	No choice	No Choice	Choice by 2007	Free choice
Non-competitive areas	Transmission and Distribution		Monopoly	Regulated access	Regulated access	Regulated access
				Negotiated access		
				Single buyer system		

Figure 8<sup>224</sup>

<sup>223</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 21.

<sup>224</sup> Chart portraying the gradual introduction of competition into the electricity sector.

## Chapter IV: Assessing liberalisation

In 1988, the European institutions committed to the gradual liberalisation of the electricity market.<sup>225</sup> The main reasons leading to such compromise were as follow:<sup>226</sup>

- High public expenditure and much interference with the market cut productivity in many instances and blurred the European capabilities of engaging in prosper international competition.
- From a macroeconomic perspective, there was significant theoretical and empirical evidence suggesting that liberalisation of the electricity market would bring positive effects to network industries in terms of lower prices and better service levels.<sup>227</sup>
- Textbook microeconomic theory suggested that liberalisation and competition would result in internal (production) and external (market) efficiency and that the benefits would be passed on to customers and the economy in the form of lower prices and better allocation of costs.<sup>228</sup>

Thus, in sum, MS agreed to liberalise the electricity market in order to a) lower supply prices (by enhancing effectiveness and better allocating the generation costs) and b) provide a better service to the final consumer.

In this regard, to assess whether the liberalisation venture has paid off, after 25 years of legislative reforms intended to open the electricity market, it is indispensable to ascertain whether the electricity prices have decreased and whether the public service obligation to supply electricity has improved as well.

### 5.- Electricity prices

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<sup>225</sup> European Commission, ‘*Commission Working Document on Internal Energy Market*’, COM (88) 238, May 1988.

<sup>226</sup> See above, *Conceiving liberalisation*, p. 11.

<sup>227</sup> Directorate General for Enterprise and Industry – Observatory of Small and Medium Enterprises (SME), *op. cit.*, p. 9.

<sup>228</sup> JAMASB, T. and POLLITT, M., ‘*Electricity Market Reform in the European Union: Review of Progress toward Liberalization & Integration*’, The Energy Journal, Vol. XXVI, Special Edition, Massachusetts, 2005, p. 12.

### *5.1.- Impact of liberalisation on the domestic prices in EU-15*

The performance of liberalisation can be measured in a number ways. The effect on electricity prices is, perhaps, the single most important performance indicator. A desirable outcome of the single European market is to achieve a lower average EU price and a degree of price convergence through wholesale and retail competition. However, this outcome is also dependent on: a) fuel markets and, in particular, access to natural gas, b) competition and resulting price convergence in national gas markets, c) sufficient interconnection capacity, and d) EU-wide emissions trading creating uniformity in emissions prices.<sup>229</sup>

Indeed, since the beginning, the European Commission has singled out price differentials as the single most important rationale for liberalisation, although admittedly its pricing techniques could have been on occasions criticized as incoherent or archaic.<sup>230</sup> As pointed out by some researchers, there seems to be a methodical inaccuracy in the data used by the Commission.<sup>231</sup>

Nevertheless, as can be seen in the following picture, the European electricity prices have not only diminished, or at least remain stable, but increased.

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<sup>229</sup> JAMASB, T. and POLLITT, M., *'Electricity Market Reform in the European Union: Review of Progress toward Liberalization & Integration'*, p. 28.

<sup>230</sup> JABKO, N., *'Playing the Market: A Political Strategy for Uniting Europe, 1985-2005'*, p. 104.

<sup>231</sup> HUNT, S., *op. cit.*, p. 16.

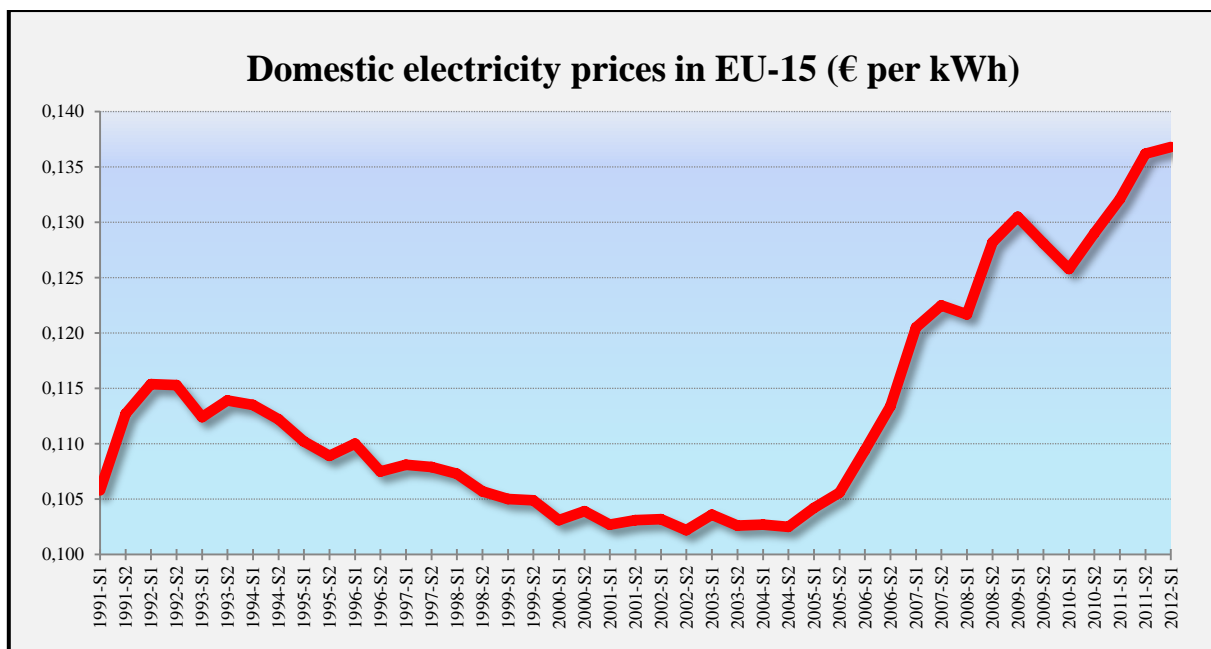


Figure 9<sup>232</sup>

From the full liberalisation of the household market, there has been a steady increase in the price of electricity for household customers. Thus, it seems that the liberalisation of the market does not really work because, ever since the full access to competition in supply was opened to retail consumers, prices have increased more abruptly than before. Moreover, if we compare the evolution of the price with that of the Harmonised Index of Consumer Prices (HICP), it is noteworthy that

<sup>232</sup> EU-15 half-yearly domestic electricity price in € per kWh, taxes excluded. EU-15 data until 2008 is presented by Eurostat analyzing an average annual consumption of 3500 kWh / 1300 kWh at night. EU-15 data from 2008 on is obtained from Eurostat data of the 15 countries member of the EU prior to 2004 by calculating the arithmetic mean of their respective domestic electricity prices, analysing a range of consumption between 2500 kWh and 5000kWh, and excluding Italy as Eurostat does not provide with the specific data for this country. This study starts in 1991 because: a) Eurostat does not offer previous half-yearly data; b) the preceding situation, before the reunification of Germany, is not comparable. Source: Eurostat, Electricity - domestic consumers - half-yearly, updated 27 of November 2012.

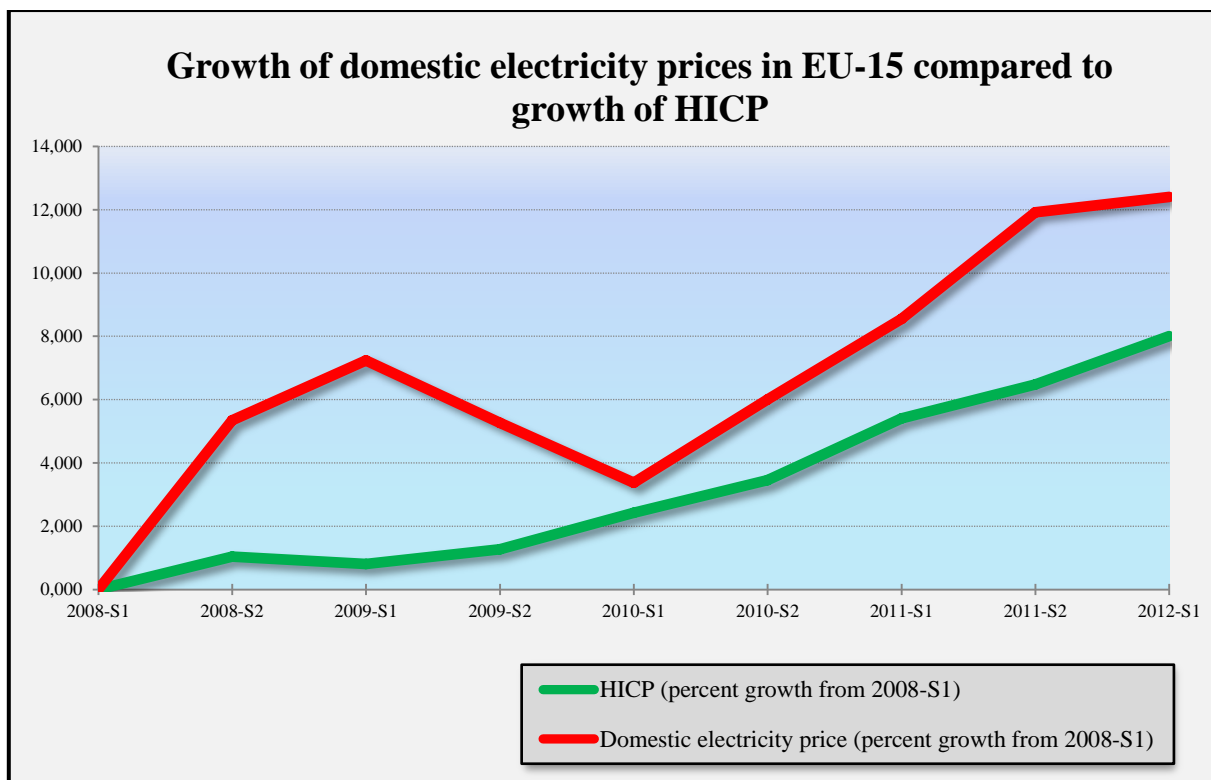


Figure 10<sup>233</sup>

since July 2007, the price of the electricity augments at a higher rate than that of the HICP. The use of a comparative chart is particularly relevant because it permits to have a pretty accurate and reliable idea of the actual impact of liberalisation. In this case, then again, the electricity prices have sharply increased in spite of the introduction of competition and the

<sup>233</sup> HICP (percent growth from 2008-S1): half-yearly HICP percent growth respect to 2008-S1 level. Half-yearly data is obtained from monthly data by calculating the arithmetic mean of the six months contained in the semester considered. EU-15 data is obtained from the 15 countries member of the EU prior to 2004 by calculating the arithmetic mean of their respective HICP percent growth. Source: Eurostat, All items HICP (2005 = 100) - monthly data index, updated 4 of January 2013.

Domestic electricity price (percent growth from 2008-S1): half-yearly domestic electricity price percent growth respect to 2008-S1 level. EU-15 data is obtained from the 15 countries member of the EU prior to 2004 by calculating the arithmetic mean of their respective domestic electricity price percent growth, excluding taxes and analysing a range of consumption between 2500 kWh and 5000kWh, and excluding Italy as Eurostat does not provide with the specific data for this country. The prices of reference are all in € per kWh. Source: Eurostat, Electricity - domestic consumers - half-yearly prices - new methodology from 2007 onwards, updated 27 November 2012.

opening of the market. It also shows that connecting markets does not necessarily lead to a more efficient system.

In like vein, a new study by the *Institut Français des Relations Internationales* (ITRI)<sup>234</sup> confirms these results and, after being presented in Brussels November 2011, frontally defies the first and most important argument in favour of liberalisation in which the Commission has always based its policy: that opening the markets, prices will decrease. In this sense, the moment the most attractive incentive towards liberalisation results to be false, the sacrifices daily done under this belief should be reassessed.<sup>235</sup>

### *5.2.- Impact of liberalisation on the wholesale market of the EU-15*

In the case of the wholesale market, the objective of the electricity market was supposed to be fully achieved by July 2004. Thus, the market has had three more years to feel the effects of liberalisation. As can be seen below, the prices for wholesale consumers are lower than those for the retail supply. Nevertheless, rather than being low because of the impact of the new legislation, this effect responds to the fact that industry consumes on a daily basis a huge amount of energy just to carry on with their usual activities and, in some cases, to the aids of the states as incentives to improve one sector or another. Anyway, in spite of the prices being more accessible than those for household consumers, they have still increased a good deal.

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<sup>234</sup> Available at: <http://www.europeanenergyreview.eu/site/pagina.php?id=3373&zoeke=liberalisation%20electricity>.

