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Faculté Droit
& Criminologie

Response to the EC Consultation on a new Energy Market Design

Brussels, 8 October 2015

Center for Private Law, Unit of Business Law

Our research center is pleased to comment on the communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions “*Launching the public consultation process on the new energy market design*” (COM(2015) 340 final) (the “**Communication**”).

The Commission invited stakeholders to comment on its vision for the redesign of the European electricity market and on the issues that may need to be addressed in such a redesign. The Communication aims in particular at giving a central role to the European consumers by increasing their decision-making powers on the market.

As part of the Center for Private Law of the *Université Libre de Bruxelles* (ULB), the Unit of Business Law of the ULB aims at organizing collective and individual research as well as colloquiums and trainings in the field of business law *sensu lato* both at European and domestic levels.

This submission draws on our research in the field of laws and regulations relating to the European electricity market, to the protection of consumers and to the right to privacy. It has been prepared by the contact persons mentioned below, with the assistance of two last-year student interns.

1 Scope of this submission

The Communication stresses notably that secure operation of the electricity grid has become more challenging with the rapid growth of intermittent power generation from renewable energy sources, and that consumers must be incentivised to respond to the new flexibility challenge. Integrating demand-side management and micro-production by retail consumers might help increasing the reliability of the electric system: more electricity should be drawn from the grid during off-peak hours when there is a surplus of generation and prices are low; while electric consumption should decrease during peak hours when generation is scarce and prices are high¹.

In this context, our submission does not aim at answering all questions raised by the Communication, but focuses on some legal and regulatory issues that must be addressed in view of supporting demand-side response and micro-production at retail level.

¹ Communication, p. 3 and 8.

2 Specific issues raised by demand-side management

Empirical evidence shows that demand-response might help addressing the risks of electricity shortage in times of lower generation levels². The objective of the Commission to incentivise demand-response to spot price signals in the wholesale power market is therefore to be encouraged.

In **question 10**, the Communication asks where stakeholders see the main obstacles that should be tackled to kick-start demand-response. Demand-response to spot prices is only possible when electricity consumers are sensitive to price fluctuations on the wholesale market, which only happens if (i) consumers have direct access to their consumption data through smart meters in real time and if (ii) the supply contracts entered into by consumers provide a dynamic pricing structure such as variable prices linked to the spot markets on an hourly basis. These two requirements are linked with each other. Hence, for demand-response to be on an hourly basis, hourly measuring is a prerequisite³.

Both requirements of smart metering and dynamic pricing give rise to legal and regulatory issues that are discussed below.

2.1 Smart metering

An efficient demand-side management depends on the roll-out of smart meters on a large scale. Under current legislation, setting up smart metering systems is not mandatory for Member States but can be subjected to a long-term economic assessment of the costs and benefits of such systems for the market and the consumers⁴. While several Member States have achieved or undertaken to deploy smart meters on their territories, others like Belgium, Portugal, Czech Republic and Lithuania must still perform their cost-benefit analysis or do not intend to deploy smart meters because their analyses led to unfavourable results⁵. It must therefore be borne in mind that consumers in these Member States will not benefit from dynamic pricing and will therefore not be directly incentivised to demand-side management.

² See in Belgium: ELIA, *Situation du réseau électrique hiver 2015-16*, 14-24 July 2015, slide 6, available at: <http://www.elia.be/fr/a-propos-elia/newsroom/news/2015/24-07-2015-Situation-du-systeme-electrique-hiver-2015-2016>.

³ THEMA Consulting Group, *Rules and regulation for demand response and micro-production*, commissioned by NordReg, May 2015, p. 2 and 9, available at: <http://www.nordicenergyregulators.org/news>.

⁴ Paragraph 2 of the Annex I of the Directive 2009/72/UE of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity, OJ L 211, 14 August 2009, p. 55-93 (the « **Electricity Directive** »).

⁵ Commission Staff Working Document « Cost-benefit analyses & state of play of smart metering deployment in the EU-27 », SWD(2014) 189 final, p. 9.

Concerning the deployment of smart meters, major issues of **data protection and right to privacy** remain. This topic is of critical importance for the success of smart metering among consumers. The Dutch experience of 2007 provides a concrete evidence of the issue: after making it a sanctioned requirement that all new building be equipped with smart meters, the Dutch Parliament stepped back under the pressure of consumer associations concerned with privacy issues, and introduced a voluntary-based deployment of smart meters⁶.

