Long-term Energy Supply Contracts in European Competition Policy: Fuzzy not Crazy

EPRG Working Paper 0919

Adrien de Hauteclocque and Jean-Michel Glachant

Abstract

Long-term supply contracts often have ambiguous effects on the competitive structure, investment and consumer welfare in the long term. In a liberalized market context, these effects are likely to be even harder to assess. Since liberalization and especially since the release of the Energy Sector Enquiry in early 2007, the long-term supply contracts of the former incumbents have become a priority for review by the European Commission and the national competition authorities. It is widely believed that European Competition authorities take a dogmatic view on these contracts and systematically emphasize the risk of foreclosure over their positive effects on investment and operation. This paper depicts the methodology that has emerged in the recent line of cases and argues that this interpretation is largely misguided. It shows that a multiple-step approach is used to reduce regulatory costs and balance anti-competitive effects with potential efficiency gains. However, if an economic approach is now clearly implemented, competition policy is constrained by the procedural aspect of the legal process and the remedies imposed remain open for discussion.

Keywords

Long-term Contract, Competition Policy, European Union

JEL Classification

K21; L42; L44

Contact adehauteclocque@hotmail.com

Publication August 2009

www.electricitypolicy.org.uk
Long-term Energy Supply Contracts in European Competition Policy: Fuzzy not Crazy

Adrien de Hauteclocque ¹

Jean-Michel Glachant ²

11 August 2009

1. Introduction

Long-term supply contracts (LTC) remain a pervasive feature of most European energy markets despite the progress of liberalization (DG COMP, 2007). To get out of the monopoly era, the current refining and harmonization of European market designs may be pointless if incumbents continue to use these contracts as devices to control market (Neumann and Hirschhausen, 2006; Glachant and Lévêque, 2006). Indeed, these contracts frequently have anti-competitive foreclosure effects when competition is imperfect (Rasmussen et al., 1991; Segal and Whinston, 2000; Fumagalli and Motta, 2006) and these effects are likely to be worsened in the new market context. However, there is growing acceptance that their positive impact on investment makes them desirable as long as spot market competition remains unsatisfactory (Chao et al., 2008; Finon and Roques, 2008). Welfare-enhancing aspects must thus be weighted against possible side effects on the current efforts of the European Union (EU) to create truly competitive markets.

Today, the allocation of regulatory powers in the EU is biased in favour of the ex post enforcement of EC antitrust law. The institutional structure of the European Union does not give to the European Commission the power to ex ante alter property rights in the different member states and thus to carry an aggressive policy of horizontal de-integration which would probably deliver better and faster results (Green and Newbery, 1997; Newbery et al., 2003). In addition, the lack of an EU-wide energy regulator with the effective power to monitor and regulate market developments, especially cross-border trade issues, is

¹ Ph.D, University of Manchester School of Law and Associated Researcher, ADIS/GRJM, Dept of Economics, University of Paris South 11 (e-mail: adenhautecllocque@hotmail.com)

² Loyola de Palacio Professor of European Energy Policy at the European University Institute RSCAS in Florence and Director of the Florence School of Regulation (e-mail: jean-michel.glachant@eui.eu)
particularly detrimental to the integration and the good functioning of European energy markets (Glachant and Lévêque, 2009).

The third liberalization package is nonetheless initiating the creation of an Agency for the Cooperation of Energy Regulators (ACER thereafter). In order to optimize the development of the transmission grid at the European level and facilitate a consensual approach to the regulation of interconnection, the ACER is to create an institutionalized forum where decisions will be more easily taken. However, the ACER is likely to be vested with limited discretionary powers in practice. The limited powers of ACER can be explained as much by the conflicting interests of the different actors involved (the European Commission - DG TREN and DG COMP, national regulators, governments, European Parliament) as by the intricacies of European institutional law and the so-called Meroni Doctrine which postulates that an Institution like the European Commission cannot delegate to an agency powers it itself does not possess. The powers delegated can be neither greater nor different than those granted in the first place by primary or secondary EC law. In this sense ACER, as the European Electronic Communications Market Authority, can be seen as a ‘network agency’ where the members of the network (the national regulators) obtain greater political and legal independence from national governments and where the powers and duties of the European Commission are not clearly defined, which in both cases raises accountability issues (Hancher, 2009). We last note that whatever the scope of the ACER regulatory powers, it does not constrain in any way the use of EC antitrust law by the European Commission as Art 81 and 82 EC are superior to secondary EC law in the hierarchy of European legal norms.

While sector-specific regulation shows obvious signs of weakness, the European Commission has announced it would use its antitrust powers with even more strength in the coming years (Monti, 2003; DG COMP, 2007). We note that in the period leading to the first liberalization directive, the use of the single market rules (Art 28, 29 and 31 EC) to fight import and export monopolies was systematically favoured and, subsequently, merger control took a more prominent role with the merger wave of the late 1990s and early 2000s (Lévêque and Montorus, 2008; Thomas, 2007) despite the relatively small number of merger prohibitions (Cameron, 2007). The increased use of the rules on cartel and abuse of dominance (and in another field, state aid) is an important change in the dynamics of European regulatory practice.