<sup>235</sup> See generally BELIN, H., 'Electricity liberalisation has failed to deliver benefits to households', Energy Law Review, 24 November 2011.

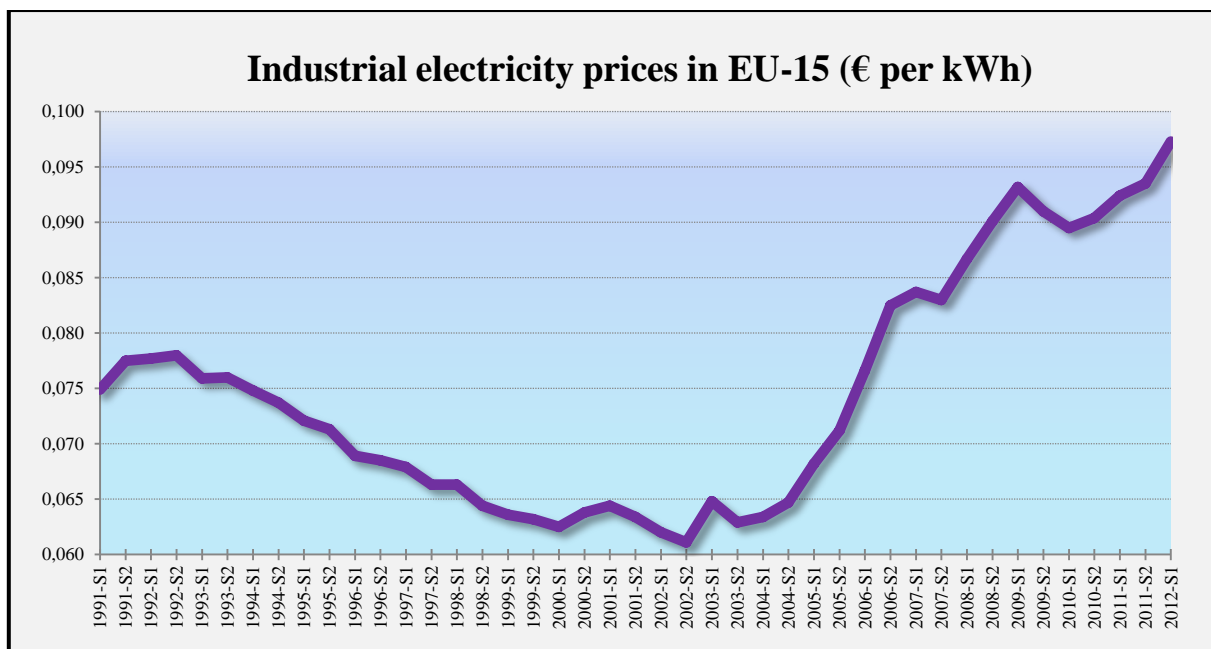


Figure 11<sup>236</sup>

As can be observed below, from July 2004 to the first semester of 2012, there has been an important increase in the price of electricity. Thus, once again, it is clear that in spite of all liberalisation efforts, there has been no real benefit.

<sup>236</sup> € per kWh: EU-15 half-yearly industrial electricity price in € per kWh, taxes excluded. EU-15 data until 2008 is presented by Eurostat analyzing an average annual consumption of 2000 MWh, a maximum demand of 500kW, and an annual load of 4000h (for Luxembourg: 50% power reduction during hours of heavy loading). EU-15 data from 2008 on is obtained from Eurostat data of the 15 countries member of the EU prior to 2004 by calculating the arithmetic mean of their respective industrial electricity prices, analysing a range of consumption between 2500 kWh and 5000kWh, and excluding Italy as Eurostat does not provide with the specific data for this country. This study starts in 1991 because: a) Eurostat does not offer previous half-yearly data; b) the preceding situation, before the reunification of Germany, is not comparable. Source: Eurostat, Electricity - industrial consumers - half-yearly, updated 27 of November 2012.

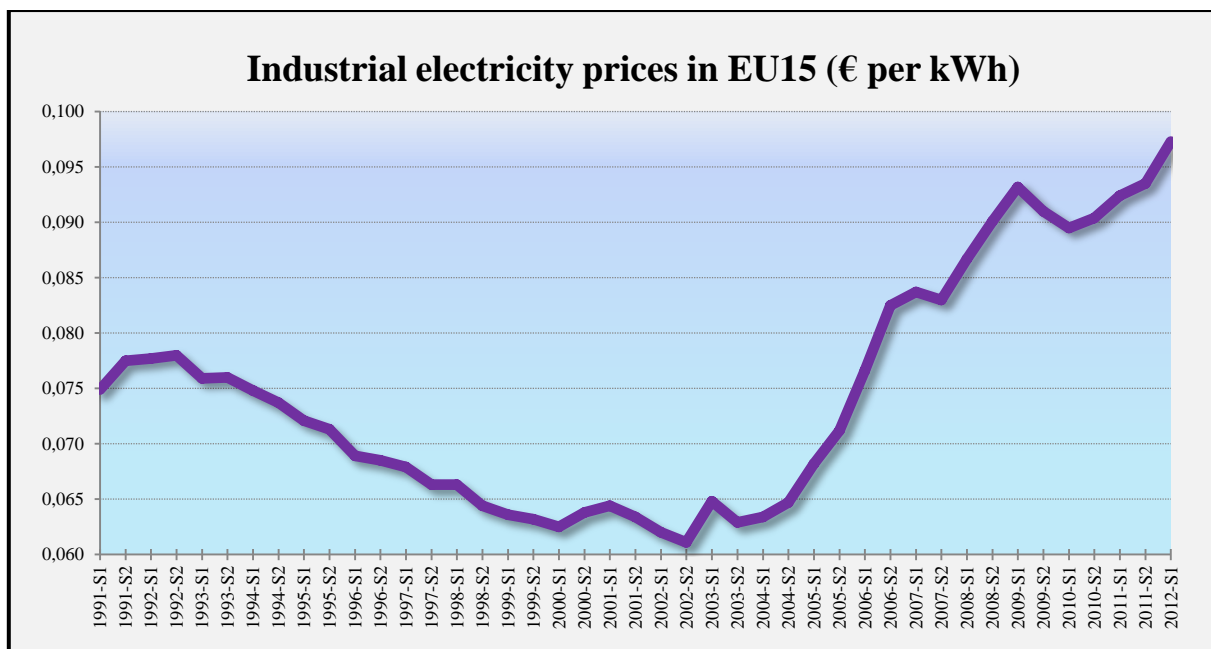


Figure 12<sup>237</sup>

Some authors have argued that this is due to the fact that prices will only decrease in the long run.<sup>238</sup> However, I believe that the electricity industry does not have enough elasticity to be bound by the rules of the market in the same way as any other commodity.<sup>239</sup>

<sup>237</sup> € per kWh: EU-15 half-yearly industrial electricity price in € per kWh, taxes excluded. EU-15 data until 2008 is presented by Eurostat analyzing an average annual consumption of 2000 MWh, a maximum demand of 500 kW, and an annual load of 4000h (for Luxembourg: 50% power reduction during hours of heavy loading). EU-15 data from 2008 on is obtained from Eurostat data of the 15 countries member of the EU prior to 2004 by calculating the arithmetic mean of their respective industrial electricity prices, analysing a range of consumption between 2500 kWh and 5000 kWh, and excluding Italy as Eurostat does not provide with the specific data for this country. This study starts in 1991 because: a) Eurostat does not offer previous half-yearly data; b) the preceding situation, before the reunification of Germany, is not comparable. Source: Eurostat, Electricity - industrial consumers - half-yearly, updated 27 of November 2012.

<sup>238</sup> According to LEVEQUE and GLACHANT, liberalisation 'is not a magic stick that will [immediately] transform the existing national championship of pumpkins into a shining procompetitive EU princess'. See LEVEQUE, F., and GLACHANT, J., '*Do not dissipate too much energy with ownership unbundling*', EU Energy Blog, 20 September 2007, p. 1.

<sup>239</sup> On elasticity, see below, p. 85.



It is clear that achieving greater competition in the European energy markets through the legislative process has not been entirely successful and that the benefits of energy liberalisation for final consumers have been rather limited, considering the persistently high prices in the electricity market.<sup>240</sup>

### *5.3.- Is it bad that prices go up?*

Definitely, other than demonstrating that liberalisation is not working as regards lower prices, paying more for electricity means serious problems. In the context of a global financial crisis, particularly, the number of low-income customers sharply increases and vulnerability to high electricity prices becomes more patent than ever. Indeed, due to the specific problems that MS face related to high unemployment and bad economic conditions in general, it is increasingly difficult to identify the beneficiaries and the most vulnerable customers in the MS: the target groups tend to cover very large parts of the population.

This has been noted by the Commission, which in November 2010 confirmed that the problem of energy poverty exists in all MS.<sup>241</sup> Although, logically, there are wide differences from one country to another, this is essentially due to the fact that some households do not have an alternative to electricity for their domestic heating, in addition to the electricity used for cooking, warming water and lighting.<sup>242</sup> Because electricity cannot be substituted with any other commodity, electricity affordability is a more serious problem than expected.

As regards the social systems functioning in MS in charge of identifying measures for protecting vulnerable customers and offering non-tariff solutions that do not conflict with the competitive electricity markets, it is debatable to what extent they are effective. Surely, it seems that cutting the supply of electricity to household consumers is too much a lucrative venture for retail companies to stop doing it. In this regard, while any citizen needs electricity on a daily basis, whenever they have the means to pay for their supply again, they will additionally have to pay for the procedure of being reconnected to the network.

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<sup>240</sup> ROGGENKAMP, M., REDGWELL, C., DEL GUAYO, I., and RØNNE, A. (eds.), *op. cit.*, p. 250.

<sup>241</sup> European Commission, *Commission Staff Working Paper: An Energy Policy for Consumers*, SEC (2010) 1407 final, Brussels, of 11 November 2010, p. 10.

<sup>242</sup> KAROVA, R., *op. cit.*, p. 363.

#### 5.4.- A patchwork of liberalised markets

Another topic for concern in relation with the impact of liberalisation on the price of electricity is that, due to the leeway bestowed on MS when implementing the measures contained in the Electricity Directives, as shown in the following table, the retail electricity prices for households in May 2012 differ quantitatively from one country to another.

<b>Retail (end-user) electricity prices for households (May 2012)</b>			
<b>Consumption: 3,500 kWh/year (<math>\pm 25\%</math>)</b>		<b>Consumption: 7,500 kWh/year (<math>\pm 30\%</math>)</b>	
<b>Country</b>	<b>€ per kWh</b>	<b>Country</b>	<b>€ per kWh</b>
Greece	0.1265	United Kingdom	0.1265
France	0.1412	France	0.1279
United Kingdom	0.1419	Finland	0.1369
Finland	0.1566	Portugal	0.1547
Portugal	0.1689	Greece	0.1553
Luxembourg	0.1707	Luxembourg	0.1587
Ireland	0.1920	Ireland	0.1604
Spain	0.1959	Spain	0.1777
Austria	0.1988	Austria	0.1798
Italy	0.2031	Sweden	0.1821
Sweden	0.2098	Belgium	0.1940
Belgium	0.2134	Germany	0.2406
Netherlands	0.2208	Netherlands	0.2439
Germany	0.2541	Italy	0.2485
Denmark	0.2982	Denmark	0.2562

Figure 13<sup>243</sup>

Certainly, among small household consumers (3,500 kWh/year), there is an abysmal difference in price, *e.g* Danish consumers pay over 135% more than Greeks. Likewise, for large household consumers (7,500 kWh/year) the difference is respectable. UK customers pay 100% less than Danish. This is coherent with the assumption that liberalisation measures, as

<sup>243</sup> Table portraying the retail electricity prices for the EU-15. Source: Europe's Energy Portal.

they stand right now, are not only far away from integration, but they incite to isolate national markets even further. As explained above, instead of levelling the playing field, the New Regime resulted into a patchwork, *i.e.* instead of a single market, many individual liberalised markets developed.<sup>244</sup>

## 6.- Public service obligations

### 6.1.- Introduction

Electricity is an essential good. Even a short interruption in electricity supply is considered unacceptable. In this sense, when operated as a state-owned monopoly, it was always assumed that an electricity company would act in the public interest, *i.e.* provide a public service. It would, therefore, put consumer protection as a higher priority than making a profit: notably guaranteeing connection and supply to unprofitable customers, ensuring reasonable prices, protecting the environment and maintaining security and continuity of supply.<sup>245</sup>

Hence, the moment liberalisation and competition between companies in a European internal market were recognized by the European institutions as the optimum system to improve the efficiency, affordability, quality and choice of services on offer,<sup>246</sup> MS struggled to retain from the EU's purview of competence the establishment of certain services of general interest. Certainly, whilst in theory competition is somewhat expected to increase the standards in consumer protection, experience has demonstrated that a risk does exist that, unchecked, some public service elements are reduced. These include in particular the connection and supply of electricity to small customers in remote areas at reasonable cost, environmental protection, protection from disconnection of vulnerable customers (*e.g.* the poor or the elderly) and, possibly, security of supply standards.<sup>247</sup>

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<sup>244</sup> CAMERON, P. (ed.), *op. cit.*, p. 64.