In its communication on “*Delivering a New Deal for Energy Consumers*” (COM(2015) 339 final), the Commission acknowledges that special attention should be accorded to data management and protection of privacy in this context. However, the Commission provides very little insight on the contemplated contents of that protection⁷.

In **question 14**, the Communication asks how access to metering data should be adapted to ensure data privacy and whether additional provisions are required on management of and access to these data. We are of the opinion that data protection in the context of smart metering should be addressed in a **specific manner**. Indeed, the monitoring of energy consumption of people at home represents a concrete and significant invasion of the citizens’ privacy. Potential concerns for risks of hacking and other forms of cyber-criminality should also be carefully taken care of. In this context, we can only emphasize the need to abide strictly by the principle of “**privacy by design**”, which means that the smart metering devices must be designed in such a way that consumers’ data are protected by default against any form of non-authorized access or other processing, and this without any need of concrete action from the consumers. For these reasons, we are of the opinion that mandatory rules should be specifically put in place to provide adequate data protection to consumers using smart meters, in addition to the general provisions of the Data Protection Directive⁸ and of the Recommendation on a DPIA Template for Smart Metering Systems⁹.

As a matter of principle, if a consumer freely and consciously prefers to use a traditional meter in order to protect his privacy, this **choice should be respected**, provided that the constraints that the system operators will have to face because of such choice are not disproportionate. The reactions of the French and Belgian data protection agencies on the similar issue of “smart ticketing” in public transports can be referred to as precedents. The use of electronic transport cards

⁶ Commission Staff Working Document « Country fiches for electricity smart metering », SWD(2014) 188 final, p. 84.

⁷ COM(2015) 339 final, p. 9.

⁸ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ L 281, 23 November 1995, p. 31-50 (the « **Data Protection Directive** »).

⁹ Commission Recommendation 2014/724/EU of 10 October 2014 on the Data Protection Impact Assessment Template for Smart Grid and Smart Metering Systems, OJ L 300, 18 October 2014, p. 63-68.

allows transport operators to trace the journeys of the users. In France, the electronic data protection commission (*Commission Nationale de l'Informatique et des Libertés – CNIL*) advocated for the “Navigo” card to allow users to choose for an anonymous version without any additional cost¹⁰. In Belgium, the CPVP (*Commission de la Protection de la Vie Privée*) gave a similar opinion with regard to the “Mobib” pass¹¹. Further to these opinions of data agencies, both French and Belgian transport operators launched anonymous but charged cards.

In case of mandatory deployment of smart meters, only personal data that is required for the metering system to function and to meet its legitimate objectives, should be collected without the consent of the consumer. An exhaustive **list of accessible data** should be provided by regulation. The **frequency of the data collection** is another key concern for the privacy of the consumer. Based on the examples from the Scandinavian countries, one might think of an hourly metering of consumption volumes per household, and a recording of these hourly volumes by distribution system operators on a daily basis¹². This regime seems to provide an adequate balance between the need for the consumer (or a third party approved by the consumer) to be aware of price fluctuations, and the need for the supplier to invoice the right amount in dynamic pricing contracts. The collection of other personal data (such as information on the electricity consumption per room or equipment) or a higher frequency of data recording should be dependent on the consumer’s free, specific and informed consent.

Another important feature of an adequate regulation on data protection for smart meters should concern the **use of the personal data** that has been collected by electricity undertakings. Different solutions can be considered and/or combined to offer an optimal level of protection to the consumers. A first way of protecting the users’ personal data is to make sure the data are deleted, anonymised or aggregated - for statistical purposes for example - after a certain period of time. Another measure that would provide firmer guarantees is the prohibition of some uses for the personal data. This prohibition could encompass profiling consumers through data reading for the purpose of advertising or selling complementary articles. A robust implementation of the principle of purpose specification and

¹⁰ CNIL, *Délibération portant avis sur un traitement de la Régie Autonome des Transports Parisiens ayant pour finalité l’exploitation des données de validation des passes NAVIGO*, Délibération n° 04-020, 8 April 2004, available at: <http://www.legifrance.gouv.fr/affichCnil.do?oldAction=rechExpCnil&id=CNILTEXT000017653150&fastReqId=575522282&fastPos=3> ; CNIL, *Délibération portant autorisation de la mise en œuvre par la SNCF d’un traitement automatique de données à caractère personnel relatif à la gestion des données de validation des passes « Navigo » chargés d’un abonnement annuel, mensuel ou hebdomadaire*, Délibération n° 2004-100, 9 December 2004 ; available at: <http://www.legifrance.gouv.fr/affichCnil.do?id=CNILTEXT000017653201>.

