Energy regulation in Europe: regulatory policies and politics of regulation

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1. Introduction

Regulation is a "technical" activity, i.e. it is *"marked by (…) specialization"* and *"relating to a practical subject organized on scientific principles"*[1]. So has been and so is energy regulation. Back in 1930, following the 1929 financial crash, reinforcement of the powers of the US Federal Power Commission (which had been established in 1920 and is the predecessor of the present Federal Energy Regulatory Commission - FERC) was justified in the following terms: *"there are some problems of their very nature so technical that neither the courts nor the legislatures are competent to handle them – problems such as utility rate making – that require specialized knowledge by trained experts"*[2].

Have a look at the impressive list of public consultations that have been carried out by the European Regulators' Group for Electricity and Gas (ERGEG) since its foundation[3] and you will soon realize how specialized and complex energy regulatory issues are. The same conclusion can be reached by visiting the web pages of national regulatory authorities[4].

Although energy regulation is a technical activity, as stated above, its scope and its purpose clearly depend on the political and institutional framework under which regulators operate, i.e., on the "politics of regulation". On the other hand, energy regulation is more than a succession of unrelated technical decisions: to be predictable and successful, energy regulation needs a coherent strategy, i.e., a clear "regulatory policy". Any "regulatory policy" reflects the way regulators apply their knowledge and expertise taking into account not only the general "politics of regulation" but also relevant sector specific policies – for instance, energy policy. Therefore, the performance of energy regulators depends not only on the quality of their *"specialized*

[1] Definitions of "technical" provided by the Merriam-Webster Dictionary: http://www.merriam-webster.com/dictionary/technical

[2] Proposal submitted by Representative Celler to the House. In Bernhard Schwartz (ed.), *The economic regulation of business and industry – a legislative history of U.S. regulatory agencies*, vol. III, Chelsea House Publishers, New York, 1973, pg. 2049.

[3] http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS

[4] Information about national regulatory authorities and regional regulatory associations can be easily obtained through the site of the International Energy Regulation Network (IERN): http://www.iern.net/portal/page/portal/IERN_HOME/REGULATION_COUNTRY. IERN is a CEER initiative launched in 2005 with the decisive support of the Italian energy regulatory authority. It is managed and supervised by the Florence School of Regulation.

knowledge", but also on their ability to conveniently and timely interpret public policies, translating them into an appropriate and transparent regulatory policy.

In a paper published in the first issue of this Review[5] I had the opportunity to describe how energy regulation started in the European Union (EU) and how and why regulators created their European association, the Council of European Energy Regulators (CEER). In that paper I also explained how energy regulators contributed to the development of the Internal Energy Market, in close cooperation with the European Commission, and why their cooperation was essential to reduce the "regulatory gap" between national and EU levels of regulation. Looking back to the evolution of energy regulation in Europe over the last twenty years, three major phases may be identified:

- The first phase, between 1989 (creation of the first energy regulator in Europe[6]) and 1997 (beginning of informal cooperation among some energy regulators[7], entering into force of the first directive on the internal electricity market) may be characterized as "discovering the European dimension of energy regulation".

- The second phase, between 1998 (starting of voluntary cooperation between regulators and European Commission, on one side, and stakeholders, on the other side[8]) and 2003 (establishment of a more mature legislative framework for the Internal Energy Market, institutionalization of regulatory cooperation at EU level through the creation of ERGEG, transformation of CEER into a formal association under Belgian law with an office in Brussels) may be described as "inventing European energy regulation".

- The third phase is not only marked by the enlargement of the EU and therefore of CEER/ERGEG (from 15 to 25 and to 27 members), by the introduction of independent energy regulators in all Member States[9] and by new legislation[10] - if this was the case, it might be called a phase of

[5] Jorge Vasconcelos, *Towards the internal energy market, how to bridge a regulatory gap and build a regulatory framework*, European Review of Energy Markets, vol. 1, issue 1, September 2005.
[6] Offer in the UK.
[7] Italy, Spain and Portugal.
[8] The so-called Florence Forum.
[9] The German energy regulator was set up in 2005.
[10] The so-called third package proposed by the European Commission in September 2007 is still under discussion in the Council and in the European Parliament.

