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# EFET proposed amendments to draft instruments within the Clean Energy Package

#### FORWARD MARKETS IN ELECTRICITY

#### **DRAFT - 6 June 2017**

We are concerned by the lack of attention throughout the Clean Energy Package to the forward market: forward and future contracts still represent over two thirds of wholesale power transaction volume on the electricity market in Europe. Indeed in the countries and regions most open to competition and benefiting from multiple interconnections the proportion is over 85 %.

We share the assessment of the European Commission that the growing penetration of intermittent power generation leads to a greater need for the deployment of flexible capacity. We also agree that, as aging large-scale traditional power generation plants are decommissioned and the total generation capacity surplus correspondingly diminishes, the potential flexibility of new generation and storage technologies will increase in importance. Greater use of demand response is to be welcomed in addition. The liquidity of short-term markets should be able to benefit from inclusion of each of these sources of flexibility.

However, the basic facts of the intermittency of an ever larger proportion of baseload generation capacity, the reluctance or inability of many consumers to adjust their demand and the high cost of newer technologies points to increasing volatility of wholesale electricity prices close to real time. Exposure to volatile short run prices reinforces the importance to market participants of long-term hedging opportunities. Both OTC markets and organised trading venues already witness the development of short period activation products on a forward basis to help generators, retail suppliers and larger consumers cope with greater uncertainty in final price outcomes for marginal volumes closer to real time. Forward markets are also important for integration and financing of intermittent renewables themselves: Investors in renewable projects normally outsource the market risks of their project, by means of long-term power purchase agreements (PPAs). In case of liquid forward markets, market participants can bid for such PPAs at more competitive prices.

Financially firm cross-border transmission rights issued by TSOs between all bidding zones in each direction and based on a transparent capacity calculation methodology are key tools to ensure the efficiency of forward and future markets across borders. They underpin those markets, not only as instruments for price hedging and price risk management, but in their function of guarantors of competition and providers of pools of liquidity.



Article	Draft CEP Proposal	Proposed EFET Amendments	Reasoning
Article Art. 3.1 Electricity Regulation	1.Member States, national r egulatory authorities, transm ission system operators, distribution system operators, and market operators shall ensure that electricity markets are operated in accordance with the following principles:  (a) prices shall be formed based on demand and supply;  (b) actions which prevent price formation on the basis of demand and supply or constitute a disincentive to the development of more flexible generation, low carbon generation, or more flexible demand shall be avoided;  (c) customers shall be enabled to benefit from market opportunities and increased competition on retail markets;  (d) market participation of consumers and small businesses shall be enabled by aggregation of generation from multiple generation from multiple generation from the electricity market and be jointly operated in the electricity system, subject to compliance with EU treaty rules on competition;	1.Member States, national regula tory authorities, transmission system operators, distribution system operators, and market operators shall ensure that electricity markets are operated in accordance with the following principles:  (a) prices shall be formed based on demand and supply;  (b) actions which prevent price formation on the basis of demand and supply or constitute a disincentive to the development of more flexible generation, low carbon generation, or more flexible demand shall be avoided;  (c) customers shall be enabled to benefit from market opportunities and increased competition on retail markets;  (d) market participation of consumers and small businesses shall be enabled by aggregation of generation from multiple generation facilities or load from multiple demand facilities to provide joint offers on the electricity market and be jointly operated in the electricity system, subject to compliance with EU treaty rules on competition;  (e) market rules shall support the decarbonisation of the economy by enabling the integration of electricity from renewable energy sources and providing incentives	Reasoning
	with EU treaty rules on	electricity from renewable energy	TSOs, as monopoly providers of transmission capacity, must, under proper regulatory supervision, grant individual market participants transparent and non-discriminatory access to networks within bidding zones. Across borders, TSOs should provide the maximum firm transmission capacity



electricity flows and crossborder transactions on electricity markets and related services markets shall be avoided;

