

ELECTRICITY MARKET DESIGN – IS A NEW MODEL EMERGING?



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Why has the role of short-term wholesale markets been oversized?
A look back at the Commission's doctrine

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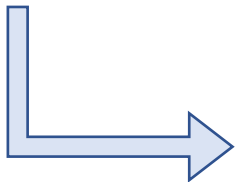
Agenda

1. The shift in the Commission's perception of the role of short term markets
2. Maturity of the electricity sector
3. Upstream business models: the choice of 'stand alone' operators
4. Key driver of the Commission's decisions: Improvement of liquidity of wholesale markets
5. Downstream issues
6. Conclusion

1. The shift in the Commission's perception of the role of short term markets

Commission's proposal 14 March 2023:

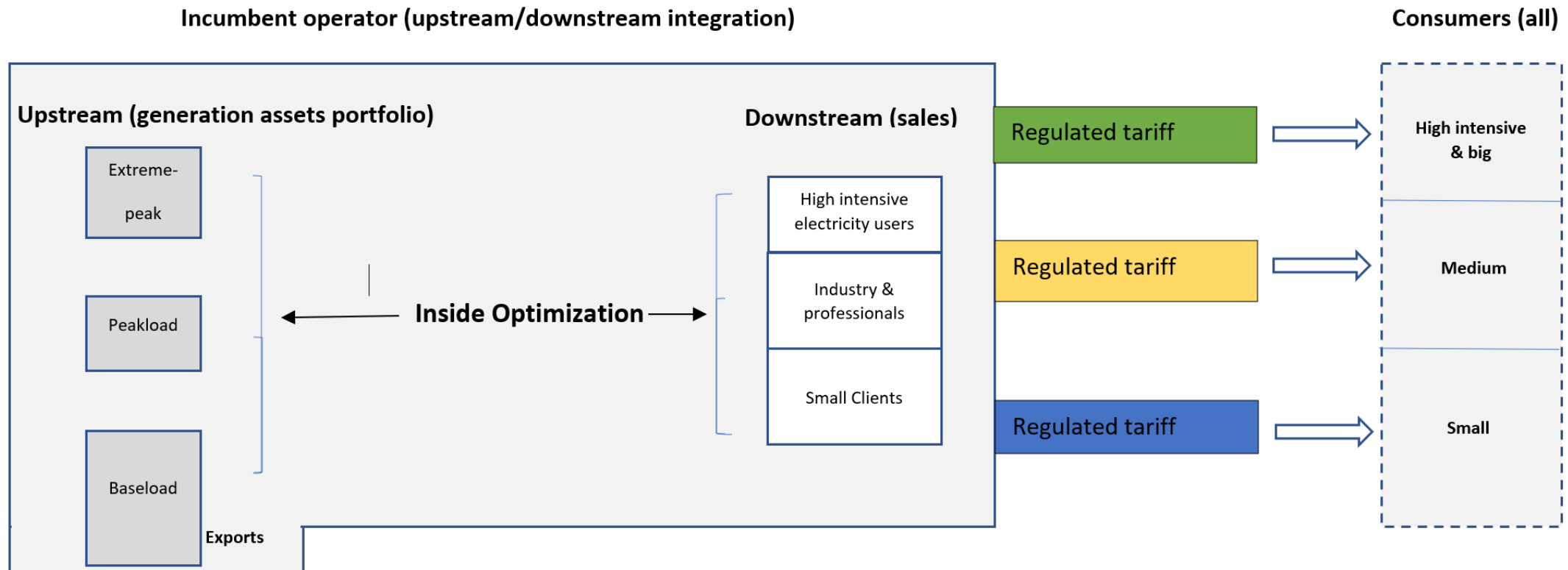
« Whilst the EU's internal energy market delivers huge gains and growth across Europe, the recent energy crisis has highlighted that the **energy market design's short-term focus can distract from broader, longer-term goals**. The reflection of short-term prices in consumers bills led to price shocks where energy bills of many consumers tripled or quadrupled [...]. Therefore, the proposal includes a set of measures aimed to create **a buffer between short-term markets and electricity bills paid by consumers, in particular by way of incentivizing longer term contracting**, to improve the functioning of short-term markets to better integrate renewables and enhance the role of flexibility and to empower and protect consumers ».