"consolidation". The current phase is also strongly influenced by important changes in EU policies, as well by a new political approach to regulation that will impact on EU energy regulation – therefore, it may be better characterized as "re-inventing European energy regulation".

To face the challenge of "re-inventing European energy regulation" it is necessary first, to understand the changing political context and, second, to design and to implement new regulatory policies. The present paper briefly addresses these two issues.

2. Changing political context

Two types of ongoing political changes will have a particularly strong impact on the future evolution of EU energy regulation: the "politics of regulation" and energy policy.

2.1. The politics of regulation

In the early 1990s, when liberalization of energy markets started in the EU, simultaneously with the beginning of the construction of the Internal Energy Market, the fundamental assumption was that competition should be widely introduced in the energy sector:

"the main focus was on establishing basic principles for competition among producers and suppliers, as well as on defining their basic rights. According to the EC proposals, restrictions to competition would be allowed only if duly justified on the basis of fulfilling public service obligations assigned to specific undertakings. It was supposed that by removing legal barriers to competition, effective competition would develop and competitive markets would emerge "naturally". Regulation was not considered a priority and the motto at that time was "as much competition as possible, as much regulation as necessary" (which meant no explicit regulation at all)."[11]

Although national regulation was not contemplated in the first Internal Energy Market directives, the few Member States that had started energy liberalization before the first EU directives were approved[12], did introduce

[11] Jorge Vasconcelos, *Towards a European energy policy*, in Peter Ludlow (ed.), *Setting EU priorities 2007*, European Strategy Forum, 2007. See http://www.esf.pt/BooksDetails.asp?id=19

[12] The UK, Spain, Portugal and Italy introduced independent regulatory authorities; Sweden and Finland, while also introducing regulation, did not went so far in institutional terms.

national regulators.

Obviously, the first directives also did not contemplate regulation at EU level, i.e., regulation of the Internal Energy Market. However, *"Soon after entry into force of the 1996 electricity directive, the EC realized the need to act in order to prevent the development of 15 parallel (national) energy markets. Proposing a new directive was not a politically acceptable solution at that time, so the EC decided to follow a different approach, based on voluntary cooperation."*[13]

The voluntary approach did not deliver the expected results and a new set of directives and regulations was approved in 2003:

"The 2003 directives were still mainly based on a competition policy point of view, which by the way was the main underlying assumption of the "Lisbon Agenda". In this sense, the 2003 directives may be considered a building block of the "Lisbon Agenda". However, they institutionalized independent regulation, at least at national level (at EU level no explicit regulatory mechanism was created, thus leaving a "regulatory gap" supposedly to be overcome through comitology)."[14]

In spite of the new directives, functioning of EU energy markets was still not satisfactory. This led the European Commission Competition Directorate-General to launch an extensive inquiry in 2005. In the final report, published in January 2007, the Commission identified as one of the four *"main fundamental deficiencies"*:

"Gaps in the regulatory environment: a persistent regulatory gap particularly for cross border issues. The regulatory systems in place have loose ends, which do not meet"[15].

In September 2007, the European Commission published a new package of legislative proposals, including a *"Proposal for a Regulation of the European Parliament and of the Council establishing an Agency for the Cooperation of Energy Regulators"*[16]. This first, timid step towards EU energy regulation was welcome by the European Parliament but it was not enthusiastically supported by the Council[17]. The current compromise, still to be formally