- (h) market rules shall provide for regional cooperation where effective;
- (i) all generation, storage and demand resources shall participate on equal footing in the market;
- (j) all producers shall be directly or indirectly responsible for selling the electricity they generate;
- (k) market rules shall allow for progress in research and development to be realized and used to the benefit of society;
- (I) market rules shall enable the efficient dispatch of generation assets and demand response;
- (m) market rules shall allow for entry and exit of electricity generation and electricity supply undertakings based on their assessment of the economic and financial viability of their operations;
- (n) long-term hedging opportunities, which allow market participants to hedge against price volatility risks on a market basis, and eliminate uncertainty on future returns on investment shall be tradable on exchanges in a transparent manner subject to compliance with EU treaty rules on competition.

within bidding zones or across bidding zones;

- (gh) barriers to cross-border electricity flows and cross-border transactions on electricity markets and related services markets shall be avoided;
- (hi) market rules shall provide for regional cooperation where effective;
- (ij) all generation, storage and demand resources shall participate on an equal footing in the market;
- (jk) all producers shall be directly or indirectly responsible for selling the electricity they generate;
- (kl) market rules shall allow for progress in research and development to be realized and used to the benefit of society;
- (Im) market rules shall enable the efficient dispatch of generation assets and demand response;
- (mn) market rules shall allow for entry and exit of electricity generation and electricity supply undertakings based on their assessment of the economic and financial viability of their operations;
- (no) long-term hedging opportunities forward and future contracts in electricity as a commodity, which allow market participants to hedge against price, volume and liquidity volatility risks on a market basis in advance of spot trading timeframes, shall be freely tradable on both an OTC basis and on organised exchanges, where available, as far in advance as possible from real time to eliminate help reduce uncertainty on-about future returns on investment in new generation, demand response capacity or storage assets shall be tradable on exchanges in a transparent manner subject to compliance with EU treaty rules on competition

they have objectively calculated as far in advance as possible from real time, and recalculate this capacity at regular intervals (from forward to intraday).

This fundamental principle underpins the function of the European wholesale power market and has been recognised as axiomatic for competition and liquidity across continental Europe since 1999. It must therefore feature in this Article 3.

It is right that the Regulation should at the start clearly recognise the value of forward and future markets, not only for their price hedging function (as laid out in art. 8), but also as guarantors of competition and providers of pools of liquidity.

Liquid and transparent wholesale markets in forward and future contracts give market participants a reliable price signal and, if the forward price curve goes out three years or more, may contribute to reducing investor uncertainty. Such explicit recognition can help policymakers, legislators and regulators re-assert their confidence in the ability of the energy-only market to provide longer term price signals, to help underpin investment decisions in all technologies of power generation, demand response and storage.

In commercial reality there is no class of traded contract categorised as a "long-



term hedging opportunity". However, wholesale markets in physical power forwards and in financial power futures are established across most of Europe. The former are mostly traded on a bilateral or brokered basis in the OTC market, the latter mostly on common counterparty exchanges subject to central clearing.

The risks which market participants try to address when trading such forward or future instruments are not related to price volatility alone. Transactions in forwards and futures may give a price signal far enough ahead to help incentivise new investment, but only if liquidity is good and the forward curve of a published reference price goes out about three years or more.

All power trading, in whatever timeframe, is subject to compliance by market participants with applicable antitrust rules, as well as with market integrity rules established in the EU under MAR and REMIT. There is no reason to mention "treaty rules on competition" in this Regulation in relation to just price hedging activities.