<sup>245</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 223.

<sup>246</sup> ALMUNIA, J., 'The role of public services in "Europe 2020"', CEEP Congress [conference], Madrid, 31 May 2010.

<sup>247</sup> JONES, C. and WEBSTER, W., *op. cit.*, p. 224.

Under this rationale, to counteract the adverse effects that liberalisation might have, Article 106 (2) TFEU (*ex* Article 90 (2) EEC) provides that undertakings entrusted with the operation of services of general economic interest are subject to competition rules only insofar as the application of such rules does not obstruct the performance of the tasks assigned to them. Moreover, Article 3 of the Third Electricity Directive admits that

Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and environmental protection, including energy efficiency, energy from renewable sources and climate protection. Such obligations shall be clearly defined, transparent, non-discriminatory, verifiable and shall guarantee equality of access for electricity undertakings of the Community to national consumers.<sup>248</sup>

Recognising that the new regime reaches, since the adoption of the Second Electricity Directive, all households, MS and the European Institutions have tried to strike a minimum balance between the efficiency benefits and quality gains of a liberalised market and the security and social aspects of a regulated market.

#### *6.2.- Public service obligations as an obstacle to integration*

Inspired by the UK's rapid electricity market liberalisation, the EU used its competence to set a date for the complete liberalisation of the electricity markets of the MS. In this context, a distinctive European model of electricity market liberalisation developed. According to this model, competition law is applied to the liberalised segments of the market, *i.e.* generation and supply, supplemented by strict forms of regulation where necessary –the sector legislation.<sup>249</sup> In this context, the imposition of public service obligations is a regulatory tool granted to the MS to overcome market failures and satisfy socially desirable objectives.

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<sup>248</sup> On the measures introduced under this Article, see above 'Main features of the legislation', p. 51.

<sup>249</sup> KAROVA, R., *op. cit.*, p. 53.

Precisely, the EU's approach to public services is that they can *only* operate when market failures occur.<sup>250</sup> Such a stance awarded the Commission the façade of a 'liberalisation machine' among the MS, 'ultra-liberal and dogmatic', while 'permissive in allowing room for privileging inefficient monopoly providers'.<sup>251</sup> Certainly, in the past, when the internal market was at its earlier stages, the services of general interest were seen as an obstacle to integration. Indeed, it has not been until the enactment of the First Electricity Directive that the independent value of public services has been recognised and the objective for improving its delivery has to some extent developed.<sup>252</sup> In this sense, the Commission admitted in 1996 that the fundamental goal of the EU was 'solidarity and equal treatment in an open and dynamic market economy'.<sup>253</sup>

Taking this much into account when introducing competition in the electricity sector, the EU has applied a gradual and structured approach in order to ensure the continuity of the public services provided and to allow the operators in the sector to adapt to a changing market environment.<sup>254</sup> Instead of adopting a Framework Directive for services of general interest, the strategy finally adopted focuses on utilising a sector-specific approach, bearing in mind the specificities of each industry and of the different public services. In this context, no definitions of a public service obligation are provided in the Electricity Directives and discretion is left to the MS to define, organise, finance and monitor such obligations. This responds to the fact that the EU policy is adapted to political feasibility and, as explained above, when opening the electricity market, MS were keen to retain competence on services of general interest. Therefore, the only task of the Commission is to make sure that public services do not affect the Community trade to an extent contrary to the interests of the Union.

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<sup>250</sup> See HAMMER, U., 'EC Secondary Legislation of Network Markets and Public Service: An Economic and Functional Approach', *Journal of Network Industries*, Vol. III, Num. 1, 2002, p. 42.

<sup>251</sup> VAN MIERT, K., 'L'Europe, vecteur de la libéralisation', [speech], Paris, 21 Oct. 1996.

<sup>252</sup> PROSSER, T., 'The Limits of Competition Law: Markets and Public Services', Oxford University Press, Oxford, 2005, p. 121.

<sup>253</sup> European Commission, Communication from the Commission: 'Services of general interest in Europe', OJ C 281, 1996.

<sup>254</sup> European Commission, Report on: 'services of general interest for the Laeken European Council', COM (2001) 598 final, p. 17.

### 6.3.- *Heterogenic measures*

As a consequence of the overall lack of EU competence to design a common social policy in the field of electricity, accentuated by an equal lack of a clear legal basis for energy until the Lisbon Treaty, MS have developed diverse national solutions to address the negative impacts of the liberalisation reforms, each one in a manner suitable for their own domestic conditions.<sup>255</sup>

In this regard, there are two main groups of public services' measures which can be found at the national level:

#### 6.3.1.- Public service obligations related to consumer protection: Regulated electricity price to protect vulnerable customers

In spite of liberalisation, many MS still maintain regulated end-user electricity prices, that is to say, prices which are established by a governmental authority and not by supply and demand.<sup>256</sup> Price regulation can take various forms, such as the need for approval, price caps, etc. Logically, due to the great discretion conferred to the MS to elaborate on public service obligations, there are clear disrupting effects on the market. For example, certain MS -e.g. France, Denmark, Greece and Spain-, other than regulating prices for household consumers, which may be so vulnerable as to require the adoption of such measures, also regulate prices for medium and large size business.

In such situations, the Commission started to take action against the MS, verifying whether they were in line with the electricity *acquis* or not, that is to say, whether the measures they adopted could be justified on a public service basis or not. The main concern was that with artificially low tariffs, new market entries were discouraged and demand was

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<sup>255</sup> KAROVA, R., *op. cit.*, p. 87.

<sup>256</sup> In fact, as of 1 July 2008, 15 out of 26 MS had regulated prices for all customers (not only vulnerable). See European Regulators' Group for Electricity and Gas, '*Status Review of End-User Price Regulation as of 1 July 2008*', Ref: E08-CPR-21-05, of 11 March 2009, p. 26.

ultimately prevented from adapting to prices increases. Furthermore, in some cases, the right to supply at a regulated price was being granted on discriminatory grounds.<sup>257</sup>

Particularly interesting is the case of Spain, which in 2004 arranged for large and medium-sized companies state aid in the form of artificially low regulated electricity prices. Consequently, as soon as 2005, these regulated tariffs led to a deficit of EUR 3.8 billion in the Spanish electricity system. In this situation, to finance such a significant deficit, the Spanish government devised and implemented a new charge to be paid by all Spanish consumers in their electricity bill over the following 14 years.<sup>258</sup> The European Commission opened investigations to examine whether such regulated prices could be somewhat justified as public service obligations and, in 2009, concluded that a) they provided a discriminatory advantage to certain professional consumers, b) they affected trade between MS, c) Spain had directly financed through state resources the tariffs which ultimately created the debt, and, very especially, d) the regulated tariffs could never be justified as for providing a service of general interest due to the fact that they only affected, as for its benevolent effects, large and medium-sized enterprises with no direct link whatsoever with end-users.

Additionally to the Commission's infringement procedures, the ECJ has equally been active in putting pressure on the MS to implement the liberalisation legislation correctly. Nevertheless, concerning the possibility to intervene in supply prices even after the full liberalisation of the market, the Court has adopted a somewhat different approach.

Recently, in the *Federutility* case,<sup>259</sup> the ECJ assessed a national measure related to the price of supply adopted under the public service obligation provision from the gas liberalisation directive. This judgment, albeit related to the Gas Directive,<sup>260</sup> is of utmost

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<sup>257</sup> Italy and Ireland.

<sup>258</sup> See European Commission, *Decision: State Aid C/3/07 (ex NN 66/06) Regulated electricity tariffs in Spain – Invitation to submit comments pursuant to Article 88 (2) of the EC Treaty*, OJ C 43/9, of 27 February 2007.

<sup>259</sup> Case C-265/08, *Federutility, Assogas, Libarna Gas Spa, Collino Commerciale SpA, Sadori Gas Srl, Egea Commerciale Srl, E. On Vendita Srl, Sorgenia SpA v Autorità per l'energia elettrica e il gas*, [2010] ECR I-000.

<sup>260</sup> Directive 2009/73/EC of the European Parliament and of the Council, of 13 July 2009, concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ L211/94.

importance because it allowed the Court to lay down the conditions according to which regulated prices are justified.

The case concerned the power granted to the Italian national regulatory authority by legislation adopted merely a few days before 1 July 2007, *i.e.* before full liberalisation took place, to set ‘reference prices’ that the suppliers of gas were bound to incorporate in their commercial offers as part of their public service obligations. The proceedings involved several actions from companies and holdings of undertakings active in the Italian gas market against such legislation and the Italian Regional Administrative Court of Lombardy referred a preliminary reference to the ECJ. In sum, it asked whether maintaining the power of the national regulatory authority to set reference prices for the supply of natural gas to domestic customers was contrary to the EU law after the liberalisation of the market or whether it could be allowed due to the particular circumstances of the market, still characterised by an absence of effective competition.

Of particular interest –for its ultimate influence in the final outcome– is the stance adopted by the Advocate General Colomer. Colomer argued that Italian legislation permitting regulated prices, even where not limited to a certain group of vulnerable customers, could still be in line with the liberalisation directives as long as it was in the general economic interest, satisfied the proportionality requirement and was non-discriminatory. In this regard, he found that

the objective of preventing undesirable and disproportionate price rises which would be detrimental to consumers constitutes grounds for ‘general economic interest’, which (...) would justify public intervention in respect of prices for the supply of natural gas.<sup>261</sup>

In like vein, the ECJ held that even though price should be determined solely by demand and supply, state intervention is allowed as long as it satisfies the criteria already mentioned by Advocate General Colomer, that is, ensure the general interest, the compliance

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<sup>261</sup> AG Colomer’s Opinion, Case C-265/08, *Federutility, Assogas, Libarna Gas Spa, Collino Commerciale SpA, Sadori Gas Srl, Egea Commerciale Srl, E. On Vendita Srl, Sorgenia SpA v Autorità per l’energia elettrica e il gas*, [2010] ECR I-000, para. 56.



with the principle of proportionality as well as the non-discrimination principle. Accordingly, it stated that the prices could be regulated in order to limit the impact of the increase in the price of petroleum products on international markets that would, in the absence of intervention, have had a major impact on the sale price offered to final customers in cases where competition was not fully developed.<sup>262</sup> The intervention, however, should be limited in duration and not go beyond what is necessary to achieve the objective pursued.<sup>263</sup>

Moreover, the ECJ asserted that, concerning the scope *ratione personae* for the application of regulated prices justified by public service obligations, the possibility exists for undertakings irrespective of their size to benefit from them. To this effect, the only requirement that the Court set is that it would be necessary

to take account, in assessing the proportionality of the national measure in question, of the fact that the situation of undertakings is different from that of domestic consumers, the objectives pursued and the interests present being not necessarily the same and also of objective differences between the undertakings themselves, according to their size.<sup>264</sup>

Nonetheless, to open the door for medium and large-sized undertakings to regulated prices, further measures must be adopted to ensure that domestic and industrial customers do not benefit in an identical manner and the principle of proportionality is hence not violated.<sup>265</sup>

Thus, whereas the Commission sees intervention in electricity pricing as ‘one of the causes and one of the effects of the current lack of competition in the energy sector’<sup>266</sup> and has to this effect initiated infringements proceedings, the ECJ, as proves the *Federutility* case, has

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<sup>262</sup> Case C-265/08, *Federutility, Assogas, Libarna Gas Spa, Collino Commerciale SpA, Sadori Gas Srl, Egea Commerciale Srl, E. On Vendita Srl, Sorgenia SpA v Autorità per l’energia elettrica e il gas*, [2010] ECR I-000, para. 37.

<sup>263</sup> *Ibid.*, para. 38.

<sup>264</sup> *Ibid.*, para. 42.

<sup>265</sup> *Ibid.*, para. 43.

<sup>266</sup> AG Colomer’s Opinion, Case C-265/08, *Federutility, Assogas, Libarna Gas Spa, Collino Commerciale SpA, Sadori Gas Srl, Egea Commerciale Srl, E. On Vendita Srl, Sorgenia SpA v Autorità per l’energia elettrica e il gas*, [2010] ECR I-000, para. 30.

established a set of conditions which upon fulfilment allow MS to intervene in electricity supply prices even after the full liberalisation of the market. In this sense, the Court has gone deeper into the social policy issues and, besides granting protection to vulnerable customers, also bears into consideration the sustainability of the MS protective policies of their large businesses.