[13] Idem.
[14] Idem.
[15] http://ec.europa.eu/competition/sectors/energy/inquiry/full_report_part3.pdf Page 329.
[16] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007PC0530:EN:NOT
[17] "Concerning the Commission proposal, the Council has introduced certain other modifications (of substance and/or of form) so as to provide for a regulatory Agency, independent from the Member States and the Commission, with well circumscribed tasks that strictly reflects the tasks entrusted to the Agency by the Electricity and Gas Directives and Regulations. The Agency focuses on issues involving more than

approved by the Council and the Parliament, clearly represents a weak institutional solution. The Internal Energy Market, serving about half billion people in 27 Member States, with yearly electricity demand above 3000 TWh and yearly gas demand about 430 Mtoe is the largest integrated energy market in the world[18]. However, it still lacks appropriate supra-national regulatory institutions like FERC in the United States. This is mainly due to the peculiar EU institutional architecture and to the reluctance of Member States to allocate to the EU decision-making powers, even at regulatory level.

The so-called third package also amends provisions concerning regulation at national level:

"The current rules already require Member States to have a regulator. However, the new rules will make a number of significant changes. First of all, the legislative proposals aim to ensure that all regulators are truly independent, not only from industry interests but - with respect to their day-to-day operational decisions - also governments. For example each Member State must ensure that the regulator is an independent legal entity, which has authority over its own budget and which has sufficient human and financial resources to carry out its tasks. Furthermore, the regulator must have a management which is appointed for a non-renewable term of at least five years and there are strict rules on the conditions under which management may be removed from office.

Secondly, regulators' statutory powers and duties will be strengthened. They will be able to issue binding decisions on companies, to take appropriate measures in cases where the functioning of the gas and electricity markets is insufficient including gas and electricity release programmes and to impose penalties on companies that do not comply with their legal obligations or with decisions from the regulator.

The legislation also introduces record keeping obligations. At the moment regulators cannot effectively assess allegations of market abuse. For regulators to be able to act they must be able to study the behaviour of market participants in the past, to investigate if

one Member State as far as binding decision making is concerned; its involvement in technical matters (establishment of network codes) has been strengthened, but is still of an advisory nature. It generally allows for the national levels to play their parts (e.g. two-step approach for defining terms and conditions for access and operational security for cross-border infrastructure (Art.8)). In all these tasks, market participants and authorities at national levels are duly consulted (Art. 8(1), 10) and due account is taken of the outcomes of regional cooperation between TSOs and between regulators (Art. 6(6) and 7(3))." http://register.consilium.europa.eu/pdf/en/08/st14/st14541-re01ad01.en08.pdf

[18] Although electricity and natural gas consumption in the USA is higher than in the EU, energy systems there are both physically and legally separated into several sub-systems. Moreover, while in the EU all energy consumers are free to choose supplier from any Member State, in the USA the majority of energy consumers has no such choice.

their operational decisions where based on sound economic reasoning or if their decisions tried to manipulate market prices. Electricity generators, gas network operators, and supply undertakings will therefore be required to keep record of all data relating to operational decisions and trades.

Thirdly, regulators will be required to cooperate with regulators from other Member States and all regulators will have the same clear objective of promoting competition, effective market opening and an efficient and secure network system.

These more detailed requirements for national regulators in combination with the mandate to cooperate at the European level will help resolve the European patchwork we see today as regards the powers of regulators, their responsibility and their independence. A functioning internal market for electricity and gas cannot exist without independent regulators who cooperate with each other. "[19]

The Council recognizes that the present regulatory "*patchwork*" is unsatisfactory but does not have the determination to implement strong institutional solutions, pretending that cooperation *"of an advisory nature"* will provide the much needed remedies. Similar attitudes were observed in the past both in telecommunications[20] and in financial markets.

