

# The return of long-term contracts for electricity

## Implications for competition policy

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The European Commission used to see long-term electricity contracts as a potential problem for the electricity sector, threatening to suffocate competition before it could fully emerge after liberalisation. It now views these contracts as one of the potential solutions to the challenges the sector now faces to decarbonise. Fabien Roques and Guillaume Duquesne analyse the economics behind this evolution, through an assessment of the potential pro- and anti-competitive effects of long-term contracts.

### Introduction

The Commission used to see long-term electricity contracts as a potential problem for the electricity sector, threatening to suffocate competition before it could emerge after liberalisation. In recent years, there has been much focus on the potential benefits of long-term contracts to facilitate investment and the energy transition. In March 2023, the European Commission proposed a new regulation on market design that supports a greater role for long-term contracts.<sup>2</sup> It views these contracts as one of the solutions to the challenges that electricity markets now face, both to help consumers hedge and to stimulate the investments required to transition to a carbon-free economy.

In this article we explore:

- how the Commission assesses the impact that a long-term contract could have on competition;
- why the potential threat that long-term contracts pose to competition is less than it used to be;

- why the potential benefits that long-term contracts provide are greater than they used to be; and
- the challenges that remain.

### The Balancing Test: how the Commission assesses the impact that a long-term contract could have on competition

When parties sign a long-term electricity contract, they make revenues and expenses on both sides of the contract more stable/predictable for a proportion of the future demand and supply of electricity, typically for several years. From an economic perspective, these contracts are an intermediate way to organise the market, that falls between two alternative extremes: vertical integration and short-term contracts.<sup>3</sup>

European competition law does not have an *a priori* stance on long-term electricity contracts. Article 101 of the TFEU which deals with anti-competitive practices<sup>4</sup> and Article 102 which tackles abuses of dominance<sup>5</sup>, together with relevant guidelines, notices and regulation, neither

permit the contracts as a matter of course, nor do they prohibit them. It depends on a contract's likely effect, which the Commission assesses on a case-by-case basis.

The assessment process is intended to provide predictability for the firms affected by it, and to allow competition authorities to focus their enforcement resources on the most serious infringements. Unless a contract includes hardcore restraints (including, for example, resale price maintenance or certain territorial/customer restrictions), whether it is investigated or not depends on the parties' market shares. The Commission will assess the potential effects of a contract if the market share of one of the parties exceeds 30%, or if it falls between 15% and 30% when the duration of the contract exceeds five years.<sup>6,7</sup> Any contract shorter than a year is generally not considered problematic, and new entrants are given more leniency when their contracts are assessed.

The Commission recognises long-term contracts can either harm competition and/or bring about efficiency gains. The potential benefits of such contracts relate to the mitigation of risk and/or uncertainty, and thereby induce efficiency gains by facilitating the financing and coordination of investments. The main anti-competitive effects, on the other hand, are related to the reduction in the size of the addressable market, and the potential foreclosure of rivals.

To determine which of these countervailing forces dominates in any particular case, the Commission applies the Balancing Test. The process has two stages.

- **First, the Commission assesses the potential anti-competitive effect of the long-term contract.** In its assessment the Commission considers both market conditions and contract characteristics. Most prominently, that includes contract features, competitive position of the parties, share of customer demand tied, duration of the contract and overall share of the market covered by the contract. Both the competitive position of the

supplier and the position of the buyer are assessed. If *either* is too strong, the contract may be considered problematic. In addition, if a significant portion of the market is *already* covered by a parallel network of long-term contracts, then the Commission may consider that the *incremental* effect of the new contracts is problematic even if the same contract would have been benign in a different context.

- **Second, the Commission will analyse the potential efficiency gains of the long-term contract.** This stage only occurs when the Commission considers that a long-term contract, or a portfolio of long-term contracts, would have anticompetitive effects. Without a negative effect, there is nothing for efficiencies to offset. For long-term contracts with substantial anti-competitive effects to be cleared by competition authorities, they should substantially improve economic efficiency, give a fair share of benefits to final consumers, be indispensable or at least proportional to the achievement of the efficiency gains and not afford contracting parties the possibility of eliminating competition in respect of a substantial part of the products in question. In case efficiency gains do not seem to clearly offset anti-competitive effects, a long-term contract might still be accepted if satisfactory remedies can be imposed.