However, building markets through antitrust does not go without uncertainties about the suitability of the legal tool itself and about the ability of judges to enforce it. Antitrust policy indeed remains constrained by the legal process, and especially judicial review. This also raises questions both about the discretion which a process of market building requires to be conducted efficiently and about the time and cost of dispute resolution through court trial (Newbery, 2005). In addition, the antitrust laws are usually enforced in sectors where competition is more mature and a limited knowledge of competition dynamics may result in significant error costs (Smeers, 2009).
Following a worldwide trend in global antitrust (Van den Bergh, 2002), the ongoing modernization of EC antitrust policy aims at implementing a 'more economic' approach based on long-term consumer welfare. It means gradually shifting from a legal 'form-based' analysis of contracts to a more 'effect-based' approach where the real economic effects of competitive behaviours are more important than the drafting of contracts (Ehlerman, 2000; Wesseling, 2000; Verouden, 2003; EAGCP, 2005; DG COMP, 2009). The 'more economic' approach might significantly impact the way the EC antitrust laws are enforced, which brings new uncertainties both for the regulator and the regulated firms.

If EC antitrust policy becomes the main energy policy tool at the EU level to open markets, it is worth analyzing the forces which shape its implementation. The case of LTC is particularly interesting as they have become one of the main priorities for antitrust enforcement (DG COMP, 2007). A series of cases has already been published and new ones are regularly opened, for instance lately against EDF and Electrabel. A widespread view, both in academia and in the industry, is that the European Commission is taking a dogmatic view on LTC and would simply consider them unacceptable when implemented by dominant companies. This can be understood as DG Competition since the early 2000’s has publicly and repeatedly voiced strong concerns over the risks of anti-competitive effects inherent in energy LTC (Albers, 2001; DG COMP, 2007). However, a more economic approach in antitrust could not reject outright LTC in energy and should command a more balanced approach.

The objective of this paper is two-fold. The first objective is to depict the pros and cons of LTC in energy, from the usual IO and NIE perspectives (e.g. Neuhoff and Hirschhausen, 2006), which are the perspectives of individual contracting parties, as well as from a general antitrust point of view. The second objective is to analyze the actual behaviour of the European Commission vis-à-vis these contracts and the methodology it is implementing to analyze anti-competitive effects in the existing context.

The paper will be divided as follows. Section II will present what economics has to say on the current EU antitrust dilemma with LTC in energy and what are its limitations. Section III will depict the two-step methodology that is emerging at the European Commission to analyze the anti-competitive effects of energy LTC. Section IV will then turn to the difficulties which the European Commission has to balance the anti-competitive effects and the potential efficiency gains. It will also analyze the remedies imposed to correct the anti-competitive features of European energy markets and the 'pro-entry' bias that can be depicted. Concluding remarks will follow.

2. The EU Actual Antitrust Dilemma With LTC In Energy:
   Foreclosure Vs Transaction Costs

In essence, antitrust policy is about maximizing long term social welfare, with a general bias in favour of consumer welfare in the EU (e.g. Eilmansberger, 2005). This often implies constraining the freedom of some economic agents in the
short term to reach a greater social value in the longer term. It is typically the case with the deregulation of energy markets where incumbents must suffer some harm to facilitate the emergence of truly competitive markets, deemed to increase social welfare (Newbery and Pollitt, 1997; Markiewicz and Wolfram, 2004). The balancing between the efficiency gains of long-term contracting for a few individual market players and the potential negative effects on social welfare are at the hearth of the antitrust dilemma with LTC in energy. However, restricting the freedom to contract of some agents must be based on valid economic reasoning and requires being able to conduct some kind of inter-temporal analysis of the effects of LTC on welfare. We present in this section a basic economic analysis of the pros and cons of LTC for individual market players and for the society as a whole.

- **LTC decrease transaction costs for contracting parties**

LTC are often considered an efficient substitute for vertical integration when the costs and risks of ownership (agency costs, costs of collective decision-making, costs of risk bearing) exceed those of contracting (transaction costs, contractual incompleteness and bounded rationality, hold-up costs, regulatory risks, market power costs) (See generally on this Meade and O’Connor, 2009). The main advantage of LTC for individual firms is to hedge price and quantity risks and therefore facilitate investment or operation. In the old monopoly era, vertical integration and long-term contracting were the preferred (but not unique) way to structure business relationships in energy. Reliability and investment were ensured, but at a hidden cost for society (Stern, 2004; Littlechild, 2005). In the new competitive paradigm, liquid and stable spot markets are to coordinate behaviours and should provide reliable investment signals for timely investment decisions and technology choices. Yet, European spot markets remain under-developed (DG Comp, 2007), demand is inelastic and market structures are highly concentrated, hence firms tend to resort to more durable vertical arrangements. If spot markets are under-developed, future cash flows are uncertain and the uncertainty on the returns will lead risk-adverse investor to under-invest in generation capacity (Neuhoff and de Vries, 2004). LTC may mitigate this by providing an insurance device which will also help secure funds with investment banks under project financing structures (Lacy, 2006; Finon and Roques, 2008). From a theoretical point of view, Neuhoff and Hirschhausen (2006) show that market players may have strategic incentives to favour LTC when the long-term elasticity of demand is higher than the short-term elasticity. However, it is not clear that short term cash management rationale should extend to pure long-term hedging strategies not linked to any new investment in capacity. Indeed, long-term hedging in this case would severely limit profit opportunities (Parsons, 2008).

If spot and forward markets remain under-developed, LTC will help economize on the transaction costs (Williamson, 1975, 1985) linked to the uncertainty described above and the significant asset specific investments of energy markets. LTC help solve the problem of counterparty credibility and thus increase the total surplus to be shared (Klein et al., 1978; Williamson, 1983). The different players face different price and quantity risks depending on their position on the
It is important to note that LTC are not monolithic and display different results in terms of surplus and risk management depending on contract characteristics and the technology involved (Wiser et al., 2004). The inclusion of tacit renewal clauses for instance decreases the transaction costs of renegotiation (EDF-IDEI Report, 2006). Reduction clauses allow the buyer to reduce off-take in case the supplier starts reselling in its commercial area, which protects the buyer’s market and its sunk investments. Volume clauses may include rebate mechanisms which may reduce the price for the buyer. Exclusivity clauses also enable the buyer to decrease transaction costs. Indeed, Crocker and Masten (1988) and Masten and Crocker (1985) show that the take-or-pay clauses may provide enough flexibility to avoid breach and thus expensive renegotiation of contract. A LTC will thus be the most efficient governance structure for contracting parties if it ensures flexibility for renegotiation and solves the counterparty credibility problem (Borison and Hamm, 2005). In return, LTC will not be efficient for individual market players in any case, especially if the economic agent has a certain monopoly or monopsony power and could manipulate spot prices.