## Art. 8 Electricity Regulation

- 1. In line with regulation (EU) 2016/1719, transmission system operators shall issue long-term transmission rights or have equivalent measures in place to allow for market participants, in particular owners of generation facilities using renewable energies, to hedge price risks across bidding zone borders
- 2. Long-term transmission rights shall be allocated in a transparent, market based and non-discriminatory manner through a single allocation platform. Long-term transmission rights shall be firm and be transferable between market participants.
- 3. Subject to compliance with treaty rules on competition, market operators shall be free to develop forward hedging products including for the long -term to provide market participants, in particular
- 1. In line with regulation (EU) 2016/1719, transmission system operators shall calculate crossborder transmission capacity available for allocation in the forward timeframe of the wholesale power market, and issue long-term transmission rights accordingly; or have equivalent measures in place for they may rely on alternative instruments being available to allow market participants, in particular owners of generation facilities using renewable energies, to hedge and manage their price, volume and basis risks across bidding zone borders, only subject to the strict terms of the exemption to the issuance of transmission rights as set out in regulation (EU) 2016/1719.
- 2. Long-term transmission rights for access to networks across the boundaries of bidding zones shall be allocated by transmission system operators up to the

Article 8 of the draft recast Regulation should at the start clearly recognise the value of forward and future markets, not only for their price hedging function, but also to simply manage price risk and as guarantors of competition and providers of pools of liquidity.

Such explicit recognition can help policymakers, legislators and regulators re-assert their confidence in the ability of the energy-only market to provide longer term price signals, and thereby underpin investment in assets utilising various technologies (not just renewable sources) for power generation, demand response and storage. In addition, Article 8 ought to include a similar provision to that which can be found in Article 6.2(h) of the recast Regulation, ensuring that also forward markets shall "make no distinction between trades made within a bidding zone and across bidding zones".



owners of generation facilities using renewable energies, with appropriate possibilities to hedge financial risks from price fluctuations. Member States shall not restrict such hedging activity to trades within a Member State or bidding zone.

maximum of the calculated available capacity in a transparent, market based and non-discriminatory manner through a single allocation platform. Long-term transmission rights shall be firm and be transferable between market participants.

- 3. Subject to compliance with treaty rules on competition, market operators shall be free to develop forward hedging products including for the long-term to provide market participants, in particular owners of generation facilities using renewable energies, with appropriate possibilities to hedge financial risks from price fluctuations. Member States shall not restrict such hedging activity to trades within a Member State or bidding zone.
- 3. Forward and future markets shall make no distinction between trades made within a bidding zone and across bidding zones.

This sub-article is not clear in its purview and is poorly drafted. Anyway it becomes redundant if amendments and additions to Article 3.1 (g) and (o), to Article 8.1 and 8.2 and Article 15.1 are made as indicated above and below.

Since the importance of not making a distinction in the spot market is spelt out elsewhere in this Regulation, it is appropriate to stipulate the principle here in respect of markets in forwards and futures.

## Art. 14.7 Electricity Regulation

Transmission system operators shall not limit the volume of interconnection capacity to be made available to other market participants in order to solve congestion inside their own control area or as a means of managing flows on a border between two control areas observed even without any transaction, i.e. flows over control areas caused by origin and destination within one control area.

Upon request by a transmission system operator, the relevant regulatory authority may grant a derogation from the first subparagraph where it is necessary for maintaining operational security or where it is beneficial to economic efficiency at Union level. Such a derogation, which may not relate to curtailment of already allocated capacities pursuant to paragraph 5, shall

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Upon request by a transmission system operator, the relevant regulatory authority may grant a derogation from the first subparagraph where it is necessary for maintaining operational security or and where it is beneficial to economic efficiency at Union level. Such a derogation, which may not relate to curtailment of already allocated capacities pursuant to paragraph 5, shall be limited in time, strictly limited to what is necessary, and avoid discrimination between internal and cross-zonal exchanges. The first paragraph of article 14.7 mistakenly refers to TSOs as market participants, which is not the case: TSOs do not participate in the market, they are neutral market facilitators.

