



- Consultation Response –

## **Consultation on the revision of the electricity guideline on forward capacity allocation**

Brussels, 1 October 2024 | Europex welcomes the opportunity to respond to DG ENER consultation on the revision of the electricity guideline on forward capacity allocation.

### **Part I: Evaluation of current forward markets**

#### **(a) Assessment of the electricity forward markets**

**10. Please list the products for which you encounter insufficient accessibility (in terms of effectiveness and liquidity) and provide a detailed answer to explain what problems you encounter in BZs where availability is insufficient (f.e. lack of competition, market too small, none of the available liquid products is a good proxy, inadequate cross-zonal hedging instruments, ...). In case you identify a lack of liquidity in some or several of the markets you resort to, please estimate the slippage costs that result from this lack of liquidity - if possible.**

First, we would like to note that this question is very broad. Ideally, it should be followed by a comprehensive assessment of different factors behind the potential lack of accessibility in some parts of the EU. In many cases, it is not necessarily the case that accessibility to appropriate hedging instruments is in short supply but rather that challenges exist linked to either the usefulness of instruments available or market parties' ability to use them. By referring to instruments available, we refer to both those traded in open competitive markets (via exchanges and OTC/bilaterally) and those made available via mechanisms where TSOs give support to hedging opportunities in line with Article 30.5(b) of the existing Guidelines.

Second, the question correctly distinguishes between market areas and timeframes. However, it should also take into account different products and different ways of execution (exchange order book, OTC cleared, OTC/bilateral uncleared). This is because, on the basis of underlying market characteristics, national and regional power markets have typically evolved from OTC trading uncleared to then OTC trading but cleared via the exchanges and to eventually exchange order book trading.

Finally, the fact that an order book sees little liquidity does not necessarily mean that the respective market is illiquid since it might still be predominantly trading bilaterally, in some cases, via the intermediation of a broker. Another reason may be that market participants in

a country/region are well hedged through proxy trading in a long-term contract that uses as underlying another bidding zone or a regional index. In this case, they enter a long-term contract with an underlying that refers to the day-ahead price of a different but closely correlated bidding zone/regional index rather than to the bidding zone where the physical hedging need exists. For example, a Dutch power producer may enter a German power future as a “proxy” for Dutch power if both day-ahead prices are well correlated. Similarly, a Swedish generator in BZ SE2 may use the Nordic System Price Future as a “proxy”. This is to say that all these elements have to be taken into account when assessing the state of liquidity of a market.

#### **11. Are additional measures needed to improve the ability of market participants to hedge price risks in the forward markets?**

YES.

##### **If yes, which ones?**

It is our view that everything else being equal European power forward markets will continue to grow. This is foremost due to the massive investments in low-carbon generation needed in the power sector, on the one hand, to achieve the EU climate targets and, on the other hand, to cover the expected increase in industrial electrification. The distribution of growth in electricity generation and consumption as well as grid interconnector capacity is unlikely to be similar across the EU, impacting differently the need for forward hedging. Furthermore, depending on existing price correlations and liquidity, some market areas/regions might initially gain more liquidity than others, while this distribution of growth and consequently liquidity may change over time.

In order to increase hedging opportunities, we believe that regulatory stability (i.e., key framework conditions for investments and short- and long-term trading remain sufficiently robust, fit-for-purpose, clear and predictable) is one crucial factor. It is often underestimated how important it is to keep the regulatory framework fit-for-purpose and stable, especially in the case of market design framework. A key example is the design of bidding zone configurations, for which potential changes require significant evaluation of effects on transition and transaction costs.

Moreover, potential changes to the MiFIDII ancillary activity exemption or restrictions to permitted means of collaterals (e.g., disallowance to use non-fully backed bank guarantees) could have a very negative impact on liquidity. One further example is position limits, which have proven to be a major obstacle to the development of liquidity in smaller markets. Moreover, crisis measures such as inframarginal revenue caps have led to a major liquidity decline in some forward markets.

Finally, while future investments in low-carbon generation are expected to stimulate liquidity in European forward power markets, it is critical that these volumes do not get isolated from the market. For example, as much as possible, RES support schemes (e.g., CfDs) should be limited in scope as well as duration and designed in a way not to cannibalise the liquidity of forward markets and retain incentives for forward market participation.