1. The importance of the short term market has not grown spontaneously after the liberalization of the electricity sector → it is the result of the Commission's policy
2. **Why is it key for lawyers?** The previous perception of the Commission has been an important driver of some Commission's decisions (antitrust, state aid, mergers) → **it is important to assess the consequences of this important move on past, ongoing and future Commission's decisions.**

2. Maturity of electricity markets

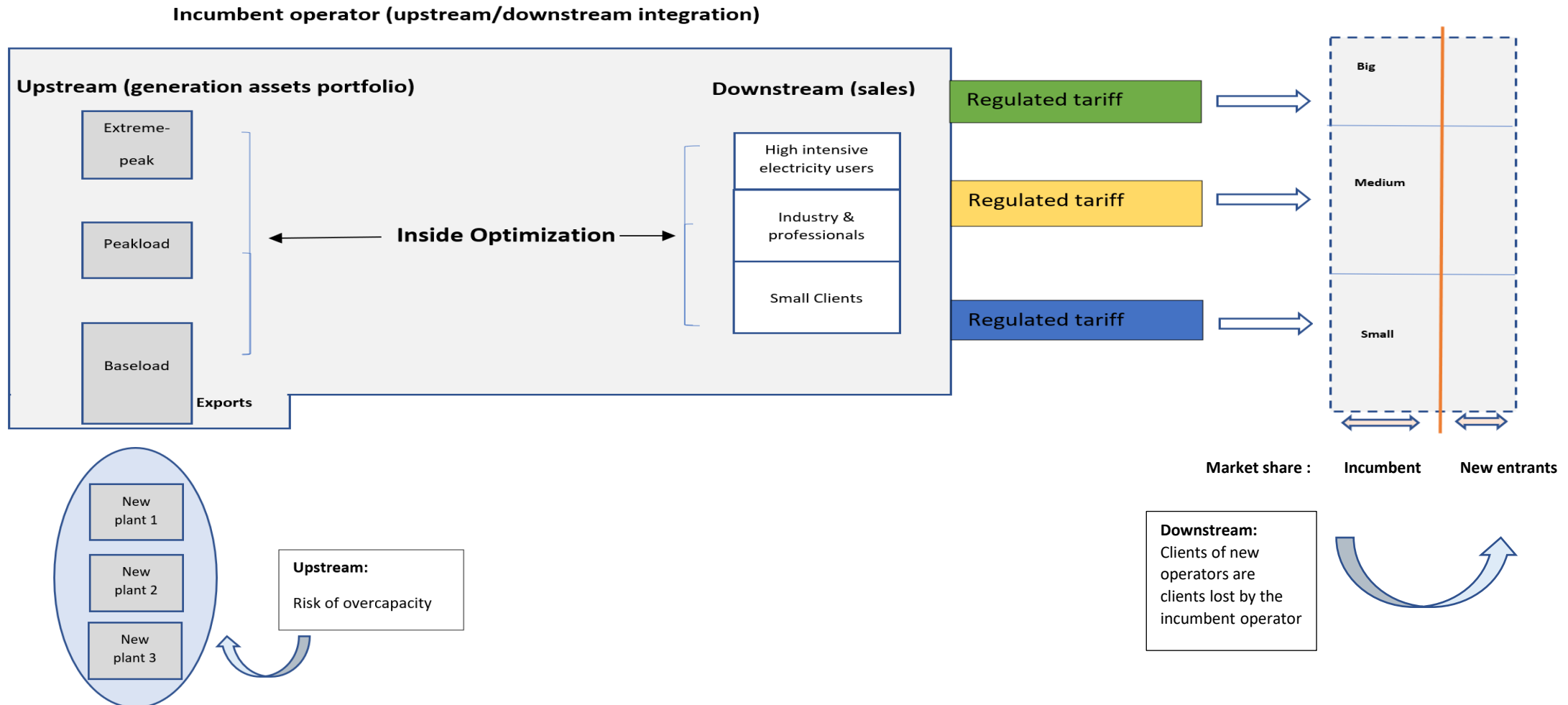