This article generally reflects the elements of the ACER Recommendation of November 2016, save for one important detail: in its Recommendation, ACER insists that the derogations to the principles should only be approved if it is necessary to maintain system security and if it is economically more efficient. This is a critical difference, where we expect the ACER wording to ensure that any TSO decision pertaining to capacity calculation, which by definition would



be limited in time, strictly limited to what is necessary, and avoid discrimination between internal and crosszonal exchanges. Before granting a derogation, the relevant regulatory authority shall consult the regulatory authorities of other Member States forming part of an affected capacity calculation region. In case a regulatory authority disagrees with the proposed derogation, the Agency shall decide on the derogation pursuant to Article 6(8)(a) [recast of Regulation (EC) No 713/2009 as proposed by COM(2016) 863/2]. The justification and reasons for the derogation shall be published. Where a derogation is granted, the relevant transmission system operators shall develop and publish a methodology and projects that shall provide a long-term solution to the issue that the derogation seeks to address. The derogation shall expire when the time limit is reached or, once the solution is applied, whichever is earlier.

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have an impact on system security, should be taken on the basis of a transparent cost-and-benefit analysis.

#### Art. 15 Electricity Regulation

- 1. Transmission system operators shall recalculate available cross-zonal capacity at least after day-ahead market coupling and after intraday cross-zonal gate closure times. Transmission system operators shall allocate the available crosszonal capacity plus any remaining cross-zonal capacity not previously allocated and any cross-zonal capacity released by physical transmission right holders from previous allocations in the next cross-zonal capacity allocation process.
- 2. When cross-zonal capacity is available after the intraday cross-zonal gate closure time, transmission system
- 1. Transmission system operators shall calculate available cross-zonal capacity at least one year ahead in advance of real time. Unless approved otherwise by regulators according to Regulation (EU) 2016/1719, transmission system operators shall allocate 100% of the cross-zonal capacity calculated as available at each border, and in each direction by way of firm transmission rights at least one year in advance of real time. Market rules shall foresee the possibility for transmission system operators to perform cost-efficient remedial action or to buy back transmission rights in order to avoid restrictions in the allocation of cross-zonal capacity and reduce the occurrence of curtailments.
- **12**. Transmission system operators

TSOs, as managers of cross-border capacity, have the ability to manage the associated risks and are the only players in the electricity sector that can do so. Hence TSOs are also the only asset owners and/or operators with an in-built capability to offer primary, physical hedges against future congestion rents through the prior creation of firm crossborder transmission capacity rights. TSOs in this sense are *natural* sellers of firm transmission capacity rights. They ought to auction these rights to market participants as early as possible, for the entire amount of capacity that has been calculated as available. Beyond the requirements of the FCA Regulation, TSOs should consider allocation PTRs/FTR options more than one year in advance.

When selling capacity rights at auctions, income for TSOs is in general proportional to the degree of congestion



operators shall use the crosszonal capacity for the exchange of balancing energy or for operating the imbalance netting process.

3. Transmission system operators shall use the methodologies developed in network

codes and guidelines on balancing, where applicable, to allocate cross-zonal capacity for the exchange of balancing capacity or sharing of reserves pursuant to Article 5 (4) and (7).

4. Transmission system oper ators shall not increase the reliability margin calculated pursuant to Regulation (EU) 2015/1222 due to the exchange of balancing capacity or sharing of reserves.

shall recalculate available cross-zonal capacity at least after dayahead market coupling and after intraday cross-zonal gate closure times. Transmission system operators shall allocate the available cross-zonal capacity plus any remaining cross-zonal capacity not previously allocated and any cross-zonal capacity released by physical transmission right holders from previous allocations in the next cross-zonal capacity allocation process.

- 23. When cross-zonal capacity is available after the intraday cross-zonal gate closure time, transmission system operators shall use the cross-zonal capacity for the exchange of balancing energy or for operating the imbalance netting process.
- 34. Transmission system operators shall use the methodologies developed in network

codes and guidelines on balancing, where applicable, to allocate crosszonal capacity for the exchange of balancing capacity or sharing of reserves pursuant to Article 5 (4) and (7).