**12.1.1 In case you have physical assets or activities (demand, retail supply, generation): to what degree or percentage do you hedge price risks related to these assets?**

1.

**(b) Cross-zonal forward hedging**

**13. Is the status-quo regarding the availability, design and type of cross-zonal instruments adequate to meet your hedging needs?**

YES.

**Please provide a detailed answer**

First, it must be made clear that if two counterparties that have physical supply/demand portfolios in different countries/bidding zones enter into a forward trade they do not necessarily need a cross-zonal hedging instrument. If the basis risk resulting from a proxy hedge is small, the trader may simply choose to absorb the risk, meaning that there is no need for a cross-zonal forward hedging instrument. Most certainly, it is not needed to be perfectly hedged as of the first open position. Closer to delivery, when the respective forward market can be expected to have more liquidity (e.g., because the suppliers start hedging as well), a cross-zonal hedging instrument, such as a spread between the respective bidding zones (markets), or a contract between a bidding zone and a Regional Reference, or an LTTR, can become efficient to mitigate the remaining basis risk.

Looking at market-based instruments, there is a wide variety of hedging instruments that indirectly or directly can be connected to cross-border exposures, both in terms of product type (options and obligations) as well as in terms of geographical coverage (all kinds of bidding zone and/or regional combinations can be traded) and in terms of maturities. Again, liquidity may vary from country to country (also border to border and region to region) depending on underlying market characteristics. Therefore, a thorough assessment of the different factors driving liquidity is warranted within this forward market evaluation process and the upcoming FCA review.

**15.5. Hedging instruments issued or supported by TSOs: On a scale from 1 to 10, do you consider that the LTTRs' price reflects the forward market fundamentals?**

**Answer from 0 (no) to 10 (yes): 3.**

**Please elaborate your answer (date, border, data, etc)**

Based on ENTSO-E publications and ACER assessments, we note that LTTRs have been on average generally undervalued versus average spot market price for given delivery periods. However, this is not necessarily an indication of incorrect price discovery at the time of the auction but is rather likely caused by the way in which the LTTRs are brought to the market. LTTRs are typically sold in fairly large volumes on too few occasions, with the TSO acting as a

price-taker. Furthermore, these LTTR FTRs are issued without full firmness, i.e., there are force majeure exceptions which can likely occur when the potential positive value of the FTR would be highest for the holder.

**15.6. Hedging instruments issued or supported by TSOs: should you have identified a potential disconnect between LTTR and forward market fundamentals, do you see any risk of contagion across market segments (through arbitrage, for instance)?**

To the extent there is a disconnect between LTTR prices and forward market fundamentals, market participants will capitalise on this price difference through arbitrage. This risk is however limited to 1) the extent of undervaluation of LTTRs and 2) the amount of LTTRs issued. Whether arbitrage trading will then affect forward prices depends on the size of the respective forward market in comparison to the amount of LTTRs issued as well as on the undervaluation.

**(c) Future-proofness: expected evolution of the forward market**

**16.1. Do you consider that the following policies and market trends have an impact on the hedging incentives of market participants on the forward market: Contracts for difference (as a state-aid scheme) [no comments allowed]**

Answer from 0 (no) to 10 (yes): 9.

**16.2. Do you consider that the following policies and market trends have an impact on the hedging incentives of market participants on the forward market: Power Purchase Agreements [no comments allowed]**

Answer from 0 (no) to 10 (yes): 5.

**16.3. Do you consider that the following policies and market trends have an impact on the hedging incentives of market participants on the forward market: Capacity remuneration mechanisms [no comments allowed]**

Answer from 0 (no) to 10 (yes): 7.

**Other policies and/or market trends - please specify**

**Contracts for difference (CfD):** Since a CfD is a state-backed hedging instrument, it takes away the incentive to hedge on the market. However, the extent of the impact depends on the design of a CfD and can be limited to a certain degree. For example, capacity-based CfDs tend to have fewer negative effects than production-based CfDs. Besides that, there are various design parameters which could limit the negative impact CfDs could have on forward markets. The Eurelectric study on CfDs offers valid principles on how to introduce well-designed CfDs.