- **Efficiency for individual market players rejoins efficiency for the society in some cases**

Some positive effects of LTC on social welfare may also clearly be depicted. In the short term, LTC tend to limit double marginalization (Onofri, 2005) and may prevent abuse of dominance on spot markets, although this is a highly debated argument. The strategic behaviour of firms on spot and forward markets has been the main stream of research in the economics of LTC in energy since the seminal contribution of Allaz and Vila (1993). The policy recommendations are not unanimous though. Due to the high concentration levels of supply and demand and the low demand elasticity, at least in the short term, abuses of market power on spot markets through e.g. withholding of capacities are likely. The different strategies used to exercise market power are complex and “the researcher rarely knows the strategic variables that firms use to influence market prices or often even the details of how market prices are set” (Wolak, 2009). Limiting the potential exercise of market power on organized wholesale markets
thus remains a difficult task for competition policy and the potential mitigating properties of LTC on market abuse must be considered with even more care.

LTC may indeed limit the incentives of dominant operators to abuse their market power on the spot as increases in prices would only be profitable on the uncontracted part of their supplies, hence LTC tend to increase traded volumes as suppliers have fewer incentives to withhold capacities to drive up prices for the remaining quantities sold, especially when supplier concentration is low (Green 1999; Bushnell, 2007; Willem and de Corte, 2008). This is however true only if competition is modelled à la Cournot, especially if coupled with other measures to increase demand elasticity (Borenstein, 2002). If competition is modelled à la Bertrand, results go in the opposite direction (Mahenc and Salanié, 2004). From a theoretical point of view, Bonasina et al. (2007) show that the set of assumptions used in the diverse models are too uncertain to firmly ground policy actions. Smeers (2009) shares this view and argues that the insights derived from these models on how market power is (or will be) exercised is too rough to order contract or asset divestiture and might even be counterproductive in terms of efficiency compared to other possible solutions such as promoting single market integration. From a practical point of view, it will indeed be difficult for antitrust authorities to differentiate between the exercise of market power and legitimate scarcity rents (Fraser, 2003). It is also likely that the standard of proof used in courts would in any way be too high to use that argument.

The positive effects of LTC on social welfare are much more obvious in the longer term. First, the ability of new players to sign LTC facilitates entry and thus contributes to market building if spot prices are volatile, when they are sufficiently long and when they can cover sufficiently high volumes (Green and Newbery, 1993, Green and Newbery; 1997, Newbery, 1998). The second positive effect is not only that it facilitates investment and thus contributes to long-term generation adequacy, it is also that it may contribute to fuel mix diversity by facilitating investment in base load technologies such as nuclear or coal (Finon and Perez, 2008). Indeed, the greater the fixed costs are, the greater are price and quantity risks (Roques et al., 2005; Finon and Roques, 2008). Whereas large, diversified and vertically-integrated incumbents can implement portfolio strategies and obtain a relatively greater value from base-load technologies (Roques et al., 2006; Roques et al., 2007), unstable spot markets constitute an especially high barrier to entry for new players in these technologies. Roques (2007) indeed shows that without LTC, CCGT is the preferred technology for new entrants as it is self-hedged given the correlation between electricity and gas prices observed in most markets. Other advantages for new entrants include e.g. Low capital costs, short construction period, a greater operational flexibility and less exposition to volatile carbon prices. This makes CCGT particularly attractive to new entrants, which is confirmed by Watson (2004). LTC might thus enable new entrants to invest directly in high-fixed cost technologies.

- But LTC can trap European energy markets in a vicious circle reinforcing collective dominance of incumbents
LTC have both positive and negative effects from the point of view of long-term social welfare. The main problem with LTC is the risk of foreclosure of more efficient players. This problem is even stronger in the new market context and is the main argument of the European Commission and national competition authorities to attack these contracts (DG COMP, 2007). If a significant part of demand is tied in the long run, a lack of retail outlets may lead to significant output foreclosure at the production level and tied consumers will not be able to subsequently benefit from future and potentially more profitable offers by new entrants. LTC may thus constitute a barrier to entry and have a negative effect on third parties. Conversely, if the market structure at the producer level is very concentrated, input foreclosure may occur and prevent entry in retail. For the Chicago School, an inefficient attempt to monopolize the market is impossible as it would require the acceptance of the buyer to incur the loss of not dealing with a more efficient entrant (Bork, 1978; Posner, 1976). This holds only under perfect information and if all possible parties are able to negotiate at the contracting stage. Under perfect information about the likelihood of entry of a more efficient supplier, economic theory shows that the current supplier is able to propose a contract with both a price and a penalty for default clause strictly advantageous for him but neutral or positive for the buyer. Rent would thus jointly be extracted by the incumbent and the buyer from the potential entrant but this would not impact social welfare. Therefore, under complete information, LTC could not be motivated by anti-competitive motives and would never be detrimental to welfare. An alternative explanation introduces buyer-to-buyer externalities while keeping the rationality hypothesis of the Chicago school. A buyer might agree to sign an inefficient LTC in order to reduce the size of a potential entrant’s market, thereby reducing the probability of entry. As a result, other buyers will have to accept a higher price in the next period (Aghion and Bolton, 1987), which will give a competitive hedge to the first buyer. While it is rational to sign a LTC for a buyer in that case, buyer-to-buyer externalities render it negative for social welfare. Rasmussen et al. (1991) and Segal and Whinston (2000) introduce scale economies in production and multiple buyers to show that if an incumbent is able to secure a profit superior to the amount required to compensate the buyer from being tied, he will use LTC to fully foreclose the market. In case of competition between retailers, Fumagalli and Motta (2006) refined the analysis and showed that the risk of exclusion increases when the intensity of downstream competition decreases. Simpson and Wickelgren (2007) however argue that the opposite is true when buyers are allowed to breach exclusive contracts and pay expectation damages.