¹¹ CPVP, *Recommandation relative aux principes de base à respecter dans le cadre de l’utilisation de la télébilletique par les sociétés publiques de transport en commun (A-2010-003)*, Recommandation n° 01/2010, 17 March 2010, available at: <http://www.privacycommission.be/fr/recommandations-cpvp?page=1>.

¹² THEMA Consulting Group, *Rules and regulation for demand response and micro-production*, p. 2.

limitation¹³ is of critical importance in this regard. With the smart metering system, the data controllers must use the data collected only for certain purposes that have been accepted freely by an informed user. A clear guidance should be given on what can be done without user consent and what requires user consent¹⁴. The consumer should also be allowed to accept the transmission of more information concerning himself only if he is informed of the consequences on his privacy. In that case, the consumer must be able to withdraw his consent at any time, without any specific justification or unnecessary administrative burden.

2.2 Dynamic pricing

In **question 2**, the Communication asks which challenges and opportunities could arise from prices reflecting actual scarcity of power generation and how these challenges can be addressed. We submit that dynamic pricing structures in supply contracts implies advantages and risks. On the one hand, these pricing structures have the benefit of incentivising retail consumers to enter into a profitable management of their demand. On the other hand, these structures increase the **volatility of energy prices** for retail consumers and suppliers. One could expect that the more active and informed consumers will benefit from this volatility and manage to reduce their energy bills by shifting part of their demand to off-peak hours¹⁵. On the other hand, consumers who are less informed or suffer from weaker socio-economic conditions might not be able to modify their behaviour in a similar way, and might therefore end up paying higher energy bills. In this regard, it can be noted that recent regulations of variable prices in supply contracts, such as the “safety net” that Belgium implemented in 2012-2013, aimed at reducing the volatility of energy prices in view of protecting residential consumers and SMEs¹⁶.

On the basis of this observation, one should conclude that dynamic pricing must not become mandatory, but should always result from a **free and informed agreement** between the consumer and his supplier, in accordance with the principle that the price for the supply of electricity should be freely determined by the operation of supply and demand¹⁷. An additional argument supporting the

¹³ Article 6.1.b of the Data Protection Directive.

¹⁴ Article 29 Data Protection Working Party, « Opinion 04/203 on the Data Protection Impact Assessment Template for Smart Grid and Smart Metering Systems ('DPIA Template') prepared by Expert Group 2 of the Commission's Smart Grid Task Force, 22 April 2013, p. 15.

¹⁵ See in Sweden: Energimarknadsinspektionen, *Anvisade elavtal – nuläget och framtida utveckling*, Ei R2013:17, November 2013, p. 22-23, available at: http://ei.se/sv/Publikationer/Rapporter-och-PM/rapporter-2013/anvisade-elavtal-nulaget-och-framtida-utveckling/?_sm_au_=iVVZQNVWrL5tWRV7.

¹⁶ Commission de Régulation de l'Electricité et du Gaz, *Rapport (RA)150924-CDC-1458 relatif au 'mécanisme du filet de sécurité introduit par l'article 20bis, §§1^{er} à 5 de la Loi électricité et l'article 15/10bis, §§1^{er} à 5 de la Loi gaz'*, 24 September 2015, p. 8, available at: <http://www.creg.be/fr/outputdb.asp>.

¹⁷ ECJ (Grand Chamber), 20 April 2010, *Federutility and Others v Autorità per l'energia elettrica e il gas*, case C-265/08, ECR 2010, I-3377, para. 18.

consumers' freedom to choose between various pricing structures, is that regulation of pricing formula at retail level often hampers competition and therefore ends up not benefitting consumers¹⁸.

This being said, there is a legitimate public interest to foster the offering of dynamic pricing structures to retail consumers as an alternative to other fixed or variable pricing schemes. Under current legislation, suppliers may but are not compelled to offer tariffs that support dynamic pricing for demand-response measures by final customers¹⁹. The Energy Efficiency Directive might be modified on that aspect in order to make it **mandatory for suppliers to offer at least one dynamic pricing formula** in their price list to customers with smart metering devices in place. The consumer will therefore have the right to opt for the pricing formula that suits him the best.