As a result, notwithstanding all the infringements proceedings that the Commission has undertaken against MS for non-implementation of the electricity *acquis*, including the maintenance of regulated prices, if the MS could elaborate objective justifications that their intervention satisfies the criteria outlined in *Federutility*, they may be permitted to continue with their protectionist policies.<sup>267</sup>

### 6.3.2.- Public service obligations related to the supply of electricity

In relation to security of supply, the electricity *acquis* is formed by both the Third Electricity Directive and the Electricity Supply Directive. From the correspondent Articles of the combined regime, it can be inferred that there are essentially three kinds of measures that MS usually adopt to lessen the side-effects of liberalisation:

- The adequacy of generation: *e.g.* measures involving a public service obligation in relation to a new long-term generation capacity,<sup>268</sup> long-term contracts –which inevitably restrict competition- introduced by the undertakings concerned with performing public services,<sup>269</sup> etc.
- Securing the primary energy sources: *e.g.* granting state aid in exchange for generating a certain amount of electricity from domestic sources,<sup>270</sup> ordering the reservation of some electricity sources to be available in case of supply interruptions,<sup>271</sup> etc.

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<sup>267</sup> KAROVA, R., *op. cit.*, p. 108.

<sup>268</sup> See European Commission, State aid case Num. 475/2003 (Ireland), COM (2003) 4488, of 16 December 2003.

<sup>269</sup> See European Commission, State aid case Num. 413/2004 (Ireland), COM (2004) 2632, of 14 July 2004.

<sup>270</sup> See European Commission, State aid case Num. 6/A.2001 (Ireland), ‘*Public service obligation imposed on Electricity Supply Board with respect to the generation of electricity out of peat*’, COM (2003) 3265 final, of 30 October 2001.

- Safe network infrastructure: *e.g.* curtailing export capacity on the interconnectors when internal congestion is anticipated, thereby discriminating between different network users and segmenting the internal market.

Whenever any of these measures have been implemented into the domestic legal system of a MS, the Commission has opened infringement procedures on the spot. Incidentally, the overall outcome of such procedures reveals that, in line with the objective for liberalisation of the national electricity markets and the establishment of an internal energy market, the measures referred are constantly deemed discriminatory as long as they restrict cross-border trade of electricity. Very especially, it appears that MS are never entitled to restrict exports of electricity so as to reserve such electricity for national consumption or to grant priority rights to capacity allocation. Thus, even where security of supply measures are not prohibited *per se* in the electricity *acquis*, the result is the same.

As regards the role of the ECJ, it can be noted that the jurisprudence is significantly scarce so far. Probably, the most significant case is *VEMW*,<sup>272</sup> concerning the preferential access to the Dutch electricity interconnectors granted to the Dutch TSO, SEP, in order to carry long-term contracts concluded prior to liberalisation. The purpose of such contracts was to ensure the reliable and efficient public distribution of electricity at costs which were to be as low as possible and justified in light of the public interest. Eventually, with the transposition of the First Electricity Directive in the Netherlands, the exclusive rights of SEP, which were intended to last until 2009, were abolished and the portion of transmission capacity of the cross-border interconnectors to be reserved was severely decreased. This decision was challenged and the relevant Dutch Court referred a preliminary ruling to the ECJ.

In its judgment, the Court found that the Netherlands should have applied for derogation within a year from the entry into force of the Directive and confirmed that MS were not allowed to unilaterally decide to maintain preferential rights. In this context, it further specified that derogation from the Directive rules could only be permitted if the relevant

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<sup>271</sup> See Brussels and European Commission, State aid case SI.7/2003 (Slovenia), ‘*Stranded costs in Slovenia*’, COM (2005) 172, final, of 2 February 2005.

<sup>272</sup> Case 17/03, *Vereniging voor Energie, Milieu en Water (VEMW) et al. v Dutch Energy Regulator Dte* [2005], ECR I-4983.

undertaking was entrusted with a service of general interest.<sup>273</sup> Thus, contrarily to the opinion of the Commission on the subject, the ECJ suggested that capacity reservation does not necessarily have to be discriminatory and that it shall be decided on a case-by-case basis, taking into consideration the objectives and the background of each reservation.<sup>274</sup>

Therefore, it comes as no surprise that following the ECJ judgment the Commission issued an interpretation in which it outlined that the preferential access to transmission capacity was discriminatory and precluded by the Second Electricity Directive.<sup>275</sup>

### 6.3.3.- Lack of democracy?

Another issue concerning the quality of the services supplied after the liberalisation of the electricity market relates to the lack of reach of democracy over the private management of the vital commodity. Certainly, the replacement of public control and, in some cases, public ownership by market forces and private ownership has reduced the democratic control over a crucial public service. Regulatory bodies are seldom representative and are made up mainly of the business community rather than a broad church of business, trade unions, consumers and other interest groups.<sup>276</sup>

In this sense, liberalisation facilitates greater corporate control of national economies and politics by letting them get a hold of the electricity industry. Thus, private corporations are able to recreate previously public monopolies to some extent. In the long term, multinational corporations become increasingly powerful and energy supply becomes vulnerable to the shifting interests of global corporations.<sup>277</sup> Not surprisingly, European electricity companies have traditionally shown a marked tendency towards increased market concentration and few companies have an impressive share over the electricity cake. Partly due to the fact that

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<sup>273</sup> Case 17/03, *Vereniging voor Energie, Milieu en Water (VEMW) et al. v Dutch Energy Regulator Dte* [2005], ECR I-4983, para. 60.

<sup>274</sup> *Ibid.*, para. 58.

<sup>275</sup> European Commission, *Commission Staff Working Paper on decision C-17/03 of 7 June 2005 of the Court of Justice of the European Communities*, SEC (2006) 547, of 26 April 2006.

<sup>276</sup> THOMAS, S., *op. cit.*, p. 56.

<sup>277</sup> Transnational Institute, '*Lights off: Debunking the Myths of Power Liberalisation*', Power & Society Debate Papers, Num. 1, 2002, p. 11.

preferential rights were maintained to some former national monopolies, the horizontal concentration remains very high.<sup>278</sup> Among the EU-15, more than two-thirds of the European energy market is now concentrated in the hands of six large companies (see picture below).

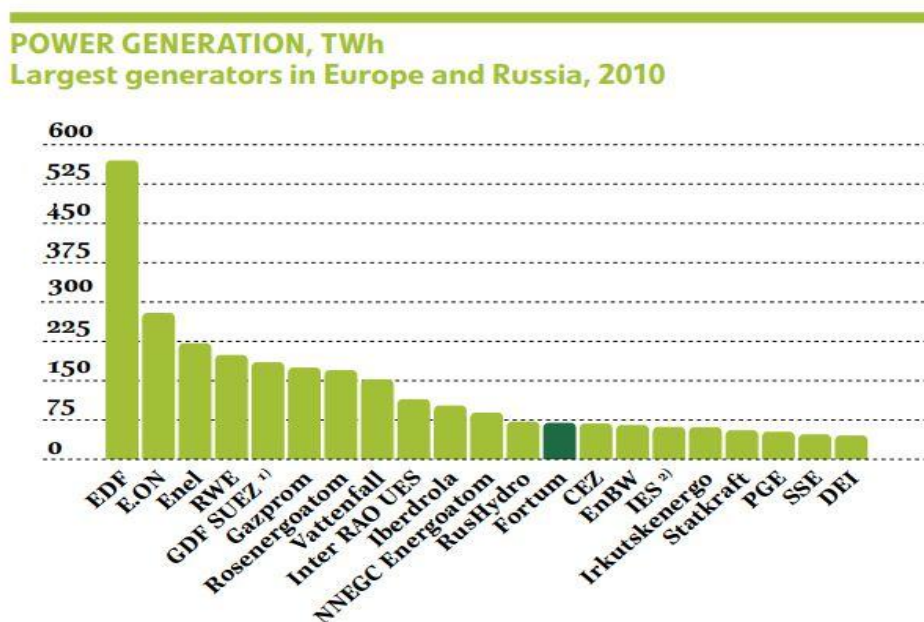


Figure 14<sup>279</sup>

Logically, the more power the private sector has, in detriment of public ownership, the less pressure civil society can exert on the government to prevent decisions being made that are contrary to the interests of the majority.

#### 6.4.- Remarks

In the end, the historical lack of coordination at European level has led MS to adopt domestic measures to fill the gaps of the liberalisation directives and, in some cases, they differ quantitatively and inevitably hinder the functioning of the internal market. To some extent, the Commission has tried to correct these deviations and harmonise to a minimum degree the policies of MS by means of infringement procedures. However, considering the complexity of the matter, it is doubtful whether such means are adequate and even effective at all. The situation is particularly delicate if we take into account that the ECJ has steadily undermined the liberalisation efforts of the Commission and has adopted a position closer to

<sup>278</sup> JAMASB, T. and POLLITT, M., *op. cit.*, p. 26.

<sup>279</sup> Source: Fortum 2010.

that of the MS. In this sense, the Court has questioned throughout its litigation the UK-inspired Commission policy for energy liberalisation, calling into question the speed with which the liberalisation, being pushed by the Commission, is proceeding in the MS.

There is no doubt that the electricity issue bears very strong social implications and, from practice, it seems that they are not ready to be subdued to the market forces. Indeed, in many European countries where there are incumbent electricity companies, the state still retains tight control over the commodity prices charged to end-users. Moreover, the coexistence of regulated and market prices is clearly not a transitory measure in many states. It has been in place for many years and there are no clear indications that MS with regulated prices intend to progress towards market prices.<sup>280</sup> In those cases, the price setting is declared as an instrument to fulfil public service obligations and as a measure for the protection of customers. Thus, it cannot be attacked because it is undisputed that for certain services of general economic interest, liberalisation does not always lead to a more qualitative or optimal service.<sup>281</sup> Legislation and regulatory activity is eminently justified to pursue social justice or environmental sustainability, and the free operation of market forces must be subordinate to those objectives. Even the Commission, which generally believes that the internal market will provide the appropriate framework in terms of ensuring good public services, has accepted that in certain circumstances additional measures are indispensable to achieve the right social outcome *i.e.* that they are a ‘public good’.<sup>282</sup>

In this sense, there is no doubt that a market system does not accommodate social objectives as easily as the traditional state-controlled system, where a minister or utility board could simply direct the power monopoly to build this kind of power station or that, or to alter its price tariff one way or another, with the costs being passed on to consumers or

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<sup>280</sup> See European Regulators Group for Electricity and Gas, ‘*End-user energy price regulation*’, ERGEG Position Paper, E07-CPR-10-03, of 18 July 2007, pp. 4-5.

<sup>281</sup> DELVAUX, B., HUNT, M., and TALUS, K. (eds.), *op. cit.*, p. 63.

<sup>282</sup> Directorate General for Transport and Energy, *Note on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas: Measures to Secure Electricity Supply*, 2004, p. 1.

government.<sup>283</sup> Precisely, the experience of environmental and advocacy groups has been that in a competitive market nobody will look after social concerns.<sup>284</sup> Moreover, market liberalisation has tended to dismantle the mechanisms to look after them under the old system as part of the deregulation process.

Full open markets with well-functioning competition cannot in the long run coexist with regulated end-user energy prices or capacity reservations, and admitting that the electricity sector withstands a heavy load of social considerations and that this much is not going to change in the short term, it may very well be that competition never works.

## 7.- Electricity liberalisation and energy sustainability

So far, we have examined the outcomes of the liberalisation process and we have concluded that they do not live up to what was initially expected, *i.e.* lower prices and better services were the objectives and none of them have been achieved. From this point onwards, we are going to assess whether the liberalisation process has had further detrimental side-effects on the internal market and, especially, whether liberalisation was the right approach to comply with the sustainable development aims of the Union to begin with.

To ascertain whether opening the electricity market helps or hinders energy sustainability is debatable: does it contribute to energy efficiency and conservation, and the uptake of renewable energy?

Three capital elements can be identified in energy sustainability.

### 7.1.- Energy efficiency

Energy efficiency concerns the productivity obtained from the primary energy consumed. Although in technical terms some energy is always wasted when it is converted

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<sup>283</sup> BARTON, B., '*Electricity Market Liberalisation and Energy Sustainability*', in BRADBOOK, A., LYSTER, R., OTTINGER, R. (eds.), and XI, W., '*The Law of Energy for Sustainable Development*', Cambridge University Press, Cambridge, 2005, p. 466.