LTC also indirectly have exclusionary effects by drying out spot markets. Spot markets deliver better results than bilateral contracting only if sufficiently liquid. The absence of competitive spot markets is detrimental to social welfare in several ways. A competitive spot market allows more transparency than bilateral contracting on the evolution of supply and demand and the current production costs of the firms in place. The possibility to contract efficiently on the spot also limits the opportunity of dominant agents to abuse their market power when they contract bilaterally with smaller players. It mitigates as well the risk that in the long term LTC will lead to tacit collusion on spot markets by stabilizing the
market shares of an oligopoly of collectively dominant suppliers (DG Comp, 2007; Neumann and Hirschhausen, 2006; Le Coq, 2004; Liski and Montero, 2004). However, Green and Le Coq (2006) suggest that the longer LTC are, the lesser is the risk that these LTC will lead to tacit collusion. The lack of a liquid spot market will not facilitate entry in retail and trading, and will thus foster volatility which encourages market players towards vertical re-integration or long-term contracting. Last, we note that similar exclusionary effects may also arise both from the fidelity rebates granted by dominant firms and from unclear termination rights, which provokes foreclosure effects and higher switching costs, thereby contradicting the current efforts of the EU to build markets.

Some contract clauses other than duration and exclusivity might also result in anti-competitive effects or express an attempt at monopolizing the market. Destination clauses and use restrictions hamper the integration of a single European market for energy, facilitate collusion between sellers and decrease the intensity of competition in the downstream market (Neuhoff and Hirschhausen, 2006). Reduction clauses, the so-called ‘English clauses’, clauses of ‘right of first refusal’ or ‘most favoured customer’ all have similar market partitioning effects. Clauses of tacit renewal which typically decrease transaction costs for individual contracting parties may easily have lock-in and thus foreclosure effects when the producer is overwhelmingly dominant.

Finally, we note that, although not linked directly to the duration or exclusivity clauses, LTC might also entail severe price restraints such as excessive pricing or price discrimination. The price negotiated in a LTC depends on contracting parties’ information about market conditions as well as on their respective bargaining power. As a result, an incumbent might well abuse the position of dependency of a new entrant or unfairly discriminate in favour of another incumbent. For instance, in case of regulated tariff in the downstream market associated with an overwhelmingly dominant producer upstream, a significant price squeeze may lead to severe barriers to entry. To the opposite, price discount linked to a long duration or a significant volume may distort competition in the downstream market if this rebate gives a competitive hedge to the downstream dominant firm.

- **Conclusion: the EU actual antitrust dilemma with LTC in energy - quo vadis European Commission?**

This section has showed that the antitrust dilemma with LTC in energy is far from entirely solved by economic theory. The effects of LTC on welfare depend on a quantity of variables such as the different risks involved, the evolution of supply and demand, the storability of the product, market structure and primarily who is signing the contract. Economics does not provide any integrated model to weigh anti-competitive effects with potential efficiency gains over several periods of time but clearly shows the different elements to be taken into account to conduct the balancing exercise. The above analysis seems to indicate that building markets to increase welfare in deregulated energy markets might require an asymmetric application of antitrust policy, at least in the short term. Indeed, if a new entry may clearly depend on the signing of a LTC, the claim that
potential efficiency gains counter-balance anti-competitive effects is much less clear in the case of super-dominant incumbents which have already secured a wide customer base, even for investments in very high fixed-costs technologies such as nuclear.

A ‘legalistic’ analysis of LTC, especially if a pro-entry bias is favoured, could lead to an analysis primarily based on the form of contracts and therefore to a general ban on LTC in energy. A more economic approach in the opposite could not rule out the fact that even dominant firms benefit from using LTC and that substantial foreclosure effects may not occur in every case. However, fully analyzing the pros and cons of all LTC would result in significant enforcement costs. The quality and efficiency of antitrust analysis largely depends on the level of information required to limit ‘type I’ and ‘type II’ errors in decision making. As a result, a constant preoccupation of antitrust policy should be to narrow down the number of cases where a full competition analysis is required to reach a decision. From that angle, the ‘legalistic’ approach would have the obvious advantage to clarify rules, both for enforcers and market players, and hence to facilitate self-enforcement through deterrence.

We will argue in the next two sections that if some uncertainty remains, a methodology of analysis has emerged at the European Commission and that this methodology takes into account most of the modern competition economics of LTC.