Configuration prior liberalization



2. Maturity of electricity markets

“Since electricity markets are characterized by a **high level of maturity**, which manifests itself in a relatively low number of new connections to the grid as compared to the total number of customers, the bulk of new clients can only be recruited among existing customers by means of lower prices and/or better terms and conditions of sales”

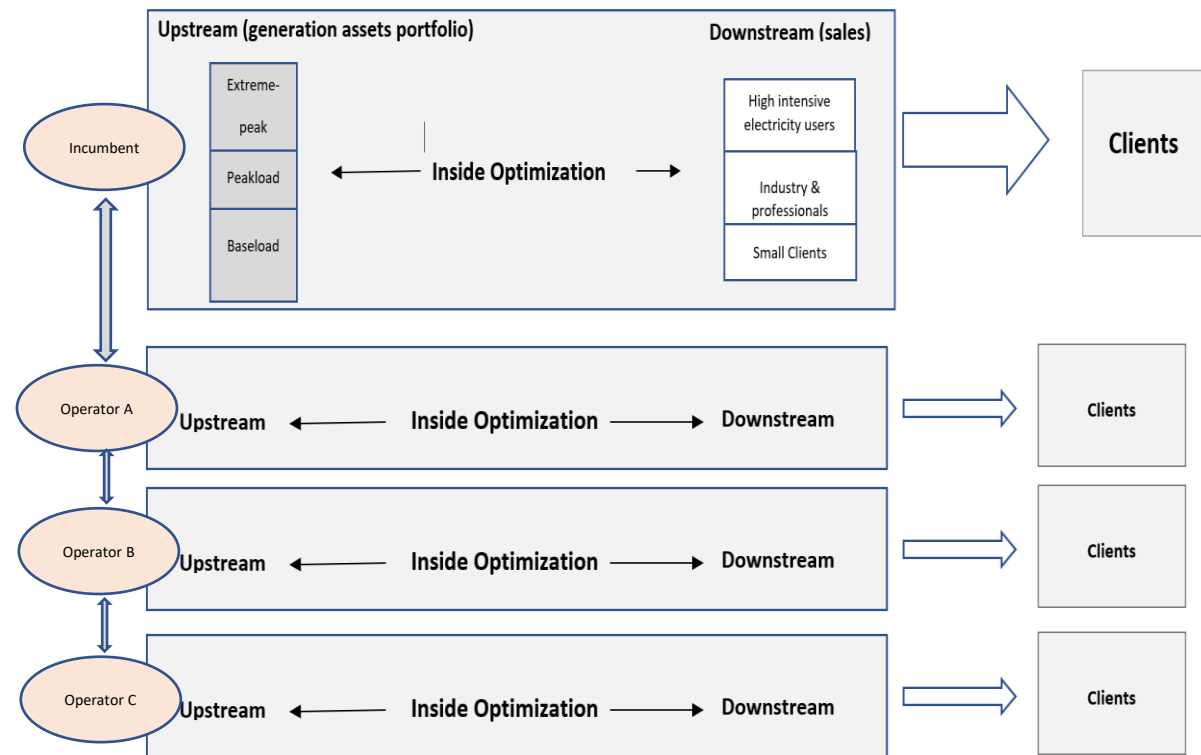
(DG Competition report on Energy sector inquiry, 2007, §935)