<sup>284</sup> SIOSHANSI, F., '*California's Electricity Crisis Continues*', International Association for Energy Economics Newsletter, First Quarter 2001, Energy Economics Education Foundation, Cleveland, 2001, p. 24.

from one form to another, or put to use, the amount can be reduced. Improvements in energy efficiency mean that the amount of economic output or satisfaction of human needs per unit of energy can be increased. Some countries, like Japan, have made dramatic improvements in the measure of gross domestic product obtained per unit of energy consumed.<sup>285</sup>

In this sense, the most anticipated benefit from market liberalisation was precisely the efficiency that market forces usually bring: companies in competition are under pressure and keep their prices down while offering a more attractive service to customers. However, as commented above, electricity prices have not diminished. On the contrary, they have sharply increased ever since the fully liberalisation of the retail supply. As a matter of fact, there is a new realisation that it is not easy to restructure the electricity industry and throw it open to market forces. Power markets are much more complex than many policy makers had realized and electricity cannot be treated as merely another commodity; it is more fundamental to the economy than most things, it is still a public service in the eyes of many citizens, not a mere article in commerce, and it cannot be stored. Benefits such as higher operating efficiencies and lower retail prices do not automatically flow from the introduction of competition, and where they do occur they do not necessarily accrue to expected beneficiaries like small consumers.<sup>286</sup>

Moreover, prices will reflect the value of electricity and the inputs required to make it and bring it to the customer, that is to say, the fuel cost, the cost of required pollution abatement measures, the cost of capital to build power stations, and the cost of transmission and of the distribution lines. Certainly, a market system where price signals are transmitted without distortion puts more focus on the price of inputs. The price of different fuels cannot be hidden, and companies either reflect the charge of fuels in their sales fees or go broke.<sup>287</sup>

Likewise, consumers in search of electricity will have to pay the market price in competition with other consumers and the price of electricity will reflect its scarcity. When electricity is scarcer, for example during a drought in a hydro dependent country, the price will rise and vulnerable customers will be exposed to the crudity of market forces.

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<sup>285</sup> According to the World Bank database, Japan increased its energy efficiency a 10.34% only from 2010 to 2011. See: <http://data.worldbank.org/indicator/EG.GDP.PUSE.KO.PP>.

<sup>286</sup> BRADBROOK, A., LYSTER, R., OTTINGER, R. and XI, W. (Eds.), *op. cit.*, p. 456.

<sup>287</sup> SIOSSHANSI, F., *op. cit.*, p. 10.



Finally, concerning investment in better installations in an open market model, it is likely that companies will not even consider improving their generation and transmission capacities unless electricity prices are high. Investing too early is penalized. A further characteristic of liberalisation is that government has less influence in investment decisions and undertakings will only invest in new facilities if there is profit in doing so. Companies in a market system are not invulnerable to government influence, but they are working with their shareholders' money rather than taxpayers' money. The market imposes a financial discipline of its own.

### *7.2.- Energy conservation*

The second element, energy conservation, is the reduction of energy use, for example in eliminating unnecessary heating. In this context, liberalisation was expected to induce electricity users to adopt a more eco-friendly behaviour and increase their awareness of the costs of such commodity.

Surely, where there is an electricity market, scarcity of supply -because of low generation capacity, constrained transmission, or low hydro lakes- means that prices will raise. Therefore, if that price signal is passed on to users, they are likely to respond by cutting back their levels of consumption. From this assumption, it was defended that by restructuring the electricity industry there would be a much clearer recognition of the elasticity of demand and hence it would be possible to involve the customer in playing a more active role in balancing supply and demand in real time. In this regard, consumers were supposed to take steps to avoid using electricity in response to price signals, for example in peak periods, so promoting energy efficiency and reducing environmental impacts.<sup>288</sup>

Nevertheless, it is apparent from experience that demand for electricity is often not as elastic as it is for other commodities. Obviously, a bank or a hospital cannot stop using electricity merely because the price has risen. Likewise, households might switch to wood stoves for heating, but they are likely to keep buying it for their lighting and television no matter what the price. One of the main rationales behind the liberalisation venture was that, in

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<sup>288</sup> BRADBOOK, A., LYSTER, R., OTTINGER, R. and XI, W. (Eds.), *op. cit.*, p. 459.

a state-controlled system, as experienced during the early years of the energy industry, scarcity of electricity had no impact whatsoever in the behaviour of consumers and that they would keep using it in the same amount no matter what. However, it may seem that even in an open market the demand for electricity varies, if any, in a very subtle way.

### *7.3.- Use of renewable energy sources*

The third element of energy sustainability refers to the use of renewable sources, replacing or avoiding dependence on fossil fuels.

In this regard, the following consideration should be made before-hand: electricity cannot be stored, so the size of the market is determined by instantaneous demand rather than demand over a longer time period. Moreover, the demand for electricity is subject to cyclical, seasonal, and random variation in both the short and long term. At the same time, supply must be continuous, reliable, and supplied with sustained frequency and voltage so the pairing of variable demand and continuous supply requires that suppliers maintain excess capacity to meet peaks in demand.<sup>289</sup>

As a result of these characteristics, tangible barriers exist to the deployment of renewable energies. Indeed, an open market puts heavy penalties on generators that need to buy electricity at the last minute for balancing purposes. In particular, wind power is terribly vulnerable to a system that puts a premium on predictability. Because of the nature of wind energy, it cannot be guaranteed round the clock; if the wind is not blowing, then there will be no production. A wind company that has made supply commitments will have to make up its supply from the spot market, and in a volatile market they may have to pay exorbitant prices. If it cannot offer dependable supply, then it will have to sell at a discount. On the contrary, gas and coal-fired plants could run part loaded, under full capacity, and ramp up at the last minute to avoid penalties.<sup>290</sup> In the long run, liberalisation inevitably creates economic incentives for power suppliers to sell more electricity. The main concern of private corporations is always to maximise profit, without much thought given to environmental or social impacts. Moreover,

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<sup>289</sup> KAROVA, R., *op. cit.*, p. 11.

<sup>290</sup> BRADBOOK, A., LYSTER, R., OTTINGER, R. and XI, W. (Eds.), *op. cit.*, p. 460.

privatisation and deregulation provide incentives to keep cheaper albeit polluting fossil fuel power plants running longer.<sup>291</sup>

In spite of the attempts at the Union level to address these concerns and stimulate the use of clean energy sources –e.g. Green certificates for generating environmentally friendly energy, or the introduction of Article 7 (2) (j) in the Third Electricity Directive establishing the obligation of the generating capacity to meeting the overall Community target of at least a 20 % share of energy from renewable sources in the Community’s gross final consumption of energy in 2020-,<sup>292</sup> it appears that it would be easier to meet such objective in an state-organised sector.

Probably, establishing a market for certificates will be no easier than establishing one for electricity, especially because cross-border trade is particularly weak among MS, where one country may still be on an old subsidy system and the other on a new green certificate system. Likewise, even if the use of renewable energies has increased during the last two decades, as depicted in the picture below,

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<sup>291</sup> Transnational Institute, *op. cit.*, p. 9.

<sup>292</sup> As referred to in Article 3 (1) of the Directive 2009/28/EC of the European Parliament and of the Council, of 23 April 2009, on the promotion of the use of energy from renewable sources, OJ L 140, of 5 June 2009.

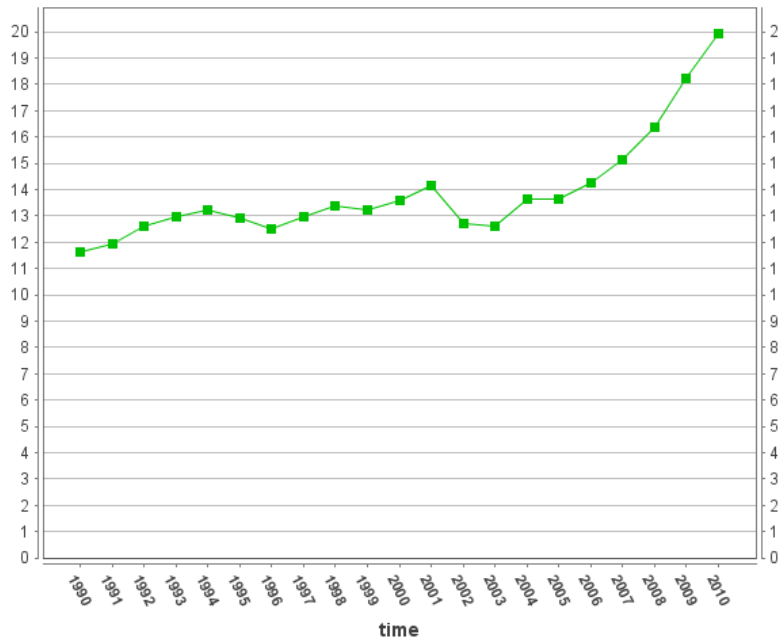


Figure 15<sup>293</sup>

it remains true that this much is not due to action at the Community level but to the separate action of a few MS. Thus, while UK, Belgium, Poland, Hungary and Czech Republic only obtain around 5% of their electricity out of renewable sources, Portugal, Latvia, Sweden and Austria obtain over 50%. Especially remarkable is the case of Norway, whose 90% of electricity is generated from clean sources.

<sup>293</sup> This indicator is the ratio between the electricity produced from renewable energy sources and the gross national electricity consumption for a given calendar year. It measures the contribution of electricity produced from renewable energy sources to the national electricity consumption. Electricity produced from renewable energy sources comprises the electricity generation from hydro plants (excluding pumping), wind, solar, geothermal and electricity from biomass/wastes. Gross national electricity consumption comprises the total gross national electricity generation from all fuels (including auto-production), plus electricity imports, minus exports. Source: Eurostat.

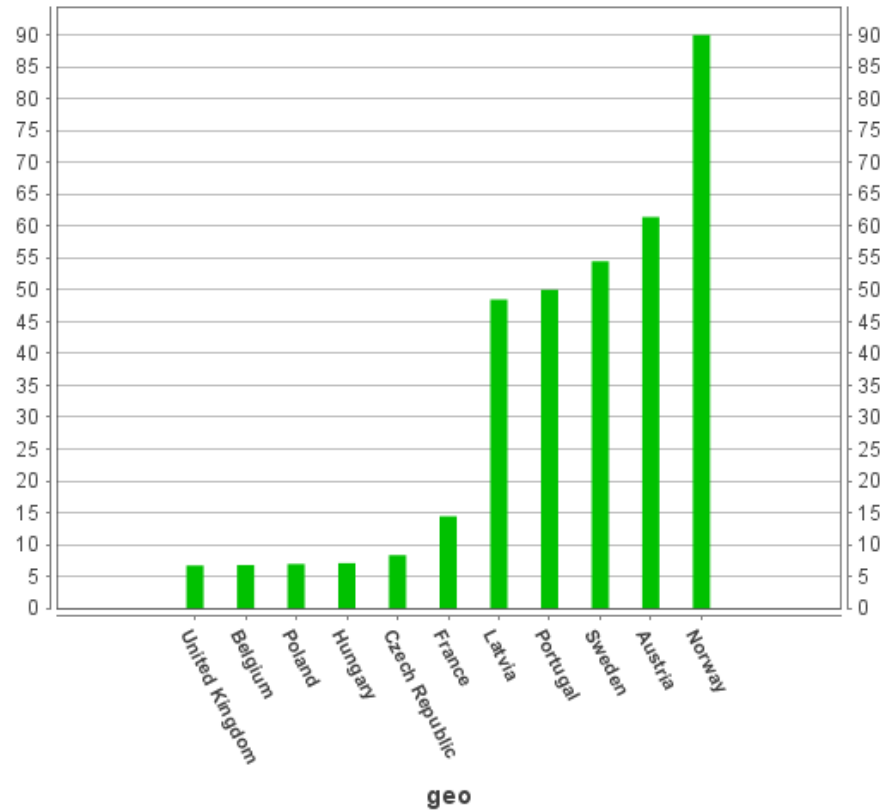


Figure 16<sup>294</sup>

#### 7.4.- Remarks

The benefits of liberalization have flowed less freely than the Commission hoped. Power markets are much more unpredictable than expected and it becomes clearer that electricity cannot be treated as any other commodity. Submitting the electricity industry to the market forces is resulting very different than the experience with the telecommunications sector.

In sum, in a liberalised market:

- prices will reflect the value of electricity and the inputs required to make it and bring it to the customer;

<sup>294</sup> This indicator is the ratio between the electricity produced from renewable energy sources and the gross national electricity consumption for a given calendar year Source: Eurostat.

- whenever electricity is scarcer the price will rise and vulnerable customers will be unprotected;
- there will be no investment in better technologies and facilities unless profit is certain;
- it appears from practice that there is hardly any elasticity in the electricity demand, thus consumers not being encouraged to save energy;
- tangible barriers exist to the deployment of renewable energies.

There is solid evidence that a market of electricity driven by price disregards some social and environmental issues that are otherwise rather difficult to address through regulation. Certainly, when restructuring electricity markets, governments have focused mainly in lowering prices, without realising that low-priced power is very different than low-cost power.<sup>295</sup> In this regard, the lack of investment and the eventual damage to the environment created by a liberalised market may increase the long-term costs way more than whatever could be hoarded by the low prices.