It is also worth noting that when state resources are involved, long-term contracts must also comply with State aid rules. First, the aid must facilitate the development of an economic activity deemed positive for society at large and must foster the creation of an incentive effect. Also, the aid must not unduly affect trading conditions to an extent that would be harmful to society. Once this has been established, the European Commission carries out a case-by-case assessment of the positive and negative consequences of the aid.<sup>8</sup>

## Why the potential threat of long-term contracts has reduced

Context matters. Whether a longer-term contract fosters competition, or hinders it, depends on both market conditions and the contract characteristics. The exact same long-term contract may result in very different effects on competition and customers' welfare depending on the market context.

In the last twenty years, the changes in the energy market have tipped the scales of the Balancing Test in favour of long-term contracts. A key reason for this change is that the potential for long-term contracts to have anti-competitive effects is likely to have substantially reduced in many markets.

Broadly, long-term contracts can lead to two sets of anti-competitive effects. They can:

- **foreclose actual or potential rivals.**<sup>9</sup> When long-term contracts lock-in a substantial proportion of demand, they may foreclose rival electricity suppliers who may fall below scale and exit the market, or not enter the market in the first place if they see little prospect of achieving scale. Long-term contracts, therefore, can foreclose competitors and act as a barrier to entry.
- **dry up spot market liquidity.** By reducing the size of traded markets, long-term contracts may induce greater volatility and undermine efficient price formation.<sup>10</sup>

Twenty years ago, when electricity markets were still restructuring after liberalisation, the potential anti-competitive effects of long-term contracts concerned the Commission.<sup>11</sup> Its 2007 Energy Sector Inquiry identified long-term contracts as one of the main priorities for antitrust enforcement.<sup>12</sup> It considered that long-term contracts were one of the issues undermining progress towards competitive markets. The Commission took a series of decisions against several incumbents, regarding their portfolios of long-term contracts (Repsol<sup>13</sup>, E.ON Ruhrgas<sup>14</sup>, RWE<sup>15</sup>, Distrigaz<sup>16</sup>, EDF<sup>17</sup>, Electrabel<sup>18</sup> and

GDF<sup>19</sup>). The Commission also intervened in Poland<sup>20</sup> and Hungary<sup>21</sup> to terminate long-term contracts under State aid rules.

To understand this stance against long-term contracts, it is necessary to look closer at the market context in the years after liberalisation. In the early 2000s, the priority for competition authorities was to make the market more competitive. Long-term contracts were a threat as they enabled former national incumbents to effectively replicate vertical integration, which worked directly against this objective. The 2007 Energy Sector Inquiry concluded that long-term contracts were cementing the dominant position of the incumbents and drying up short-term market liquidity, with no clear outweighing efficiencies.<sup>22</sup>

Why did the Commission conclude that, at the time, long-term contracts were preventing effective competitors from developing?

Before it restructured, the electricity sector was both vertically and horizontally integrated. This integration arose from two factors: first, economies of scale reduced the cost of building generation assets and networks; and second, centralising information helped forecast growth in demand, which also helped plan new generation assets and expand the network. In contrast, non-integrated short-term markets require significant technological and operational coordination to adjust prices and deliver power in real time.

When the market was liberalised, incumbent suppliers and retailers entered long-term contracts, partly to replicate these benefits of vertical integration and partly because the market was not functioning maturely. The lack of liquidity in the spot markets could undermine market participants' ability to hedge their positions in the electricity markets without a pre-set price. Demand served through those long-term contracts was not traded in the spot markets, which further reduced their liquidity.

As a consequence, several countries saw their incumbents enter long-term contracts,

which left the competitive structure of the market largely unchanged.