3. A Two-Step Methodology To Analyze The Anti-Competitive Effects Of LTC In Deregulated Energy Markets Is Emerging

Prior to liberalization, LTC were not a priority of the European Commission which rather focused on removing legal monopolies over imports and exports. A few decisions in the early to mid 1990’s nonetheless concerned long-term power purchase agreements between independent power producers and the national incumbents. They mainly aimed at limiting their durations so that these LTC would not jeopardize the forthcoming opening of markets. 15 years became the canonical duration accepted by competition authorities and no structured analysis of foreclosure effects was conducted. Since then, no clear methodology to analyze foreclosure effects in the context of deregulated energy markets has been clearly communicated by competition authorities and this is why legal uncertainty is so strong currently in the market place (Hauteclouque, 2009). However, since the early 2000’s and especially for the last two years, a series of decisions have been taken concerning the portfolio of LTC of several incumbents (Repsol, E.ON Ruhrgas, RWE and most importantly Distrigaz) and new proceedings are regularly opened (EDF, Electrabel, GDF). This section shows that the European Commission has developed a two-step strategy to analyze the anti-competitive effects of LTC in the new market context and that this methodology is clearly inspired by sound economic principles (the appendix presents a table of cases showing the progression towards a more economic approach in enforcement).
- **Step one: market share thresholds and black-listed contract clauses – per se prohibitions**

Antitrust enforcement is constrained by the rules contained in the EC Treaty as firms may appeal against the decisions of the European Commission before Community Courts. Art 81 EC which deals with anti-competitive practices and Art 82 EC which tackles abuses of dominance, together with relevant guidelines, notices and regulation, do not *a priori* allow or ban LTC. They provide to the opposite a framework of analysis based on market share thresholds which define which situations must be fully investigated. This system is designed to provide predictability to the firms and allow competition authorities to focus their enforcement resources to the most serious infringements. It is thus based on the insight that vertical restrictions of competition are more likely to be harmful to competition when horizontal competition is distorted (Motta, 2003). This means that the European Commission will act only when the LTC is implemented by a company with market power, market shares being used to approximate the level of dominance. This is an imperfect proxy for market power in many cases in energy but as concerns customer foreclosure, market shares seem a good and easy tool to use.

In practice, LTC between small and medium-sized companies are normally not considered by the European Commission as being capable of affecting appreciably trade between Member States, except when they engage in cross-border trade. In fact, as long as the market shares of each contracting parties do not exceed 15%, LTC do not fall under the jurisdiction of the Commission. Beyond 15% market shares, LTC are presumed to be legal so long as the market share threshold of 30% is not exceeded and duration is not indefinite or over 5 years. In case of collective dominance by several suppliers below the 30% threshold, the European Commission or a national competition authority retains the right to conduct a full competition analysis. LTC for companies with larger market shares will require a full competition analysis in all cases.

To the system of market share thresholds has been added a list of black listed clauses, called ‘hard-core’ restraints. These contract clauses are thought to contravene the fundamental Treaty objective of market integration and hence will almost never be accepted, which amounts to a quasi *per se* prohibition. Black listed clauses relevant for energy are essentially market partitioning clauses, use restrictions and contractual provisions having similar effects. Forbidding market partitioning clauses and use restrictions makes sense for a homogenous product and in an industry that has traditionally been organized along national borders. During the course of recent decisions in energy (e.g. *Gas Natural/Endesa, KalibaXe/EDF*), the European Commission has also made clear that clauses other than duration and exclusivity leading to significant switching costs would almost never be accepted when implemented by dominant firms. Among them, unclear termination rights, fidelity rebates and tacit renewal clauses have been considered illegal in several decisions. In these instances, the Commission has

---

3 We note here that the much-awaited guidelines on the enforcement of Art 82 EC have been published in February 2009.
clearly favoured the fight against foreclosure over the saving of transaction costs for individual contracting parties, even to the detriment of the non-dominant firms contracting with a dominant incumbent.

The EU law framework to analyze anti-competitive effects of LTC is thus primarily based on market share thresholds and a series of black listed clauses. Even if these thresholds are set somewhat arbitrarily and have not been designed specifically for energy markets, they nevertheless contribute to ensure more predictability in enforcement. In addition, they rely on the fact that a firm with low market shares will not be able to distort competition sufficiently to justify a full competition analysis, which is justified from an economic point of view. As concerns the black listed clauses, it is obvious that the market integration objective played a big part in their definition. They however fit well in energy where the low level of market integration remains hard to overcome.

Over 30% and provided that certain clauses are not included in the contract, competition authorities see a ‘grey’ area where the assessment of anti-competitive effects becomes more complicated and where, in theory, a multiplicity of elements should be taken into account. We will show that the emerging methodology of the European Commission evidences awareness of a lot of the modern economics of foreclosure.

- **Step 2: analysis of anti-competitive effects in ‘grey’ cases – the relevant facts**

In case the LTC does not include any hard-core restraints and the market shares of at least one of the contracting parties exceed the 30% threshold, the European Commission will conduct a full competition analysis of the anti-competitive effects of the agreement to decide if it infringes EC antitrust law. This de facto limits antitrust enforcement in energy to the cases involving dominant incumbents. We will see in Section III that this is only when there is a strong presumption that the LTC will result in substantial anti-competitive effects that the analysis of potential efficiency gains attached to the LTC will be carried out and that a balancing exercised will be conducted. Long-term contracting by dominant firms is therefore far from being illegal per se.

Competition authorities will consider a lot of different elements to analyze anti-competitive effects. Some are purely intrinsic to the vertical relationship as the duration or the volume specified while others help analyze the market context, such as the level of vertical integration in the industry. This is reasonable in so far as the potential anti-competitive effects of a LTC, or a portfolio of LTC, cannot be understood without taking into account the specificities of the market context. We will thus first analyze how the European Commission assesses market characteristics before going on to its analyses of the contract itself.