The current world financial crisis exposed the need of appropriate supra-national regulatory mechanisms with extreme clarity. The undergoing process of "re-inventing" the financial regulatory system, both at world level and at EU level, will probably have deep and lasting consequences regarding the "politics of regulation". In principle, this broad political change may favour the adoption of better regulatory solutions[21] in the EU, not only in

[19] http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/361&format=HTML&aged=1&language=EN&guiLanguage=en

[20] While national energy regulators have cooperated closely with the European Commission and support the creation of a European regulatory agency, telecoms regulators have a different approach. In an interview published by Europolitics on February 22, 2008, Dániel Pataki, Chairman of the (telecoms) European Regulators' Group (ERG) stated:
"We have been criticised for not being united, for not advising Europe. We must deliver. That is what I've told my colleagues. This is not just about regulatory reform. It is also about the future of the ERG, whether we can prove that there is a viable alternative to a European telecoms authority, based on the existing network of regulators. (…)
Liberalisation has made good progress and the regulatory framework has worked well. Now the framework has to evolve with the market. There is no need for a revolution. So why this transfer of power? We think that any new institution must strike a better balance with the national authorities."

[21] In this context better regulatory solution basically means a more efficient allocation of tasks to national and EU regulatory authorities/agencies in order to ensure coherent and complete regulation of energy markets in the EU. It should not be confounded with the concept of Better Regulation as used by the Commission which mainly means simplification, reduction of administrative burdens and improving the quality of the impact assessment system.

financial markets but also in energy markets. However, it is not at all sure that the lessons from the financial crisis will be transferred to the energy sector; it may well happen that short-term internal EU disputes, shortsighted national perspectives and persistent institutional conflicts will prevent the widespread adoption of a new "politics of regulation" and, consequently, the improvement of EU energy regulation.

A recent statement by Henry Kissinger on the financial crisis is also appropriate to illustrate the political choices concerning regulation of the Internal Energy Market:

"In the end, the political and economic systems can be harmonized in only one of two ways: by creating an international political regulatory system with the same reach as that of the economic world; or by shrinking the economic units to a size manageable by existing political structures, which is likely to lead to a new mercantilism, perhaps of regional units."[22]

If an EU *"regulatory system"* is not introduced to properly regulate the Internal Energy Market, it will inevitably split into "*economic units"* (i.e., national markets) "*manageable by existing political structures*" (i.e., national governments) "*which is likely to lead to a new mercantilism, perhaps of regional units"* (i.e., regional energy markets).

2.2. Energy policy and related policies

In March 2007 the European Council considered that *"[given] that energy production and use are the main sources for greenhouse gas emissions, an integrated approach to climate and energy policy is needed to realise this objective* [of limiting the global average temperature increase to not more than 2°C above pre-industrial levels].

Integration should be achieved in a mutually supportive way. With this in mind, the Energy Policy for Europe (EPE) will pursue the following three objectives, fully respecting Member States' choice of energy mix and sovereignty over primary energy sources and underpinned by a spirit of solidarity amongst Member States:
− increasing security of supply;
− ensuring the competitiveness of European economies and the availability of affordable energy;

[22] Henry A. Kissinger *The chance for a new world order* International Herald Tribune, January 12, 2009.

– promoting environmental sustainability and combating climate change." [23]

The existence of "*an integrated approach to climate and energy policy"* means that regulation cannot be exclusively focused on market issues, as it often was in earlier stages. In particular, regulation must take into account EU objectives related to energy efficiency and electricity generation based on renewable sources, as expressed by the European Council in December 2008:

"In the context of this agreement [on the four proposals in the energy/climate legislative Package] *and of the Economic Recovery Plan, it is imperative to intensify action to improve the energy efficiency of buildings and energy infrastructure, to promote green products and to support the automotive industry's efforts to produce more eco-friendly vehicles.*

The Union's efforts to combat climate change are coupled with resolute action to enhance its energy security, including interconnections and the connection of the most isolated European countries."[24]

The new EU integrated energy/climate policy requires appropriate regulatory incentives, namely as regards energy efficiency, green products, electric vehicles and interconnections. This means that the traditional regulatory toolkit must be reviewed and expanded. This review is particularly urgent under the current economic circumstances in order to support the European economic recovery:

"As regards action by the European Union, the European Council supports in particular:
– an increase in intervention by the European Investment Bank of EUR 30 billion in 2009/2010, especially for small and medium-sized enterprises, for renewable energy and for clean transport, in particular for the benefit of the automotive industry, as well as the creation of the 2020 European Fund for Energy, Climate Change and Infrastructure ("Marguerite Fund") in partnership with national institutional investors;

– simplification of procedures and faster implementation of programmes financed by the Cohesion Fund, Structural Funds and the European Agricultural Fund for Rural Development with a view to strengthening investment in infrastructure and in energy efficiency;

[23] Presidency Conclusions of the European Council 8/9 March 2007.
[24] Presidency Conclusions of the European Council 11/12 December 2008.