In contrast, electricity markets in the 2020s are more mature and competitive in many countries, which reduces the potential anti-competitive effects that long-term contracts pose. This is for the following reasons.

- **Electricity markets have become more competitive in many countries and regionally integrated.** Former incumbents now face competition from each other and new entrants. In part, that is because interconnectors now greatly increase the transmission capacities *between* Member States<sup>23</sup> and integrating regional electricity markets has harmonised operating rules<sup>24</sup>. Together, these have allowed regional markets to emerge, with intent to integrate further in the future.<sup>25</sup> In practice, that has reduced incumbents' market shares.<sup>26</sup>
- **Some customers have countervailing buyer power, which further reduces the likelihood of unfair terms in long-term contracts.**<sup>27</sup> The countervailing buyer power of consumers has evolved as well, with larger buyers such as cloud services providers and consortia of smaller consumers now having some form of negotiating power, which puts further pressure on suppliers to come up with competitive offers.<sup>28</sup>

In this context, improved competition and countervailing power reduces the potential for long-term contracts to have material anti-competitive effects.

### Why the potential benefits of long-term contracts are greater

As changes in the market have reduced the potential *threat* of long-term contracts, so too have they increased the potential *benefits* of long-term contracts. So, from the perspective of the Balancing Test, there is both less for efficiencies to address and more benefits available to address any potential harm that might remain.

Broadly, long-term contracts can benefit markets by reducing direct costs and the costs of financing. Specifically, they can:

- **reduce risk, by allowing efficient hedging.** Long-term contracts allow parties to hedge their price and quantity risk, which makes revenues and expenses on both sides of the contract more stable and predictable. On the buyer's side, the long term contract makes industrial customers more likely to invest in electrifying their processes to decarbonise if they can benefit from more stable and predictable energy costs. On the seller's side, stability lowers the cost of capital, which encourages investment. Therefore, in both cases, long-term contracts facilitate entry.
- **Stabilise long-term price signals, which reduces risk for coordinated investment in close sectors.** Long-term contracts help parties coordinate directly by internalising externalities – i.e., buyers and sellers can jointly optimise their investments e.g. to decarbonise on the same long-term horizon. They also help coordination indirectly, as long-term price signals in the energy sector increase confidence for investors in related complementary sectors.

Twenty years ago, the scale of these potential benefits was relatively low as then there was not much focus on new investments. In particular, long-term contracts' impacts on financing costs were not needed to support investments in generation assets and networks. At that time, the generation fleet was largely built and relied on legacy investments in mostly thermal and hydropower plants. The investments in gas-fired plants had low upfront capital costs, and large variable costs purchasing the gas to operate them. In that context, generators' financing risk was low in any case, so there was less potential benefit that could come from the stability that long-term contracts would provide.

That is no longer the case, as the European decarbonisation plans will require a substantial step in the historical rate of investments, both to decarbonise the power sector and to convert to electricity a number of end use sectors such as industry and transport. In March 2023, the Commission proposed new regulation on market design which *supports* a greater role for long-term contracts.<sup>29</sup> The reason is that it would help the market transition to a low carbon economy, and also shield suppliers and consumers from volatile prices which – although due to the recent energy crisis that followed the Russian invasion of Ukraine – are expected to continue.

The Commission has expanded on the potential benefits of long-term contracts in recent publications. Most prominently, in its Guidelines on Vertical Restraints, published in 2022,<sup>30</sup> the Commission illustrates how long-term contracts could encourage a power generator to invest, when it might not do so without predictability of revenues.