**Power Purchase Agreements (PPAs):** The impact PPAs can have on forward markets depends on the type and design of the PPA. While physical PPAs can take away liquidity from the market, virtual PPAs can provide liquidity to the spot market and indirectly also to the forward

market. This is because PPAs, despite being very bespoke by nature, are sometimes partly cleared at exchange clearing houses. The ability to efficiently manage counterparty risk will incentivise more PPAs to be concluded. In addition, the prices of PPAs cleared at exchange clearing houses are published, hence, providing transparency that again may trigger further PPAs to be concluded. Under this perspective, PPAs and forward markets can be complementary instruments serving different purposes of market participants.

**Capacity remuneration mechanisms (CRMs):** In general, CRMs can substantially affect forward markets as they may significantly reduce the need to hedge against spot market volatility. This effect is limited with pure capacity remuneration (EURO per MW), but amplified in case operating costs are remunerated (EURO per MWh). In the latter case, a CRM has a CfD design with the potential to negatively impact hedging incentives.

**State interventions in markets:** During the energy crisis, in parts due to the Council Regulation (EU) 2022/1854, several Member States introduced emergency measures in the form of price caps, inframarginal revenue caps, windfall profit taxes, which overall have led to significant distortions on forward markets. By altering the regular functioning of markets and undermining investor certainty, similar interventions cause a reduction of liquidity of forward markets.

**Trend towards cleared hedging:** Since the energy crisis in 2022, the already existing trend from uncleared bilateral forward market business towards cleared hedging solutions accelerated. We expect this trend to continue in light of solid risk policies on the market participant's side, especially with regard to counterparty risks.

**Linked markets and prices:** As European power markets are more and more linked on physical level via EU-wide market coupling, forward markets are also traded in multi-market portfolios. Price differences between single market areas are used for hedging and portfolio optimisations. Furthermore, the increased share of financial players will further increase the liquidity in existing and emerging liquidity pools, with positive spill-over effects to linked neighbouring markets.

#### **17.1. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to hedging needs**

Depending on future policy interventions [see also our response to Q.16], there will be a growing hedging need due to continued energy transition in the form of renewables and low-carbon energy sources expansion and of industrial electrification.

#### **17.2. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to trading volume**

Depending on future policy interventions [see also our response to Q.16], there will be growing trading volumes with continued energy transition and expansion of renewables and low-carbon energy sources.

**17.3. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to the maturities of products**

Depending on future policy interventions [see also our response to Q.16], there will be an increase in maturities, especially to accommodate for Power Purchase Agreement (PPA) hedging, but also due to massive investments expected both on low-carbon electricity production and industrial electrification.

**17.4. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to active players (f.e. type of players, shares, etc)**

Depending on future policy interventions [see also our response to Q.16], there will be a growing number of active participants.

**17.5. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to products**

Depending on future policy interventions [see also our response to Q.16], there will be an increase in diversity and granularity of forward products.

**17.6. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to the evolution of liquidity**

Depending on future policy interventions [see also our response to Q.16], we expect the liquidity in electricity forward markets to improve as participation from a wider range of market actors increases.

**17.7. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to the evolution of liquidity needs**

Since the frequency of price changes increased, especially in liquid order books, the traded quantities per trade may get smaller, resulting in more granular trades instead of single big transactions.

**17.8. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to share of volume traded among the different bidding zones**

As market participants more and more manage multi-market portfolios instead of focusing on only one country or single bidding zone, the importance of trading price differences and coupled markets will increase.

**17.9. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to the configuration of bidding zones**

Currently, it is not obvious to make a judgment on that right now since a recommendation on any re-configuration of bidding zones for the countries currently subject to such a review (IT, FR, NL, DE, SE) has been made yet. To some extent, the impact of any re-configuration is still

to be assessed and, among others, based on when changes would take place and the expected duration of new bidding zone configurations.

**17.10. How do you expect the forward markets to evolve in the next 5 to 10 years with respect to any other trends (please specify)**

As the role of Energy in the overall economic context is growing, the need for hedging and optimisation on forward markets will increase accordingly.