– on the basis of a list of specific projects which will be presented by the Commission, taking into account a suitable geographical balance, the mobilisation of the possibilities, in the context of the Community budget, for strengthening investment in these sectors and, through regulatory incentives, developing broadband internet, including in areas that are poorly served" [25]

The responsibility of energy regulators in the context of the present economic crisis cannot be underestimated, as shown by a recent example in the United States. At the end of 2008, FERC was requested by a regulated undertaking (ComEd) to allow *"an incentive rate of return (ROE) adder of 150 basis points for each of the 22* [electricity transmission] *projects, as well as an additional ROE adder of 50 basis points for two Static VAR Compensators (SVC) as a separate incentive for the use of advanced transmission technology."* [26]

In an order issued by FERC on December 4, 2008, the petition was denied. However, Commissioner Moeller dissented in the following terms:

"As this nation presently faces a serious financial crisis, now is not the time for this Commission to discourage investment in needed transmission infrastructure. The Congress required us to consider transmission incentives, and the Congress is again considering how to create jobs through massive investments into our nation's infrastructure. We should do all that we can to ensure that incentives are granted when appropriate. (…)

The Commission should not be excessively rigid at a time when significant investment is needed in transmission infrastructure for increased reliability and better access to renewable energy sources. Each transmission project is unique to the area and system for which it is proposed, and such individual circumstances should be considered when deciding whether to grant incentives.

For these reasons, I respectfully dissent."[27]

3. New regulatory policies

A new energy regulatory policy must go beyond the traditional and "trivial" objectives of promoting consumer rights, as well as economic efficiency in energy infrastructure and in energy markets. It must incorporate, at least,

[25] Idem.
[26] http://www.ferc.gov/EventCalendar/Files/20081204162401-EL08-78-000.pdf
[27] Idem.

three more challenging goals:

(1) To contribute to the achievement of the Internal Energy Market in spite of the insufficient and imperfect regulatory system at EU level. Although the new directives and regulations, if finally approved and properly implemented and enforced, will improve the independence and increase the harmonization of powers of national regulatory authorities, the lack of an European regulator, some new ingredients of self-regulation and the persistence of comitology will create inevitable difficulties and delays.

(2) To enable the fulfilment of EU energy and climate policy goals by providing appropriate incentives to the modernization of energy infrastructures aimed in particular at improving energy efficiency at all levels – generation, transmission/distribution and use –, increasing penetration of renewable sources and facilitating the development of new services (demand response, electric vehicles, etc.). This requires a new regulatory approach to infrastructure planning and operation.

(3) To encourage the use of available EU and national funds and financial instruments by energy undertakings in order to accelerate investments in the energy sector. These investments may be necessary to modernize the energy infrastructure (in particular through the massive introduction of information and communication technologies), to increase the connectivity of electricity and gas networks (both within the EU and at its borders) or to diversify and decentralize supply sources.

The energy systems of the 21st century will be very different from the energy systems of the previous century. This transformation is already taking place, dictated by technological, environmental, economical and geo-political factors and the EU is leading the way in several dimensions: market restructuring, integration of national markets, internalization of environmental costs, introduction of new technologies, etc..

The structural transformation of energy systems inevitably implies the adaptation of energy regulation and the adoption of new regulatory policies. Re-inventing energy regulation will not be an easy task. It is particularly challenging in the EU because it was "invented" here barely ten years ago and it is still far from maturity. Nevertheless, it is easier to envisage how a

new energy regulatory policy should look like than to predict how the new "politics of regulation" will be.