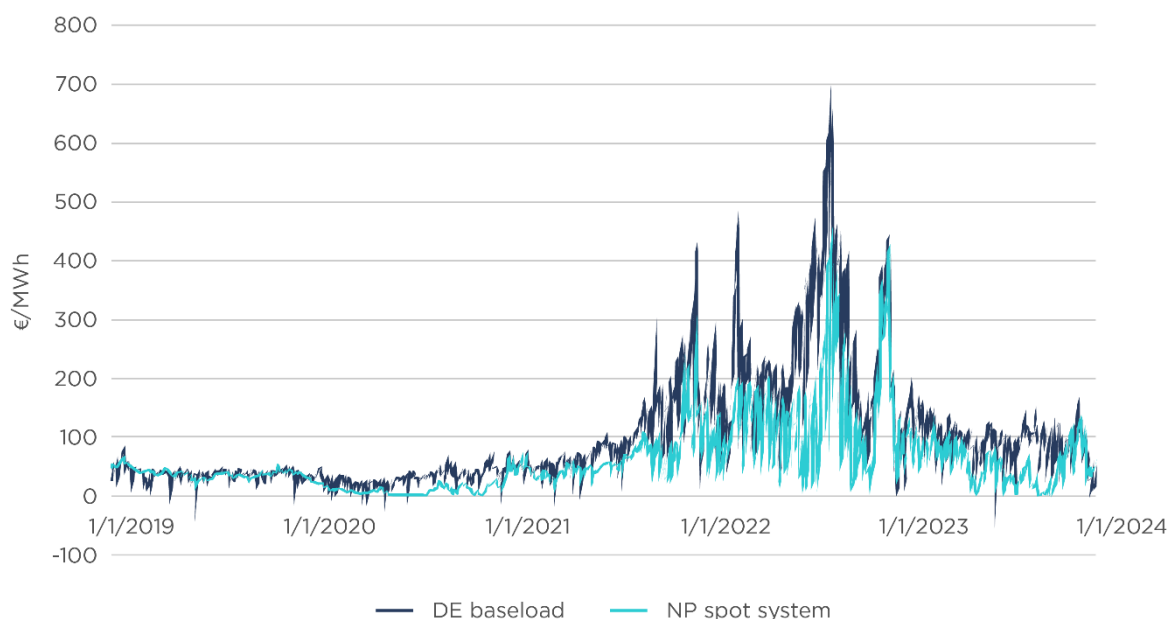
In addition, the Guidelines on State aid for climate, environmental protection and energy<sup>31</sup> published in 2022 outline that aid

can be appropriate to ensure that an already existing economic activity is carried out in a sustainable manner. In addition, the Commission’s Temporary Crisis and Transition State aid Framework (TCTF)<sup>32</sup> – which responded to the Covid crisis and the passing of the Inflation Reduction Act in the United States – further relaxes the State aid rules and allows pre-approved State aid schemes to be fast-tracked, in particular for certain long-term contracts. This is aimed at guaranteeing a favourable environment for investment in clean generation in the face of challenges imposed by the attraction of the United States to investors, the aftershocks of the Covid pandemic, and the ongoing cost of the energy crisis.

The potential benefits of stable/predictable prices and quantities are greater now than they were twenty years ago. That is because several factors interact, specifically:

- **Prices and volatility have increased massively due to the gas crisis and policy and regulatory uncertainty**, as shown in Figure 1 below. Volatility is expected to remain high at a time where coordinated investment is needed for