- **a) Analysis of market characteristics**

Market characteristics are usually what competition authorities analyze first. Economic theory is poor on insights regarding the patterns of entry in energy markets and the specific market features which favour it. In the recent line of
decisions, elements taken into account included the maturity of demand, the level of vertical integration in the market, the real opportunity to set up a new resale network and the existence of buyer power. The latter is important as contracting parties frequently have diverging interests and thus incentives to contain each other’s exercise of market power. In general, the European Commission considered that the presence of numerous buyers *de facto* limits the possibilities of abuse of a dominant position by the supplier. When assessing market characteristics, the European Commission also looks at potential entry in supply and demand, and its potential impact on future competition. This largely depended on the existence of potential competitors, usually foreign incumbents present in neighbouring markets. A potential competitor is usually a firm able to undertake the required investment to enter the market within one year following a small but significant increase in prices as well as having a certain brand image and financial strength. For entry in electricity, ready available gas capacities have been considered an important factor.

The most important element will be the assessment of the cumulative effect of all the LTC signed by the different producers on market foreclosure. Indeed, LTC can foreclose markets to new entrants only to the extent that a substantial part of market demand is tied for the long term. The doctrine of cumulative effect had been devised in a famous series of cases in the beer and ice-cream sectors and had been one of the cornerstones of the ‘more-economic’ approach in EC antitrust policy. As a general rule, the European Commission considers that a significant cumulative foreclosure effect is unlikely to arise if the total market demand tied in the long term does not exceed 30% of global demand. In the case of a ‘super-dominant’ incumbent like in the *Distrigaz* case, the European Commission considered that no competition concerns would arise if its portfolio of LTC would cover less than 20% of the market. In *E.ON Ruhrgas*, the Bundeskartellamt estimated that the firm contributed significantly to cumulative foreclosure with 75% market shares in its supply area, within a national market where 80% of total demand was supplied in the long term. This demonstrates that when a firm is largely dominant, the anti-competitive effects of its demand tied in the long term arise sooner. In the case of a group of leading suppliers, the European Commission will look similarly at the cumulative effects of their LTC but there will be no need to prove that they lead to tacit collusion to show that significant foreclosure effects occur (Kjolbye, 2007).

*b) Analysis of contract characteristics*

After having analyzed market conditions and their likely evolutions, the focus will be on the characteristics of both the LTC itself and the contracting parties. Most prominently, the European Commission will conduct a combined analysis of duration, exclusivity and whether buyers who represent alone a substantial part of total market demand are tied for the long term with the dominant supplier, or the collectively dominant suppliers.

The European Commission will first look at the percentage of the consumer demand tied under the LTC, namely the exclusivity clause, as it is one of the main sources of foreclosure effect. Indeed, if a customer must meet all or a big part of
its needs with a particular supplier for a long period of time, he does not constitute any longer an available outlet for a potential entrant. In *Gas Natural/Endesa* in 2000, the Commission reduced the size of the contract from nearly 100% to 75% of Endesa global purchases as Endesa was one of the leading electricity producers in Spain and thus could motivate entry in gas supply in its own right. More generally, the European Commission is looking here at the degree of economic dependency of the buyer *vis-à-vis* the dominant supplier. The share of the customer’s demand tied is in the European Commission’s view the best way to demonstrate dependency and it repeatedly used that proxy. Most importantly, the analysis of the European Commission is based on quantities actually received and not on quantities contracted. Indeed, take-or-pay or flexibility clauses are one of the main reasons why LTC dry out spot markets. Quantities effectively used are generally not the same than quantities previously forecasted. Without flexibility mechanisms, buyers would be obliged to trade their surplus or source their missing quantities from spot markets. LTC could therefore contribute to the deepening of these markets while providing a fair level of supply security (Longva, 2008). However, flexibility mechanisms are not forbidden *per se* and the European Commission conducts its analysis on a case-by-case basis.

European competition authorities recognize when they analyze the share of the customer’s demand tied that transaction costs may become too high when negotiating for a small quantity and that it may become uneconomic for an alternative supplier to provide less than a certain amount. Recent decisions seem to indicate that it is considered that 20% of a customer demand is the threshold for having incentives to enter into a relationship with a second supplier (*E.ON Ruhrgas* and *RWE*). Competition authorities are thus more reluctant to accept LTC accounting for more than 80% of a customer demand. Some commentators close to the European Commission think that foreclosure effects could be found for contracts amounting as low as 50% of a customer demand in case these contract terms are widely spread in the market (Schnichels and Nyssens, 2007).

The share of the customer’s demand tied has to be analyzed along with the duration of the contract. Even if 100% of a customer demand is tied to a particular supplier, foreclosure will not occur if this customer can return to the market on a regular basis. As a general rule, the European Commission is very suspicious of contracts longer than 5 years and considers that efficiencies generally do not offset foreclosure effects beyond that limit. We also note that the Commission considers contracts with tacit renewal clauses or no last delivery date as contracts of indefinite duration (*E.ON Ruhrgas*). Recent decisions show that the duration of contracts accepted by the European Commission will mainly depend on the competition position of the counterparty. If the counterparty is an established reseller, accepted duration will probably not exceed two years as in *Distrigaz*. The Bundeskartellamt in *E.ON Ruhrgas* restricted duration to four years for contracts with resellers who have more than 50% of their demand tied under the contract, but only two years above 80%. European competition authorities will thus play with the two factors. Interestingly, where requirements are satisfied by several suppliers, the Bundeskartellamt specified that contracts should distribute the risk of demand
fluctuations among suppliers according to the actual supply share provided by each of them so as not to disadvantage the second supplier. In Repsol, 5 years duration was accepted for exclusive contracts with established resellers but the market shares of the dominant firm only reached 30 to 50%, which shows that the European Commission adjusts duration according to the level of market dominance of the supplier. For a new entrant in retail, duration of 5 years is most likely to be accepted. One also notices a more lenient approach of the European Commission towards fuel supply contracts than to electricity producer/reseller contracts. This shows that even dominant firms need and can claim for some degree of long term security in fuel supply.