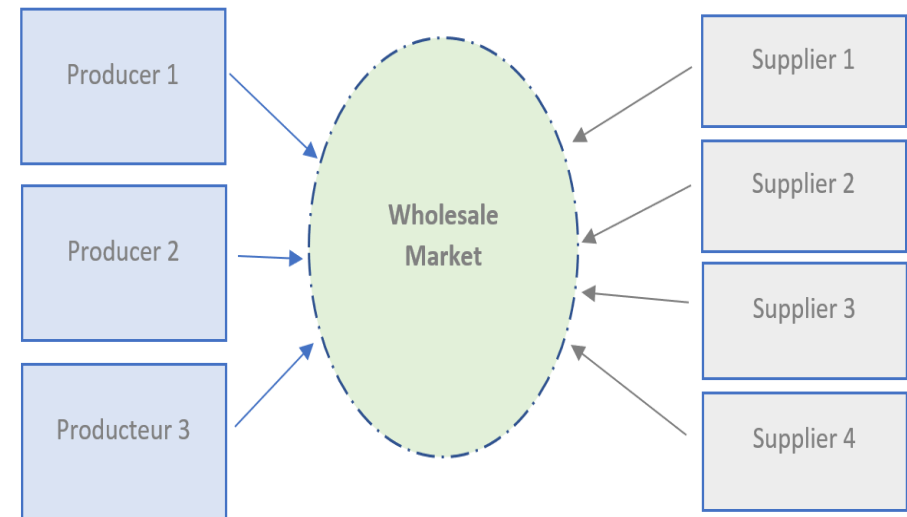
3. Upstream business models

“Various business models as well as various structures due to the liberalisation process exist on electricity markets in the EU, ranging **from stand-alone** generators and independent supply companies **to fully integrated utilities**”
(DG Competition report on Energy sector inquiry, 2007, §328)

‘Fully integrated utilities’ Model

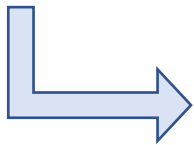


‘Stand alone’ Model



3. Upstream business models: the choice for ‘stand alone operators’

“Cross-border entry in electricity markets is facilitated to an important degree if entrants do not have to enter as vertically-integrated companies acquiring **simultaneously generation capacity and a customer portfolio**, but can choose to enter as purely a supply company or generation company. This reduces the risks and costs of entry. **However, this is only possible if a liquid wholesale market exists. Liquid wholesale markets are therefore key for the erosion of incumbent’s market power**” (DG Competition report on Energy sector inquiry, 2007, p.151)



1. The preference of the Commission goes clearly to **‘stand alone operators’**.
2. It places **wholesale market** at the center of the game.
3. **Liquidity of wholesale market becomes a priority and one of the driver of the Commission’s decisions.**

4. Key driver of the Commission's decisions: Improvement of liquidity

Liquidity and 'Fully integrated' utilities

“Vertical integration of generation and retail within the same group reduces, all other things being equal, the need to trade on wholesale markets. In turn, this can lead to a reduction of liquidity of wholesale markets. In a market without any vertically integrated companies, all electricity will necessarily be traded between generators and suppliers. In contrast, when all companies are vertically integrated, each vertically integrated group in the sector would meet (part of) its respective demand from final customers with own generation capacity and so would have less need to enter into wholesale transactions.”

Lack of liquidity can have many negative effects, such as: high volatility of prices, which increases costs for hedging (this can be an important barrier to entry) and a lack of trust that the exchange price reflects the overall supply and demand balance in the wholesale market (reduced reliability of the price signal).

A lack of liquidity may also initiate a vicious circle by creating further incentives to vertical integration because operators do not want to rely on the wholesale market for their electricity supply. New entrants face higher risks when markets are volatile and consequently may not be able to match, at least not in the short run, market offers from their vertically integrated competitors and may only be able to attract capital at higher costs”.