**Figure 1: Historical power prices in France, Germany and the Nord Pool spot system, 2019-2024**



Notes: Daily prices

Source: Compass Lexecon using EnergyMarketPrice data

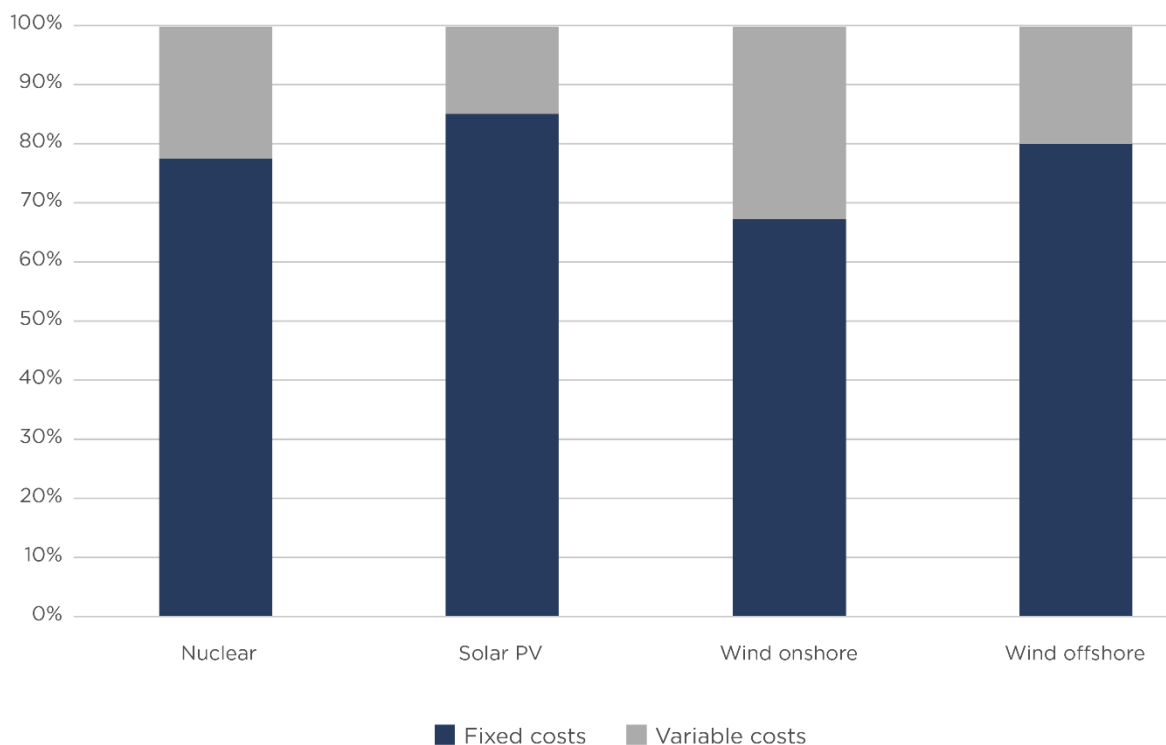
energy transition. Using long-term contracts to hedge those increased risks contributes to reducing the cost of capital. In addition, long term contracts can act as a coordination and commitment mechanism, mutually beneficial to both parties. In the case of state backed long term contracts, these also act as signals for Member States' commitment to decarbonisation and reduce policy/regulatory risks for investors.

- **The cost structure of clean electricity production typically entails substantial upfront fixed costs, which increases investment exposure to volume and price risks.**<sup>33</sup> The technologies corresponding to most investments in the next years have changed; renewables, nuclear, carbon capture and storage, as well as batteries and other storage technologies are all capital intensive, as shown in Figure 2 below. In the past, gas plants had

relatively low investment costs that they could hope to recover in periods of scarcity, where they could charge above their marginal cost. For renewables and other low carbon technologies, this merchant investment model raises a number of challenges and increases the costs of financing, given their capital intensity. Long-term contracts could provide the required certainty to ensure investment in the efficient production mix.

- **Decarbonisation requires a step change in investment.**<sup>34</sup> In the next decade, €800 billion needs to be invested in new power generation, a substantial increase compared with previous decades. Attracting private investment in clean energy assets requires predictable revenues to facilitate financing, which is why, so far, most of the existing renewable generation fleet in Europe has been supported by public or private long-term contracts.

**Figure 2: Cost composition of different low carbon power generation technologies in Europe, 2022 estimation**



Notes: variable costs include fuel, CO2 and O&M, while fixed costs cover all other costs. The 2022 estimation is based on a forecasted average fuel and CO2 costs in the IEA Announced Pledges Scenario over a 10 year period starting in 2022.