Once the European Commission has considered that a LTC, or a portfolio of LTC, is likely to create significant anti-competitive effects, it will analyze the potential efficiency gains and proceeds to a balancing exercise. In case efficiency gains do not seem to clearly offset anti-competitive effects, LTC might still be accepted if satisfactory remedies can be implemented.

- **LTC, efficiency gains and the practice of the balancing exercise**

The balancing exercise follows a methodology based on four criteria directly derived from the wording of the EC Treaty. In theory, for LTC with substantial anti-competitive effects to be cleared by competition authorities, they should (i) substantially improve economic efficiency, (ii) give a fair share of benefits to final consumers, (iii) be indispensable or at least proportional to the achievement of the efficiency gains and (iv) not afford contracting parties the possibility of eliminating competition in respect of a substantial part of the products in question. Objective factors out of the control of the company such as public service obligations may also be taken into account. In practice, we note that it is often difficult to trace back elements of competition authorities' decisions precisely to the four criteria.

The first criterion indicates that the LTC must create significant efficiency gains to be accepted. Recent decisions are however less clear on how to analyze efficiency gains than on how to assess anti-competitive effects, which is a general problem in competition policy (Lugard and Hancher, 2004). The outcome of the balancing will thus be even harder to predict. The two main efficiency gains recognized by the European Commission have been investment and entry. In Synergen for instance, the Commission accepted both a 15 years gas supply contract with Statoil for 100% of the needs of the new CCGT plant and a 15 years power purchase agreement for 50% of its output with the electricity incumbent ESB. It thus recognized the need of secure output levels and long-term upstream
fuel commitments to facilitate investments and project financing. However, the mere objective of securing loans might not be sufficient to have a LTC accepted as the Commission in other sectors did not always consider it indispensable. In case the loan comes from a dominant supplier, it is likely to be considered as an efficiency gain only if it cannot be obtained on the same terms with commercial or investment banks. It is also noticeable that the Commission has once acknowledged that even dominant firms could claim for a certain level of security in fuel supply (Gas Natural/Endesa). The second criterion does not seem to have lead to very substantial developments and in general was analyzed along with the first criterion on efficiency gains. As a general rule, the Commission considered that LTC helping investment and entry contributed to the success of the liberalization process, which was in itself thought to be good for final consumers.

The third (proportionality) and fourth (exclusion) criteria are obviously very difficult to implement and this is where the discretion as well as the difficulties of antitrust authorities really lie. European competition authorities are still struggling with them today. For instance, an open question concerns the duration that an incumbent electricity producer really needs to sink a very high fixed-cost investment (criterion 3) and how to make sure that this duration will not result in excessive exclusionary effects (criterion 4). A first indication was however given by the European Commission in the Exeltium case in September 2008. Exeltium was a consortium of energy intensive users to whom EDF was to supply base load electricity over more than 20 years. Alleged efficiency gains mainly included security of fuel supply and hedging for the buyers. The European Commission finally cleared this contract, after almost three years of analysis, provided that resale restrictions would be cancelled and an opt-out clause would be introduced to mitigate anti-competitive effects. In addition, the European Commission explicitly stated that the Exeltium agreement would be included in the analysis of the cumulative foreclosure effect of the contract portfolio of EDF currently being conducted.

Interestingly, one of the main advantage attached to LTC recently discussed in the economic literature, which is the potential mitigation effect of LTC on spot market abuses, has never been used by the European Commission. This probably reflects the fact that such economic analysis based on oligopoly modelling would not reach the legal standard of proof required before the court.

- **Market building through antitrust remedies: the new treatment of incumbents**

In case efficiency gains do not seem to clearly offset anti-competitive effects during the balancing exercise, LTC might still be accepted if satisfactory remedies can be imposed pursuant to Art 7 of Regulation 1/2003, or negotiated (Art 9).

A first group of remedies has consisted in modifying the drafting of contracts, for instance by deleting certain clauses such as use restrictions or limiting duration. In this case, the whole agreement is not cancelled and it is the responsibility of
the parties to decide whether the contract is still valid. Other more behavioural remedies have been imposed such as forbidding any vertical mergers or acquisitions for a certain number of years (Repsol). These are classical remedies in EC antitrust policy and are not specific to the energy sector. One notes here that if long-term generation adequacy is clearly a core policy goal of the European Commission, the vague concept of 'security of supply' is itself approached with more and more scepticism in antitrust cases. Today, even long-term gas import contracts are not sure to be accepted on the basis of a 'security of supply' argument.

The second group of remedies has been specifically devised for the energy sector and coincided with the decision of the European Commission to use its power against abuses of dominance (Art 82 EC) to attack directly the portfolio of LTC of the incumbents. This was thought to be the only way to bring about rapidly substantial improvement in the competitive structure. The European Commission recognized that some of these LTC created real efficiency gains (criterion 1) but that the criterion on exclusion and proportionality could only be fulfilled if foreclosure effects were severely mitigated. This led the Commission to impose remedies better able to accommodate market players' needs while limiting foreclosure.