(DG Competition report on Energy sector inquiry, 2007)

Liquidity and upstream long term contracts (PPAs)

“In certain countries PPAs are believed to be among the main causes for the low volumes of electricity traded on the wholesale markets”. (DG Competition report on Energy sector inquiry, 2007, p.156)

“A number of respondents also agreed that power purchase agreements (PPAs) between generators and suppliers also can add to the drying-up of liquidity”.(p.225)

5. Downstream issues

- One of the main trend was to connect consumers to the variations of prices on wholesale markets (short term).
- The reference to a need to put in place a **“buffer between short-term markets and electricity bills paid by consumers”** is a step backwards from previous policy.
- The impact of this new position remains to be seen. In particular, as regards assessment of competition rules and long-term supply contracts:

“As explained above long-term contracts curb the customers’ mobility and prevent the customers from choosing the best offer available on the market at a given moment in time. On the other hand, depending on the structure of the individual contract, in particular the price formula contained in the contract, long duration may allow the customers to better manage the risks related to adverse price movements, to which they would otherwise be exposed. **The benefits of price security, which for certain customers may represent a real value, may not however outweigh the negative effects on competition and overall consumer welfare of long-term contracts on market contestability.** This fact must also be considered when discussing the recent calls for re-introduction of long-term reservations (of the already congested and scarce interconnections) in order to enable long-term supply contracts” (DG Comp, report, p.284)

6. Conclusion

- Reasons for this shift: the crisis and decarbonization (and the need for new capacities → is the market no more mature?)
- Upstream/downstream integration is one of the key issue.
- Rapport Champsaur: Cette organisation de marché conduit à séparer les activités de fourniture des activités de production et remet donc en cause le modèle d'opérateur intégré entre l'amont (production) et l'aval (commercialisation). Or, le maintien de ce modèle est souhaitable d'un point de vue industriel et collectif. L'électricité ne se stockant pas, la performance économique globale s'apprécie sur la capacité à optimiser le mix de production, le recours au marché et la consommation des clients. Ainsi, le modèle de fournisseurs « purs » ne possédant pas de moyens de production ne semble pas s'imposer. Contraints à un approvisionnement sur un marché de gros extrêmement volatil et ne pouvant asseoir les demandes de leur client sur des moyens de production, les fournisseurs « purs » sont fragiles.
- Discussion at the recent UFE conference

Thank you for your attention

Short term market and Renewables

« Les règles du marché en vigueur reposent sur les principales technologies de production de la dernière décennie, à savoir de grandes centrales électriques utilisant des combustibles fossiles, centralisées, avec une participation limitée des consommateurs. Étant donné que la production d'électricité variable provenant de sources d'énergie renouvelables (E-SER) jouera à l'avenir un rôle croissant dans le parc de production, et que les consommateurs devraient pouvoir participer aux marchés s'ils le souhaitent, il convient d'adapter les règles. Les marchés à court terme de l'électricité, qui permettent l'échange transfrontalier d'E-SER, sont essentiels pour la bonne intégration de l'E-SER sur le marché. Cela est dû au fait que la majeure partie de la production à partir de sources d'énergie renouvelables ne peut être anticipée avec précision que peu avant la production réelle (en raison des incertitudes météorologiques). La création de marchés permettant la participation très peu de temps avant la livraison effective (marchés «intrajournaliers» ou «d'équilibrage») constitue une étape essentielle pour permettre aux producteurs d'E-SER de vendre leur électricité à des conditions équitables, et elle augmentera également la liquidité du marché. Les marchés à court terme offriront de nouvelles possibilités commerciales, qui permettront aux participants de proposer des solutions énergétiques «d'appoint» dans les périodes de forte demande et de faible production d'énergie renouvelable. Cela inclut la possibilité pour les consommateurs de modifier leur demande («participation active de la demande»), ainsi que le recours à des gestionnaires de stockage ou à des producteurs flexibles. » (Exposé des motifs du Règlement sur le marché intérieur de l'électricité (2016/0379(COD), p.4).