Source: IEA (2023) World Energy Outlook 2023, <https://iea.blob.core.windows.net/assets/86ede39e-4436-42d7-ba2a-edf61467e070/WorldEnergyOutlook2023.pdf>

- **Decarbonisation requires coordinated investment along the value chain.**<sup>35</sup> In addition to clean generation, there needs to be significant investment in the electricity grid as well as flexible resources such as storage or demand response (e.g. through electric vehicles and the associated smart charging infrastructure), to prepare the electricity system for new challenges that renewables cause.<sup>36</sup> Coordinated investment requires stable long-term price signals that long-term contracts can facilitate.
- **Uncertainty about political and regulatory intervention is higher than in the past.**<sup>37</sup> Regulatory or policy interventions in wholesale and/or retail electricity markets have increased during the energy crisis. These include caps on wholesale electricity prices, caps on fuel prices and the introduction of bilateral negotiated contracts for electricity supply or inframarginal taxes placing a *de facto* revenue cap on renewable generators, which reduces incentives to invest.<sup>38</sup> Unlike other market risks, parties cannot efficiently manage or hedge these regulatory and policy risks. However, long-term contracts backed by Member States could help them signal their commitment to decarbonisation and support for investments, thereby reducing policy and regulatory risks.

All in all, the changes in context and policy priorities for the electricity industry have strong implications. First, short- and long-term markets need to be decoupled to allow (i) short-term allocative efficiency, based on marginal costs, as well as (ii) long-term dynamic efficiency, to efficiently invest in clean generation and retire old plants.<sup>39</sup> Second, substantial investment needs to be coordinated in several sectors, so that infrastructure for generation, transmission, storage and complementary industries develops together as needed. That requires a predictable investment framework, significant economies of scale and coordination, and clear commitment from governments – all of which long-term contracts can help support.

## The challenges that remain

The challenges currently faced by electricity markets are not like the ones they faced twenty years ago. Back then, long-term contracts were perceived as threatening to suffocate fledgling competition before it could emerge after liberalisation. And the predictability and coordination that long-term contracts could provide offered relatively little benefit with which to offset that threat. Investment needs were low, the dominant technologies had relatively low capital intensity and financing and operating risks were perceived as manageable. That is no longer the case. Electricity markets are maturing in many countries but investors face a formidable combination of high volatility, an uncertain policy and regulatory environment and massive investment needs.

This change in context is therefore likely to tip the scales of the Balancing Test in favour of long-term contracts in many cases, as the potential harms are less, and the potential benefits are greater.

However, the outcome assessment is not necessarily predictable, which it needs to be to fully help industries meet these challenges. Indeed, future guidance from the Commission on how the legality of long-term contracts is linked to the specific features of the contracts, as well as the market structure and position of the parties, is needed.

In its recent new regulation on market design, the Commission has recognised the importance of the long-term contracts for achieving the ambitious decarbonisation objectives. The recent updates to the guidelines on vertical restraint and on State aid are also noteworthy, even though they fall short of providing specific guidance on how competition assessment of long-term contracts can be carried out in this new context.

There are still open questions regarding how the features of long-term contracts affect the pro- or anti-competitive effects of long-term contracts, some of which are going to be crucial in future assessments and, therefore,

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to succeed in decarbonising energy. Assessing what effect a long-term contract will have on competition requires a comprehensive assessment of all dimensions. This raises a number of difficulties for competition authorities, both in challenging the doctrine that is currently established and in the tools that are used to monitor the state of competition in the market.

Indeed, the current definition of safe harbours is narrow and not fully fit for purpose, even if the general principles underlying it are appropriate. In particular, the safe harbour does not cover long-term contracts with durations above five years, which is too short a horizon for all the benefits to materialise, or contracts with incumbents, which can have an important role to play in the transition.

This means that in most cases, the assessment of long-term contracts needs to be carried out on a case-by-case basis, weighing the pro- and anti-competitive effects against each other – which is why the Balancing Test is needed. This, in turn, raises a number of new challenges for the competition authorities to address, in particular on how the current Balancing Test needs to be developed further, what specific types of efficiencies should be accounted for, and how the impact of such efficiencies should be assessed.

These questions still need to be answered, to meet the ambitious – and necessary – transition to a low carbon European economy.



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President at Compass Lexecon. The views expressed in this article are the views of the authors only and do  
not necessarily represent the views of Compass Lexecon, its management, its subsidiaries, its affiliates, its  
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