## **Part II: Assessment of potential improvement to the forward capacity allocation by TSOs**

### **(a) Evolution of the current design for TSOs to support forward markets**

**18. Frequency: How frequently should the auction of long-term transmission rights (supported by TSOs) take place? Should the frequency of auctions differ depending on the maturity of the LTTR? If yes, what frequency would you propose for which product and maturity? Please provide a detailed answer**

We think that market participants are best placed to answer this question. However, it should be noted that more frequent auctions can be expected to improve both the time-risk market participants are exposed to when hedging with the help of LTTRs and the competitive pressure during auctions, which should be the best measure against undervaluation of LTTRs.

Nevertheless, in all cases where TSO(s), based on relevant NRA appraisal in accordance with FCA Guidelines, are requested to provide support to hedging opportunities, there should be an assessment about which instrument(s) are deemed most efficient to offer, e.g., FTRs options/obligations and pre-existing market-based instrument such as EPADs. Similarly, the level frequency of issuing, the contract maturities and distribution are primarily a judgment to be made by the issuing party (i.e., TSO(s)), also on the basis of inputs from market parties.

**19.1. Volume: How should the total volume of offered cross-zonal capacity be split among products across different maturities (monthly, quarterly, yearly)? Should more capacity be allocated to shorter maturity, longer maturity products or equally in general?**

We think that market participants are best placed to answer this question. Generally speaking, a good indicator is the liquidity in the different maturities, as found on the exchanges.

**19.3. Volume: How should the forward transmission capacity be offered? (coordinated vs uncoordinated way in each border, statistical vs scenario-based calculation, thresholds, split, allocation, possibility of offering longer maturities, etc)**

We are convinced that while it makes no sense to copy/paste the short-term allocation logic to the long-term market (i.e., long-term flow-based), it is however essential to respect the limitations of the short-term cross-zonal capacity allocation. In other words, only capacity which by a very high likelihood would be allocated in the spot market can be hedged in the forward market. This is especially needed to keep the risk for TSOs (and thus grid tariff payers) to an acceptable level.

Nonetheless, it is key to keep in mind that the issuing of LTTRs (and likewise for alternative equivalent instruments) is not based on PTRs but on FTRs. This means that no physical cross-zonal capacity is allocated, but rather that the instruments issued provide a financial hedge against the spot price difference between two adjacent bidding zones or one bidding zone and a regional spot index for a given delivery period.

This approach makes it reasonable, in the long-term (2-5 years), to allocate fairly little LTTRs (or equivalent measures) volume with respect to the expected physical cross-zonal capacity for the delivery period, while, closer to the actual delivery period (next year, quarter, month), increasingly more volume.

In any case, there should be flexibility for the TSO. If prices are not high, it would be good for TSOs to be able to limit volumes, whereas if prices are high, TSOs should be able to increase volumes.

**20.1. Maturities: How to define the ideal maturities for cross-zonal instruments? Please provide a detailed answer**

We believe that market participants and TSOs are best placed to answer this question. Generally speaking, a good indicator is the liquidity in the different maturities, as found on the exchanges. However, there should be sufficient flexibility for TSOs to adapt to market demand.

**20.2. Maturities: Should the maturity of cross-zonal instruments be the harmonized at EU level, regional (per capacity calculation region) level or not at all? Choose one option:**

Not harmonized at all.

**Please provide a detailed answer**

There should be flexibility for TSOs to adapt the offered forward maturities to changing power system fundamentals, to the instruments applied, and to market demand.

**21.1 Type of products: Should LTTRs only be issued as baseload products or should other types of products be envisaged?**

While generally we think baseload products are sufficient for now, it is for TSOs to assess and for market participants to answer this question.

**21.2 Type of products: What are the advantages and disadvantages of LTTRs defined as options?**



**Advantages:** Potentially significantly lower operational effort and manageable risk for TSOs. In that setting, there has been no need for central clearing and limited capital costs for TSOs in order to finance the initial margin as well as daily settlement.

**Disadvantages:** Potentially, LTTRs defined as options are more complex for market participants since, among others, they are not aligned with market-based hedging instruments, which are predominantly obligations.