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<sup>295</sup> PERKINS, R., '*Energy Deregulation: Environmental Externalities and the Limitations of Price*', Boston College Law Review, Boston, 1998, p. 1031.

## Chapter V: Liberalisation and other objectives of the European Union

### 8.- Is further unbundling the solution?

The New Electricity Regime has been in force since 3 September 2009 and is supposed to advance the development of an internal energy supply market. To this effect, it provides for further unbundling (in comparison with the First and Second Electricity Directives) and establishes, as previously outlined, three alternative possibilities of unbundling:

- a) Ownership unbundling: entails a full separation between the operation of electricity transmission networks from supply and production/generation activities.
- b) The ISO model: vertically integrated companies may retain the ownership of their network assets, but the network is managed by an ISO. Such ISO has to be an entity completely separate from the vertically integrated company and must perform all functions of a network operator. As such, the ISO may not hold any interest in a supply or generation undertaking.
- c) The ITO model: it preserves integrated supply and transmission companies in exchange for obliging such companies to comply with additional rules to ensure that the two activities are operated independently.

Stricter unbundling measures have been a constant since the first attempts to liberalise the market. However, with this last Directive, a question arises of whether this much unbundling is still in line with the free movement of capital and even with the principle of equality.

#### *8.1.- Free movement of capital*

The reason why the current unbundling measures may be in conflict with the free movement of capital is as follows. On one hand, Article 63 TFEU precludes all restrictions on the movement of capital between MS and between MS and third countries. On the other, Article 114 TFEU, on which the new Directive is based, must serve the attainment of the goals set forth in Article 26 TFEU, *i.e.* the fundamental freedoms of the internal market. Thus, it seems Article 63 may actually bar the introduction of ownership unbundling insofar as it precludes the lawful utilisation of Article 114 TFEU as legal basis.

Article 9 (12) of the Third Electricity Directive establishes that undertakings performing any of the functions of generation or supply shall not in any event be able to directly or indirectly take control over or exercise any right over unbundled TSOs in MS which apply ownership unbundling. Other way put, energy generation and supply companies, disregarding whether vertically integrated or not, would either

- a) have to give up their shareholdings in energy transmission network owning TSOs in those MS which have opted for ownership unbundling, or
- b) not be allowed to acquire such interests or control.<sup>296</sup>

Similar to ownership unbundling, this would mean that existing transmission network operation activities would have to be sold or that the correspondent generation and supply undertakings would be prevented from establishing and carrying on an economic activity in the area of transmission networks in MS which have opted for ownership unbundling.<sup>297</sup>

Therefore, the new Electricity Directive might run into conflict with not only the free movement of capital, as provided in Article 63 TFEU, but also with the fundamental freedom of establishment, enshrined in Article 49 TFEU.

#### 8.1.1.- Case-law

All along its jurisprudence, the ECJ has been strict in maintaining that the free movement of capital, as a fundamental precept of the Treaty, may be restricted only by rules which are justified by reasons referred to in Article 65 TFEU –non-discriminatory measures addressed to prevent infringements of national taxation systems and the prudential supervision of financial institutions-<sup>298</sup> or by overriding requirements of the general interest. Furthermore, the ECJ has stressed that the requirements of public policy and security must be interpreted

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<sup>296</sup> EHLERS, E., ‘*Third Generation of Internal Energy Market Directives: Does Further Unbundling Level the Playing Field*’, in ROGGENKAMP, M. and HAMMER, U., ‘*European Energy Law: Report VII*’ Energy & Law, Vol. 11, Intersentia, Oxford, 2010, pp. 117-118.

<sup>297</sup> EHLERS, E., ‘*Electricity and Gas Supply Network Unbundling in Germany, Great Britain and The Netherlands and the Law of the European Union: A Comparison*’, p. 163.

<sup>298</sup> Additionally limited by the proportionality principle, as accorded in the Joined Cases C-163/94, C-165/94 & C-250/94, *Sanz de Lera and Others*, [1995] ECR I-4821.



narrowly.<sup>299</sup> As a consequence, public policy and public security may solely be relied upon if there is a genuine and sufficiently serious threat to a fundamental interest of society, such as supply security in the event of crisis.<sup>300</sup>

Nevertheless, the European Court has so far only recognised overriding interests on a case-by-case approach, in matters such as consumer or environmental protection. In this context, it is widely accepted that only general interests of non-economic character can be overriding restrictions.<sup>301</sup> However, it is not enough for such interests to be auxiliary to primary economic general interests or consequential thereon because the ECJ has persistently established that restrictions of fundamental freedoms have to be very narrowly construed.<sup>302</sup> Moreover, protectionist measures or any economic measures are not justified in any case.<sup>303</sup>

#### 8.1.2.- Accommodating the ECJ jurisprudence with the aims of the Electricity Directive

As regards the objectives of the Electricity Directive, the improvement of competition in the internal energy market is invoked as means to achieve energy supply security in the long-term as a public security reason to introduce further sector restructuring.<sup>304</sup> Thus, the aim for justifying restrictions in the free movement of capital could be classified as of overriding general interest. In this sense, invoking supply security as a valid public security restriction may conflict with the case-law of the ECJ.

Admittedly, in *Commission v Belgium*<sup>305</sup> the Court accepted supply security as a valid public security restriction of former Article 56 EC (63 TFEU) only because the legislation was specifically targeted at events of energy crisis, that is to say, where supply security was under

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<sup>299</sup> See C-72/83, *Campus Oil v Minister for Industry and Energy* [1984] ECR I-2727.

<sup>300</sup> See C-483/99, *Commission v France* [2002] ECR I-4581.

<sup>301</sup> Up to this day, this seems confirmed by the attitude of the ECJ, which has only recognised non-economic interests as overriding restrictions.

<sup>302</sup> EHLERS, E., 'Third Generation of Internal Energy Market Directives: Does Further Unbundling Level the Playing Field', pp. 117-118.

<sup>303</sup> C-174/04, *Commission v Italy* [2005] ECR I-4933.

<sup>304</sup> Recital 14 of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55.

<sup>305</sup> C-503/99, *Commission v Belgium* [2002] ECR I-04809.

immediate threat, occurring in narrowly prescribed circumstances and not across-the-board and restricting fundamental freedoms permanently.<sup>306</sup> Consequently, unbundling legislation could not successfully be justified as a public security restriction by merely arguing that it safeguards supply security in the long-term –by enhancing the competitive structure of the energy market, investment would be attracted-, because it is clearly not targeted at protecting supply security in the event of immediate threat. The public security general interest of supply security is not to be achieved directly or immediately at any given point in time but through the economic goals of promoting competition and establishing an internal market.<sup>307</sup> Hence, the legislation is clearly based on an economic general interest.

Likewise, further unbundling cannot be justified by environmental reasons. The possible claim that greater market transparency would benefit consumer protection cannot be regarded as an overriding restriction of Article 63 TFEU because greater transparency serves among other things also the benefit of consumers, but not *per se* or directly consumer protection. Consequently, it would visibly go against the ECJ's narrow interpretation of restrictions of fundamental freedoms.

Therefore, precluding energy generation and supply undertakings from owning and operating energy supply networks in another MS where ownership unbundling has been introduced, cannot be considered to be a measure that if proportionate would legitimately restrict the free movement of capital.

## *8.2.- Breach of the principle of equality*

### *8.2.1.- Article 345 TFEU*

Article 345 TFEU reflects the neutrality of the EU Treaty towards property ownership and, in this regard, leaves the decision as to whether economic undertakings should be private or in public ownership to the MS.<sup>308</sup> Coherent with this neutrality is the mere regulation of

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<sup>306</sup> EHLERS, E., 'Third Generation of Internal Energy Market Directives: Does Further Unbundling Level the Playing Field', p. 122.

<sup>307</sup> *Ibid.*, p. 122.

<sup>308</sup> Article 345 TFEU provides that 'the Treaties shall in no way prejudice the rules in Member States governing the system of property ownership'.

ownership, without resulting in a *de facto* expropriation, which can in principle be imposed by European legislation. In this sense, the imposition of independent system operation which does not go as far as requiring expropriation is probably in compliance with afore-mentioned Article 345 TFEU. Conversely, imposing ownership unbundling of energy transmission networks and force undertakings to sell their assets is not in line with the Treaty. In particular, imposing publicly owned vertically integrated companies to sell their networks to private undertakings seem to shatter the neutrality adopted by Article 345 TFEU.

To avoid this situation, the Commission has devised the possibility for public companies to simply transfer their networks to other public law entities or organisationally separate state units or divisions.<sup>309</sup>

Nevertheless, to pretend that such structural separation can be classified as ownership unbundling is flawed because, in the end, both the competitive energy supply activities and the energy network functions would continue to be owned and operated by the state as one and the same person, disregarding whether such activities are integrated into one organisational unit or separate in two units.

#### 8.2.2.- Equality between private and public undertakings

Because of the differential treatment of publicly owned and private companies operating energy transmission networks, the general principle of equality, which belongs to the common constitutional traditions of the MS and to the general principles of EU Law as recognised by the ECJ,<sup>310</sup> is at stake.

To ascertain whether there has been a violation of the general principle of equality, an unjustified difference in treatment of comparable situations is necessary. In this context of the

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<sup>309</sup> Article 9 (6) of the Directive 2009/72/EC, of 13 July 2009, OJ L 211/55 states that ‘for the implementation of this Article, where the person referred to in paragraphs 1 (b), 1 (c) and 1 (d) is the MS or another public body, two separate public bodies exercising control, on the one hand, over a transmission system operator or over a transmission system and, on the other hand, over an undertaking performing any of the functions of production or supply, are deemed not to be the same person or the same persons’.

<sup>310</sup> Joined Cases C-117/76 and 16/77, *Ruckdeschel & Ströh v Hauptzollamt Hamburg St. Annen* and *Diamalt AG v Hauptzollamt Itzehoe* [1977] ECR 1753.

New Electricity Directive, there are no reasons why private and public energy supply undertakings should not be comparable. According to the Commission, unbundling measures are only effective if *all* energy supply undertakings have to surrender control of their energy transmission networks.<sup>311</sup> Moreover, both types of companies pursue network and competitive energy supply activities and compete with each other.

Thus, unequal treatment can be appreciated in the fact that the Electricity Directive only actually forces private undertakings, and not also public energy supply undertakings, to surrender their control over energy transmission networks.<sup>312</sup> This disadvantage resulting from unequal treatment is particularly aggravated by the fact that only the state government will in the future be allowed to own and operate energy supply networks together with competitive energy supply activities in one person, whereas private energy supply undertakings do not have this opportunity anymore.

In sum, the unbundling requirement for public companies in the New Directive is *de facto* only functional or organisational in nature, while for private undertakings it involves ownership unbundling. In this regard, it is unsettled whether such detrimental unequal treatment can be objectively justified.

### 8.3.- Remarks

The liberalisation process in which the European institutions have engaged not only has not been reporting the benefits expected but it is becoming an obstacle to the achievement of the objective of sustainable growth. Moreover, it seems that current measures in the field of sector unbundling are already in friction with the fundamental freedoms of the internal market, namely the free movement of capital. Indeed, further sector restructuring is already too heavy a weapon to achieve the objectives sought. At this rate, opening the electricity market will end up undermining the very same objectives of the internal European market.

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<sup>311</sup> See Communication of the Commission, ‘*Prospects for the internal gas and electricity market*’, COM (2006) 841.

<sup>312</sup> EHLERS, E., ‘*Electricity and Gas Supply Network Unbundling in Germany, Great Britain and The Netherlands and the Law of the European Union: A Comparison*’, p. 163.

In this regard, it is particularly noteworthy the lack of a justification for unbundling measures. So far, the Commission has only insisted in the theory that the separation of the energy transmission networks would promote cross-border energy trade. Surely, with the shift away from centrally owned transmission networks, investment adequacy is a concern,<sup>313</sup> especially in relation to vertically integrated TSOs who might have short-term compelling reasons not to invest in networks if such investments would come to benefit their competitors. In this context, the Commission has consistently argued that the unbundling of TSOs will augment the EU's supply security as it seems to lead to increased investments in the network facilities. In its Impact Assessment,<sup>314</sup> the Commission claimed that within three or four years of TSOs undergoing ownership unbundling, investments in the networks in the electricity sector would have doubled. Nonetheless, researchers have responded to this statement that there is no evidence guaranteeing success and that 'any benefits of any unbundling model would have to be carefully balanced against any costs of implementing the same'.<sup>315</sup>

In this sense, while the theory of restructuring seems straightforward and not difficult to implement, the actual experience has been far from successful. Public backlash to tariff increases and to disconnection, price volatility, blackouts, worker resistance to job loss in the name of efficiency, bureaucratic resistance, and outright corruption have more often than not stymied restructuring efforts and slowed the liberalisation momentum.<sup>316</sup>

Definitely, 'unbundling is no *panacea*'.<sup>317</sup>

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<sup>313</sup> JAMASB, T. and POLLITT, M., 'Security of Supply and Regulation of Energy Networks', Energy Policy, Vol. XXXVI, Num. 12, 2008, p. 4585.