The Distrigaz decision constitutes according to the European Commission the landmark case for future antitrust enforcement on LTC in energy. The European Commission opened a proceeding against the Belgian electricity incumbent for possible breaches of the EC Treaty rules on abuse of a dominant position due to their LTC with industrial customers. The European Commission started by excluding of the analysis of cumulative foreclosure effects all the LTC linked to a new investment in gas-fired power plants, in line with its analysis of efficiency gains. A strict limitation of 5 years was then imposed on remaining contracts to avoid that customers who would be particularly likely to switch suppliers be tied for a very long period of time and unilateral termination rights were granted to buyers with contracts longer than 5 years. The innovation lied in the flexibility parameters granted to the dominant firm. Distrigaz was allowed to adjust its portfolio of contracts to its own needs as long as it complied with a duration of maximum 5 years and if 70% of its customers come back to the market every year. As a result, Distrigaz could for instance have 37.5% of customers supplied under 5 year contracts and 62.5% supplied under one year contracts or 40% supplied under 4 year contracts and 60% supplied under one year contracts. These commitments were due to last for a minimum of four years and until Distrigaz' market shares decrease below 40% (or another supplier reaches the level of Distrigaz market shares minus 20%).

- Conclusion: European LTC in competition policy - the European Commission is doing good, thank you!

The analysis of the recent series of decisions shows that the European Commission is using an economic approach to analyze foreclosure effects of LTC and imposing (or negotiating) remedies in energy. Its combined analysis of duration, exclusivity and the pattern of consumption are particularly interesting.
Even if the two-step methodology has not been devised for the specificities of newly deregulated energy markets, we have to conclude that this methodology balances favourably between the need for predictability and the need for a full competition analysis in complicated cases. However, the hierarchy among elements to be taken into account during the balancing exercise still lacks of clarity and hence predictability. Furthermore, the maximum duration imposed, for instance 3 to 5 years in the most recent cases, seem to closely follow what has become the current practice in other sectors such as beer and ice-cream, which appears problematic given e.g. the capital-intensive nature of the energy industry. We can nonetheless already have a first picture of the emerging doctrine of European competition authorities.

Some of these conclusions could similarly be drawn on the new guidelines on the enforcement of Art 82 EC. The document from the European Commission has indeed clearly been influenced by economic thinking and promotes the idea that the exclusionary conducts of dominant firms are usefully analyzed within a more general and structured framework (Ridyard, 2009). The guidelines indeed reflect the increasing concern for predictability which should accompany the current movement towards a more effects-based approach in antitrust.

Predictability is also important because the deterrence potential of antitrust policy is correlated with the predictability of enforcement, which then fosters self-compliance. We have seen that the new methodology depicted above may help dominant firms assess whether their portfolio of LTC comply with competition rules. This finding echoes an important objective of the guidelines when it states that the predictability derived from having a more general and structured framework “help[s] undertakings better assess whether certain behaviour is likely to result in intervention by the Commission under Article 82.”

All in all, we think that the new methodology depicted in this paper, as the new guidelines on Art 82 EC, are positive steps forward despite the remaining shortcomings.

5. Conclusion

The case of LTC is highly topical. This paper has shown that the European Commission is much less dogmatic than is usually thought. Its analysis displays real efforts to both include recent insights of the competition analysis of foreclosure and limit regulatory costs through a step-based approach. Even dominant incumbents are granted the right to sign LTC and the remedies imposed here and there have been innovative. However, the European Commission still takes a ‘legalistic’ approach in so far as its practice closely complies with what could be acceptable before the European Courts of Justice. In addition this new approach has not been devised for the specific context of energy market building and there is no reason to believe that the thresholds successfully used for beer and ice-cream are inevitably smart for energy. The market building efforts of the Commission under its antitrust powers thus appear to be constrained by the procedural aspects of the legal process.
In addition, by building markets through antitrust, the Commission necessarily focuses on market structure rather than on market design. This is a risky choice as our knowledge of competition dynamics in these sectors is too limited to propose very robust and efficient remedies. We must note that building market through antitrust is far from being limited to the *ex post* tool kit. Antitrust has become a constantly on-going process of ‘trial-and-error’ which clarifies rules over time. Each rule being clarified increases the credibility of self-enforcing competitive behaviours in the market. Today we think that we are up to a point where the lack of predictability could be more detrimental to market building and social welfare that the lack of economic analysis. As a result, we would applaud the publication of non-binding guidelines on acceptable contract forms and reasonable nexus of contracts as a positive step forward in the building of the EU internal market.
## Appendix

<table>
<thead>
<tr>
<th>Period</th>
<th>Key Cases</th>
<th>Use of Economic Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-liberalization</td>
<td><em>Electricidade de Portugal/Pego, Isab Energy/Enel, Jahrhundertvertrag</em></td>
<td>No structured analysis of foreclosure, exclusive focus on duration, political considerations strongly influence competition analysis</td>
</tr>
<tr>
<td>Early post-liberalization</td>
<td><em>Synergen, Gas Natural/Endesa</em></td>
<td>Analysis of potential entry is refined, new remedies (such as VPP) are devised, interactions gas/elec are taken into account, duration may remain rather long, threshold-based analysis is introduced</td>
</tr>
<tr>
<td>Recent Art 82 EC cases (2004-)</td>
<td><em>Distrigaz, Repsol, E.ON Ruhgas</em></td>
<td>Full analysis of cumulative foreclosure effects is conducted; combined analysis of exclusivity, patterns of consumption and duration; flexibility introduced in remedies</td>
</tr>
</tbody>
</table>
References


EAGCP report, “An Economic Approach to Article 82” (July 2005).


Littlechild, Beesley lecture (2005).


Neuhoff and Hirschhausen, "Long-Term vs. Short-Term Contracts: A European Perspective on Natural Gas" (updated version November 2006), Working Paper CWPE 0539 and EPRG 05, University of Cambridge.


Newbery and Pollitt, “The Restructuring and Privatisation of the CEGB: Was it Worth it?” (1997), XLV
The Journal of Industrial Economics, 269-303.


Thomas, Corporate Concentration in the EU Energy Sector, Report commissioned by the European Federation of Public Service Unions (2007).