45. Transmission system operator s shall not increase the reliability margin calculated pursuant to Regulation (EU) 2015/1222 due to the exchange of balancing capacity or sharing of reserves

(although, of course, over longer timeframes, the market will not be able to predict what congestion will be, meaning that this proportionality may become decoupled over very long time periods). As income increases if there are more constraints, it is proportional to the potential costs if there is a need to buy back or curtail transmission rights. TSOs are long in transmission. In essence, TSOs only bear the *residual* risk of congestion being worse (or less severe) than what the market had expected and priced in when bidding for the capacity in the first place. All other market players are short in transmission.

The issuance of forward transmission rights at all borders in all directions allows to:

- guarantee that a certain minimum volume of products will always be available and offered on a transparent and non-discriminatory manner through organised auctions;
- provide substantial congestion income to TSOs by allowing them to extract the maximum value out of the network infrastructure they manage;
- provide better and more reliable visibility for market participants as to the total volumes of hedging products;
- ensure that the capacity that is offered to the market is maximised at all points in time and that any variations of these volumes is published in a timely and effective manner;
- provide valuable signals as to the structural value of cross border capacity, from a "congestion" point of view. This is useful for all market players and for TSOs and regulators, whereas the daily price signals are much more volatile. For example, forward allocation provides clear market-based price signals as to the need for additional infrastructure investments.

## Art. 17.2 Electricity Regulation

Any revenues resulting from the allocation of interconnection capacity shall be used for the following purposes:

(a) guaranteeing the actual availability of the allocated

Any revenues resulting from the allocation of interconnection capacity shall be used for the following purposes:

(a) guaranteeing the actual availability of the allocated capacity; and/or first, ensuring

The proposal of the draft recast regulation seems quite drastic, as it could have the consequence of TSOs holding sums of money for unlimited periods of time even if the financial needs for congestion management and investment are consistently below the TSOs' congestion income. This money would



capacity; and/or

(b) maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors.

If the revenues cannot be efficiently used for the purposes set out in points (a) or (b) of the first subparagraph, they shall be placed on a separate internal account line for future use on these purposes.

firmness of already allocated crossborder transmission capacity;

(b) maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors. second, funding cost-efficient remedial actions enabling a higher allocation of cross-border transmission capacity, consistent with the maintenance of security standards; and/or

(c) third, funding investments in transmission capacity that have been deemed to be economic according to a cost-benefit analysis.

If the revenues cannot be efficiently used for the purposes set out in points (a), or (b) or (c) of the first subparagraph, they shall be placed on a separate internal account line for future use on these purposes. If the revenues placed on the separate internal account line have not been used within a period of [two to five] years for the purposes set out in points (a), (b) or (c) of the first subparagraph, they may be used, subject to approval by the regulatory authorities of the Member States concerned, up to a maximum amount to be decided by those regulatory authorities, as income to be taken into account by the regulatory authorities when approving the methodology for calculating network tariffs and/or fixing network tariffs.

The regulatory authority shall inform the Agency of the approval referred to in the second subparagraph.

then sit with TSOs, or be invested by TSOs, rather than being used productively in the unregulated economy. Instead, we advocate a clear hierarchy in the use of congestion income.

If congestion income remains and (i) firmness of already allocated crossborder transmission capacity is ensured, (ii) no efficient re-dispatching/ countertrading operation can be done to increase the availability of cross-border capacity, and (iii) no investment activity is planned, then the congestion income could be used to reduce transmission tariffs after a period of two to five years. We expected that this set of rules would help guarantee that TSOs take all necessary, possibly costly remedial actions to ensure the availability of crossborder capacity at all times, take investment decisions when economically warranted, while at the same time not holding capital for an unnecessarily long period of time when it can be returned to end-consumers if it is not needed for the proper functioning of the electricity market and system.