<sup>314</sup> Commission Staff Working Document, *Impact Assessment Summary Accompanying the legislative package on the internal market for electricity and gas*, SEC (2007) 1180/2.

<sup>315</sup> POLLIT, M., 'The arguments for and against ownership unbundling of energy transmission networks', Cambridge Working Papers in Economics, Electricity Policy Research Group, Cambridge, 2007, p. 18.

<sup>316</sup> BRADFORD, P., 'Some Environmental Lessons from Electricity Restructuring', in BRADBOOK, A., LYSTER, R., OTTINGER, R. (eds.), and XI, W., 'The Law of Energy for Sustainable Development', Cambridge University Press, Cambridge, 2005, p. 410.

<sup>317</sup> KESSIDES, I., 'Reforming Infrastructure: Privatisation, Regulation, and Competition', A World Bank Policy Research Report, Washington, 2004, p. 46.

## Chapter VI: The American precedent

### 9.- The California electricity crisis of 2000

#### 9.1.- Introduction

For a number of reasons, where implemented, liberalisation has been a fiasco more often than not.<sup>318</sup> In this regard, the most striking case is that of the state of California during the electricity crisis of 2000-2001. Precisely, the collapse of California's electricity restructuring and competition program has attracted attention around the world.

Prices in California's competitive wholesale electricity market increased by 500% between the second half of 1999 and the second half of 2000. Moreover, while wholesale prices rose dramatically, retail prices were fixed until early in 2001.<sup>319</sup> As a result, California's two largest utilities -PG&E and SCE- got stuck in the middle and ended up paying far more for wholesale power than they were able to resell it for at retail. Both effectively became insolvent in January 2001 and stopped paying their bills for power and certain other financial obligations. PG&E declared bankruptcy on April 6, 2001.<sup>320</sup>

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<sup>318</sup> BARTON, B., *op. cit.*, p. 456.

<sup>319</sup> At the time, California had three major investor-owned utilities: Pacific Gas and Electric (PG&E), San Diego Gas and Electric (SDG&E) and Southern California Edison (SCE). PG&E and SCE were about four times larger than SDG&E.. SDG&E's retail prices were allowed to adjust to changes in wholesale market prices beginning in January 2000, but special state legislation subsequently capped its retail prices as well.

<sup>320</sup> See JOSKOW, P., '*California's Electricity Crisis*', Oxford Review of Economic Policy, Vol. XVII, Num. 3, Oxford University Press, Oxford, 2001, p. 365.

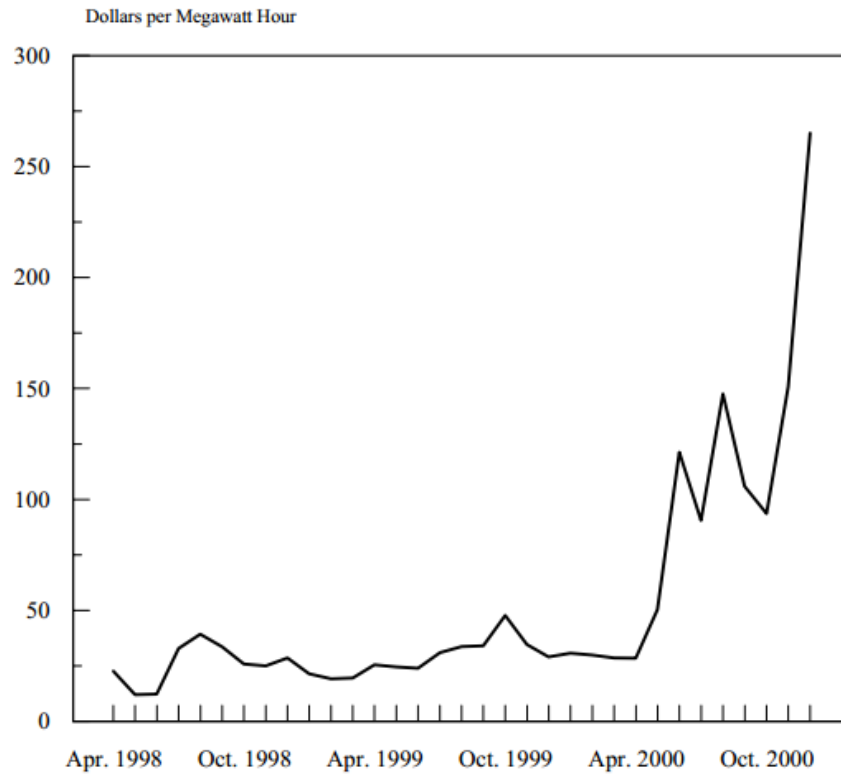


Figure 16<sup>321</sup>

As utility credit problems became evident, unregulated suppliers of wholesale power began to stop selling power to them. For a short period of time, emergency orders issued by the US Department of Energy and federal courts required generators subject to federal jurisdiction to continue supplying until the mess could be sorted out. The state of California eventually stepped into the breach (through the California Department of Water Resources) and used state funds to buy power from unregulated wholesale suppliers to avoid widespread blackouts. It spent roughly \$8 billion doing so between January and May 2001 and, moreover, it also negotiated long-term contracts with suppliers stretching out as long as twenty years into the future. These contracts are reported to involve commitments of about \$50 billion more. In

<sup>321</sup> Chart reflecting the average prices that utilities paid for electricity in the California power exchange's day-ahead auctions from 1998 to 2000. Source: Congressional Budget Office based on data for the Northern and Southern regions from the California Energy Commission.

sum, the California governor made a decision to adopt long-term electricity purchase contracts to address a short-term problem.<sup>322</sup>

Retail price increases of 30 to 40% went into effect in June 2001 and they are expected to remain high for many years to come as the long-term contracts negotiated by the state are paid off. Although wholesale prices began to moderate significantly during June 2001, the future of California's experiment with electricity restructuring, wholesale and retail competition program remains murky at best.<sup>323</sup>

To explain how and why this situation was reached, without intending to be engaged into an extensive analysis, a shallow overview of the liberalisation process in California is necessary.

## *9.2.- The Californian Electricity Market*

### *9.2.1.- Before restructuring*

For nearly a century, California's electricity industry was organized around the three private vertically integrated monopolies aforementioned, which owned and operated generation, transmission and distribution facilities to provide for the electricity needs of all consumers in their exclusive franchise areas.<sup>324</sup> Indeed, these three companies functioned as regulated monopolies, meaning that each was the only utility that could operate in its service area. There were only two limitations: on one hand, the state's Public Utility Commission (CPUC) approved the retail prices that those private utilities could charge for electricity and oversaw the reliability of their service and, on the other, the wholesale prices that electricity producers could charge utilities for power and the rates that utilities could charge for the use of their transmission lines were submitted to the prior approval of the Federal Energy Regulatory Commission (FERC).

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<sup>322</sup> SWEENEY, J., '*The California Electricity Crisis: Lessons for the Future*', Our Energy Future, Vol. XXXII, Num. 2, National Academy of Engineering, Washington, 2002, p. 10.

<sup>323</sup> JOSKOW, P., *op. cit.*, p. 366.

<sup>324</sup> *Ibid.*, p. 369.



However, electricity prices were much higher in California than in the rest of the US. In average, electricity was a 75% more expensive in California than in neighbouring western states. California's high electricity prices were caused by a combination of bad luck and some regulatory failures. On one hand, California had no in state coal-fired generation plants: the state's air pollution restrictions and lack of coal deposits made it impossible to generate electricity using coal-fired generation in California. Most of the nation had lower electricity prices, in part, because these other regions were able to use relatively low-cost coal to produce electricity. On the other, federal legislation enacted subsequent to the two oil crises and natural gas shortages in the 1970s made it impossible for California to build new oil or natural gas-fired generation. This meant that during much of the 1970s and 1980s, California had no in-state fossil fuel generation choices.<sup>325</sup>

Additionally, because of its geographical situation and overall lack of watercourses, there was no real chance to obtain a worthwhile quota of electricity from hydroelectric plants. Thus, with no other viable supply-side options, California did invest in expensive nuclear generation plants. Logically, these enormous nuclear investments led to higher retail prices and, with no new generation being built in the state, California also became dependent on out-of-state coal, nuclear, and hydroelectric generation from the rest of the western region, incurring expensive transmission fees in the process.<sup>326</sup>

Finally, before liberalisation of the sector, California's private utilities had much more generating capacity than they needed to supply their customers. Indeed, considering that private utilities were allowed to charge prices that recovered their costs of production and gave investors a large enough return to attract ample capital for the utilities. Economists have long pointed out that such regulation encouraged utilities to overinvest in electricity-generating

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<sup>325</sup> CICCHETTI, C., DUBIN, J., and LONG, C., *The California Electricity Crisis: What, Why and What's Next?*, Kluwer Academic Publishers, Boston, 2004, p. 54.

<sup>326</sup> Nevertheless, in normal weather years, this arrangement, particularly hydroelectric imports, benefited California because the state could import hydropower in warm months (when it needed power) and could export surplus power.

capacity because the cost of additional capacity could be more than covered by higher electricity prices.<sup>327</sup>

### *9.2.2.- Liberalising the Californian electricity sector*

In early 1990, there was broad agreement that the existing industry structure and regulatory system needed to be reformed. In this context, consensus developed around two issues:

- first, that regulated producers and markets delivered electricity at too high a price, and
- second, that the future prospects for business investment in California were being hurt because the state's electricity prices were higher than those in other western states.<sup>328</sup>

Eventually, in April 1994, the CPUC articulated a comprehensive program, commonly known as the 'Blue Book', providing for the radical reform of the structure and performance of California's electricity industry.<sup>329</sup>

The regime envisaged, almost identical to that of the EU Directives, was as follows:

- Retail customer choice: effective in 1998, all retail customers were given the ability to choose a competitive electricity service provider to provide them with generation services. If they did not choose they could still continue to receive 'default service' from their local utility distribution company at prices determined by the CPUC.
- Vertically integrated monopolies were required to provide open access to their transmission and distribution networks to competing parties at prices regulated by the CPUC and the FERC.
- The utilities were required to transfer the control, albeit not ownership, of their transmission and distribution assets to an independent system operator.

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<sup>327</sup> Congressional Budget Office, '*Causes and Lessons of the California Electricity Crisis*', the Congress of the United States, September 2001, p. 4.

<sup>328</sup> Congressional Budget Office, '*Causes and Lessons of the California Electricity Crisis*', the Congress of the United States, September 2001, p. 2.

<sup>329</sup> CPUC, *Proposed Policy Statement on Restructuring California's Electric Services Industry and Reforming Regulatory Policy*, April 20, 1994.

- A four-year transition period was established to give the unbundled monopolies a reasonable opportunity to recover any uneconomic, and therefore potentially stranded, costs. In this context retail prices for electricity were frozen until 2002, to allow former vertically integrated companies to recover by benefitting from a larger profit margin.
- The two largest vertically integrated companies were ordered to divest at least half of their fossil generating capacity and strongly encouraged to divest all of their generating capacity to mitigate horizontal market power problems (prior to liberalisation, there was too much horizontal concentration in the generation stage). Moreover, the three former monopolies were required to meet their 'default service' obligations by purchasing all of their remaining customers' requirements in the day-ahead and real-time spot wholesale markets operated by the ISO.

### *9.3.- A perfect storm and the melt-down of the electricity market*

California's restructured electricity market functioned adequately at first, although hot, dry weather throughout the West in 1998 put pressure on the system by increasing the demand for air conditioning and reducing the stream flows necessary for generating hydroelectric power. Wholesale power prices were about one-half (roughly \$25/MWh) of their previous cost-of-service costs (about \$50/MWh) and the state's energy experts expected that at the end of the four-year transition period, California's retail prices would decrease by an additional twenty-five per cent. Similarly, investors were quite satisfied when they realised that all three vertically integrated companies, SDG&E, SCE and PG&E, would most likely recover all of their potentially stranded costs before the retail price freeze was scheduled to end in April 2002. Truth is restructuring in California did not fail until its third year, when a so-called 'perfect storm' shocked the West coast of the US.<sup>330</sup>

California's electricity crisis was precipitated by a convergence of long-term trends and special circumstances that created a scarcity of power and put upward pressure on electricity prices.<sup>331</sup> Admittedly, three main combined factors led to the melt-down of the sector:

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<sup>330</sup> CICHETTI, C., DUBIN, J., and LONG, C., *op. cit.*, p. 55.