The potential short-term benefits of dynamic pricing as incentive for demand-response should therefore not be exaggerated. All consumers will not opt for this pricing scheme nor will they immediately change their behaviours after the installation of smart meters. This regime should also be accompanied by correct customer information and by educational feedbacks increasing the understanding of energy bills by retail consumers. One should note that market operators and authorities have already taken several initiatives in this regard, under the forms of energy service companies, aggregators and price comparators.

3 Specific issues raised by micro-production

As stressed by the Communication, the support of investments in renewables has led to various challenges for the reliability of the electric system and for the attractiveness of the market design. Among other issues, **questions 9 and 15** ask whether Member States should adopt a more coordinated approach for renewables support schemes and how distribution tariffs should treat self-generation.

While increased coordination should be profitable when authorities set their objectives of additional generation capacities based on renewable energy sources, **the design of the support schemes** should in our view still be decided at **domestic level** in order to take into account the local conditions in which such investments must occur.

¹⁸ See in Great Britain the provisional conclusion of the Competition & Markets Authority, *Energy market investigation. Provisional findings report*, 7 July 2015, p. 369, available at: <https://www.gov.uk/cma-cases/energy-market-investigation>.

¹⁹ Para. 3 of Annex XI of the Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC, OJ L 315, 14 November 2012, p. 1-56 (the «**Energy Efficiency Directive** »).

This being said, recent experience in the support of self-generation through distribution tariffs in Belgium show that this kind of support may lead to intricate issues of distributive justice and grandfathering of acquired rights. If the development of micro-production is supported by a complete or partial exemption of self-generation from distribution tariffs, a bigger share of network costs must be allocated to the other consumers who are connected to the same distribution grid. This may lead to socially unsustainable situations where consumers who do not have the means to finance an investment in solar panels must pay for the support granted to their neighbours who are capable of such investment. This can only increase the social distance between citizens and the risk of energy poverty. This statement explains why governments, regulators and distribution system operators are now willing to withdraw the exemptions that have been previously granted to “prosumers”. This in turn leads to litigations for breach of acquired rights²⁰.

We submit that **clear legislation on distribution tariffs at EU level** should help avoiding entering into such vicious cycles. It is indeed recognised that the current energy transition creates huge investment needs in distribution networks, since the production units using renewable energy sources are more costly for the network due to their intermittency and their decentralised location²¹. According to the principle of cost-reflectiveness, all network costs must be paid by the distribution tariffs, which are to be allocated among network users²².

In view of this anticipated rise of network costs and distribution tariffs, a fair allocation of these tariffs between all categories of consumers is a prerequisite for an energy transition in socially acceptable conditions. It should therefore be made clear in the Electricity Directive that the principles of cost-reflectiveness and non-discrimination imply that distribution tariffs may not be used to achieve other policy objectives than the proper operation, maintenance and development of secure, reliable and efficient electricity distribution systems. Consequently, consumers operating self-generation units should not benefit from higher discounts on distribution tariffs, than the amounts of cost-savings in networks that can be associated with the connection of those producers to the grid. Like all other consumers, “prosumers” must bear their fair share of network costs.

²⁰ See : Liège, 30 June, 20152014/RG/1419, *Touche Pas à mes Certificats Verts e.a. c. CWaPE, unpublished* ; Brussels, 27 November 2013, *M.E.R.*, 2014/4, p. 319.

²¹ M. Derdevet, *Energy, a networked Europe – Twelve proposals for a common energy infrastructure policy*, report addressed to the President of the French Republic, La documentation française, Paris, 2015, p. 20, available at: <http://www.ladocumentationfrancaise.fr/rapports-publics/154000139-energy-a-networked-europe-twelve-proposals-for-a-common-energy-infrastructure-policy>.

²² Recital 36 of the Electricity Directive.

Contacts

For further information please contact:

Xavier Taton, Associate Lecturer, xavier.taton@ulb.ac.be

Jean-Ferdinand Puyraimond, Researcher, Jean-Ferdinand.Puyraimond@ulb.ac.be

Campus du Solbosch - CP137

50 avenue F.D. Roosevelt, 1050 Brussels