<sup>331</sup> Congressional Budget Office, *op. cit.*, p. 10.

### 9.3.1.- Growth in demand for power because of economic expansion

By 2000, it was clear that capacity no longer comfortably exceeded demand. As a consequence of the deregulated wholesale electricity market, there was a sudden stringent need for new capacity. In this regard, California became a net importer of power from its neighbours and the state's utilities sold about 20% more electricity to their customers than was generated by local plants.<sup>332</sup>

This rapid transition, from over generation capacity to importing around 20% of the total amount of electricity, was parallel to an impressive personal income growth rate (9.3%).<sup>333</sup> Additionally, the western region's population grew way more than the national average. Indeed, since 1996, when the restructuring plan entered into force, generating capacity in California and the West had changed little, but the size of the population and the economy -which affect the demand for power- continued to grow.

In four years, the demand for electricity had sharply increased:

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<sup>332</sup> Congressional Budget Office, *op. cit.*, p. 3.

<sup>333</sup> CICCETTI, C., DUBIN, J., and LONG, C., *op. cit.*, p. 57.

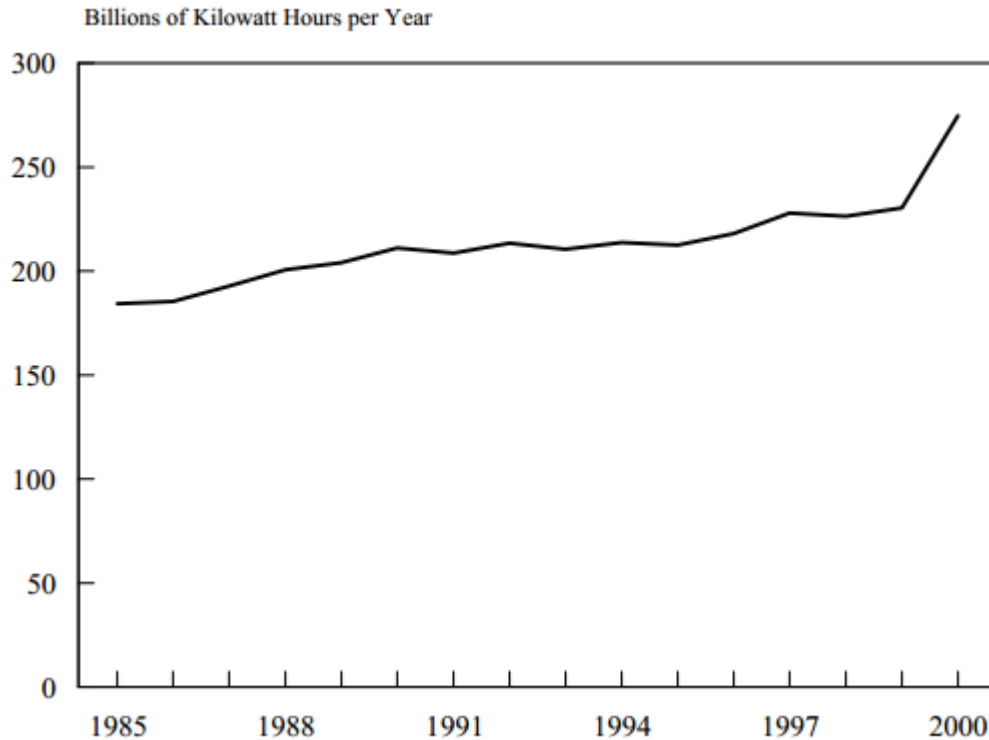


Figure 17<sup>334</sup>

In this regard, while demand was growing, there were no significant centralized generation stations built in California between 1996 and 2000 to meet this growing demand. In fact, only three small generating plants were built in the two years prior to the markets opening in 1998.<sup>335</sup> In spite of the scarcity of capacity, the power exchange bought energy only, not capacity.

#### 9.3.2.- The weather

Electricity consumption is also highly dependent on local weather conditions, which affect the demand for cooling in the summer and heating in the winter. For example, the

<sup>334</sup> Chart reflecting the electricity consumption in California from 1985 to 2000. Source: Congressional Budget Office based on data from Energy Information Administration, Electric Power Annual, Vol. I, DOE/EIA-0348/1 (various issues), Table A21.

<sup>335</sup> CICHETTI, C., DUBIN, J., and LONG, C., *op. cit.*, p. 58.

California Energy Commission estimates that if summer temperatures are 5 degrees Fahrenheit higher than normal, California's electricity demand rises by 8.5 per cent.<sup>336</sup>

In this regard, during the summer of 2000, the South-western states experienced extremely hot temperatures. In fact, Californian August of 2000 was ranked among the hottest in the last 60 years.<sup>337</sup> At the same time, there was an extended drought in the North-western countries which had a constricting effect on the watercourses and led hydropower plants to lose a good deal of their energy generation capacity.

### 9.3.3.- Manipulation of the market

At the time of the crisis there was no awareness of the concurrence of a third factor to the development electricity crisis but, by sheer chance, the sudden bankruptcy of Enron Corporation<sup>338</sup> casted new light on this point. Indeed, when Enron filed for bankruptcy, certain confidential memorandums and working documents were released by the FERC and, to the surprise of many, showed that several electricity companies were at least partly liable for the blackouts in California.<sup>339</sup>

The leading tip in this regard was that, according to leaked audiotapes of company traders, Enron Corporation arranged to take a plant off-line on the same day that California was hit by rolling blackouts to create an artificial shortage and increase the price of electricity.<sup>340</sup> Upon corroboration, it was discovered that out of the 45 GW of generating capacity which California had installed, 17 GW were inoperative. Apparently, energy traders took power plants offline for maintenance in days of peak demand in order to sell power at premium prices, sometimes up to a factor of 20 times its normal value.<sup>341</sup>

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<sup>336</sup> California Energy Commission, A Report of the California Energy Commission Staff, '*High Temperatures & Electricity Demand - An Assessment of Supply Adequacy in California: Trends & Outlook*', Sacramento, 1999, p. 2.

<sup>337</sup> CICHETTI, C., DUBIN, J., and LONG, C., *op. cit.*, p. 58.

<sup>338</sup> American energy company based in Houston, Texas. Before its bankruptcy, it was acknowledged as one of the world's leading companies in electricity and natural gas.

<sup>339</sup> BBC News, '*Enron manipulated energy crisis*', 7 May 2002.

<sup>340</sup> The New York Times, '*Tapes show that Enron arranged Plant Shutdown*', 4 February 2005.

<sup>341</sup> CNN.com, '*Enron plotted to shut down power plants*', 4 February 2005.

#### *9.4.- What lessons can be learned and how are they applicable to the European case?*

Admitting that the Californian electricity crisis resulted from the intervention of a fair share of bad luck, it is equally true that some other causes are consequence of the liberalisation process itself.

In this sense:

- Electricity has unusual physical attributes that make the design of well-functioning competitive wholesale power markets a significant technical challenge.
- Competitive electricity markets will not work well if consumers are completely insulated by regulation from wholesale market prices. California deregulated wholesale prices, but failed to deregulate retail prices or to allow the utilities to use forward contracts to hedge their default service supply and pricing obligations. When electricity wholesale prices exceeded retail prices, end-user demand remained unaffected. Hence, the incumbent utility companies had to purchase power albeit at a loss. This loss is what ultimately led independent producers to manipulate prices in the electricity market by withholding electricity generation and causing artificial transmission constraints.<sup>342</sup>
- Investments in new more efficient power plants are needed to avoid supply fall short of demand.
- Retail risk management, demand management, energy efficiency services, and continuing innovations ought to be introduced on both the supply and demand sides.

Assessing the European liberalisation process in the light of the Californian experience, it becomes clear that maintaining regulated retail prices for household consumers, even if necessary to satisfy a public service obligation, while at the same time submitting wholesale consumers to the forces of the market may lead to manipulations in the electricity industry. Precisely, it is acknowledge by the Commission that generators have to withdraw capacity

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<sup>342</sup> SWEENEY, J., *'The California Electricity Crisis: Lessons for the Future'*, Our Energy Future, Vol. XXXII, Num. 2, National Academy of Engineering, Washington, 2002, p. 12.

power in order to raise prices thus exercising market control.<sup>343</sup> Even more, isolation of the supply side of the market from the demand side breeds disaster. Thus, the practices of those 15 out of 26 MS that still have regulated prices for all household consumers,<sup>344</sup> that is, not only vulnerable, increase the risk of market malfunctioning.

In this regard, acknowledging that the social and environmental considerations of the electricity supply, *i.e.* the ‘sustainable *façade*’ is of utmost importance, even more than the economic one, it appears, then again, that liberalisation is not the right approach to the organisation of the electricity sector. Surely, during the 150 years that the Californian electrical undertakings were subject to state control there was not a single electricity crisis. Conversely, in a mere four years since the opening of the market, the electricity prices rose up about 500% and two of the main companies entered bankruptcy procedures.

In words of David Freeman, Chair of the California Power Authority at the time of the electricity crisis, concerning Enron's involvement in testimony submitted before the Subcommittee on Consumer Affairs, Foreign Commerce and Tourism of the Senate Committee on Commerce, Science and Transportation on May 15, 2002:

[T]here is one fundamental lesson we must learn from this experience: electricity is really different from everything else. It cannot be stored, it cannot be seen, and we cannot do without it, which makes opportunities to take advantage of a deregulated market endless. It is a public good that must be protected from private abuse.

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<sup>343</sup> See Directorate General of Competition, Report on Energy Sector Inquiry, SEC (2006) 1724, of 10 January 2007.

<sup>344</sup> European Regulators’ Group for Electricity and Gas, ‘*Status Review of End-User Price Regulation as of 1 July 2008*’, Ref: E08-CPR-21-05, of 11 March 2009, p. 26.



## Conclusions

Reprising what was introduced at the beginning of this project, the European quest for the liberalisation of the electricity is not a story of success. Indeed, the Commission has intended to force the application of the market rules onto an industry which simply wouldn't fit. Because of its very traits, electricity is *naturally* not open to competition.

This research has showed that the electricity industry is inherently complex and that, even if it is liberalised, prices do not necessarily go down. In fact, the lack of elasticity makes it impossible for the market forces to interplay normally with the electricity sector. Conversely, it is irrefutable that a market system does not accommodate social objectives as easily as a traditional state-controlled system, where consumer protection is normally put in a higher priority than making a profit. Moreover, experience indicates that liberalisation measures have tended to dismantle the mechanisms devised to look after social concerns. In this sense, it is particularly regrettable that still today public services are *de facto* regarded by European institutions as obstacles to integration.

At this point, it is unquestionable that the liberalisation urge does not respond to its fabulous results but to the extended idea that the market is the ultimate economic model. Typically, electricity liberalisation has been explained in terms of evolution of actor's interests, historical trends, paradigmatic shifts and institutional development. However, from the look of it, it appears that liberalisation has benefitted from the pro-market militancy of political actors in and around the European Commission, namely the UK and the US.

Once verified that liberalisation is definitely not succeeding in the improving the electricity industry, as it did with other sectors, there are nonetheless additional reasons which indicate that the market model is not the most adequate regulatory approach to electricity. To name a few:

- Companies in a market are working with their shareholders' money rather than taxpayers' money, and thus invest in new infrastructure only if there is profit in it.
- Tangible barriers exist to the deployment of renewable energies. In particular, wind power is terribly vulnerable to a system that puts a premium on predictability.

- Precluding energy generation and supply undertakings from owning and operating energy supply networks in another MS illegitimately restrict the free movement of capital.
- The unbundling requirement for public companies in the New Directive is *de facto* only functional or organisational in nature, while for private undertakings it involves ownership unbundling.
- There is a consistent lack of justification for unbundling measures. In this regard, there is no evidence guaranteeing their success and, in addition, any benefits of the unbundling model must be balanced with costs of implementing the same.
- As experienced from the Californian crisis, maintaining regulated retail prices for household consumers, even if necessary to satisfy a public service obligation, while at the same time submitting wholesale consumers to the forces of the market, may lead to manipulations in the electricity industry.
- Generators can withdraw capacity power in order to raise prices thus exercising market control.

The supply of electricity issue bears very strong social implications and, from practice, it would be better if they weren't subdued to the market forces. In this sense, as long as the market opening is further developed at the EU level while MS struggle back by derogating from the correspondent norms to maintain services of general interest, like regulated prices, the whole liberalisation thing is not going to work.

In my humble opinion, imposing competition in such a natural monopoly is ineffective and even counterproductive. Embracing the capital importance of electricity and the fact that it is considerably irreplaceable, I would advocate for an organisational model which was more focused in the social and environmental reflections of supply rather than in a system construed around obtaining a profit out of it all.

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# **Liberalisation of the Electricity Industry in the European Union**

-LL.M. in Natural Resources Law and International Environmental Law -

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