### **21.3. Type of products: What are the advantages and disadvantages of LTTRs defined as obligations?**

**Advantages:** More compatible with the hedging of energy on the forward market since most liquid derivative markets are futures and not options. Clearing solutions via clearing houses would be available. In terms of financial effects on TSOs offering options or obligations (and by extension also equivalent instruments), it is clear that obligations over time reduce the costs for TSOs vs. options, as shown in the regular report about the EPAD Pilot run by Svenska Kraftnät across Swedish bidding zone borders since early 2023.

**Disadvantages:** Potentially more complex for TSOs (in continental Europe accustomed to LTTR options) in terms of allocation, which may lead to either higher operational risks for TSOs or to lower volumes allocated. TSOs and market participants need to be ready for central clearing, and daily settlement, which is expected to lead to increased capital (and transaction) costs.

### **21.4. Type of products: What are the advantages and disadvantages of LTTRs defined as Physical Transmission rights (PTRs)?**

**Disadvantage:** Not compatible with financial derivative contracts in European power markets. Before the introduction of market coupling among several regions in 2010, PTRs provided inefficient results in terms of utilisation of cross-zonal capacity by being used either to a limited extent with respect to total available capacity or against the price direction, e.g., schedules from high- to low-priced bidding zones. Today, since all cross-zonal capacities are made available on a competitive basis via the coupled SDAC market, returning to PTR offerings would not be logical. It is better to maintain LTTRs FTRs. The same is true for alternative equivalent instruments, such as EPADs. They are also strictly financial in nature and do not depend on the physical scheduling of cross-zonal capacities.

### **21.5. Type of products: What are the advantages and disadvantages of LTTRs defined as Financial Transmission Rights (FTRs)?**

**Advantage:** much more compatible with the financial derivative contracts in large parts of continental European power markets. In addition, it is key to keep in mind that alternative equivalent instruments like EPADs are financial and not physical in nature.

### **22.1. Should cross-zonal hedging instruments be issued (several choices possible): [no comments allowed]**

- on bidding zone borders only – as today
- from any zone to any other zone (within the same capacity calculation region)
- from any zone to regional hub (including EPADs)
- as a combination of two futures contracts

**22.2. Which of the above solution(s) would be the most resilient to potential changes in the markets (f.e. increased deployment of renewables, less hedging demand due to flexible demand, offshore bidding zones and bidding zones reconfigurations, volume contracted under power purchase agreements, etc)?**

Regarding the above question, the introduction of cross-zonal hedging instruments should not be restricted to one solution only. In line with the current FCA Guidelines, TSOs should enjoy discretion on how to support forward markets. In case there are several types of hedging products available in a national/regional market, TSOs should assess which instrument fits best with market needs to consequently choose the way of support which would be the most economically efficient.

Noteworthy is that a potential virtual hub is often presented as “the” solution for a liquid forward market in a scenario of frequent bidding zone configurations. While a hub can be designed in a way that its price calculation is relatively stable regarding bidding zone reconfigurations, any LTTR issuance between BZs or between one BZ towards this hub would be severely impacted by bidding zone reconfigurations.

**22.3 Should cross-zonal hedging instruments be issued from any zone to any other zone or from any zone to a regional hub, should it remain possible to trade cross-zonal hedging instruments on border-to-border basis?**

YES.

**Please comment on your answer**

Obviously, it should remain possible for market participants to trade cross-zonal hedging instruments. It is a free market and if these products are made available to the market, it should be possible to trade them.

If the question refers to the TSOs, and whether they should also be free to issue cross-zonal hedging instruments on border-to-border basis, we find that there should be discretion for the TSOs, including to auction alternative equivalent instruments which are already traded in the market, e.g., EPAD Combos connected to three different Swedish BZs as part of the Svenska Kraftnät Pilot since early 2023.

**22.4. If TSOs were to allocate cross-zonal capacity on zone-to-hub product (f.e. LTTRs), would you subsequently trade the futures with the corresponding underlying system price? Choose one option:**

It depends, please precise the condition.

### Please comment on your answer

For a zone-to-hub product to be an efficient hedging instrument, market participants should be trading the hub future as well. This has always been the case in the Nordics. The Nordic System Price futures have been the primary “proxy hedging” instrument and only later the EPADs were added to cope with at times more significant basis risks between a given Nordic bidding zone and the Nordic System Price.

Establishing liquidity in a CORE Virtual Hub instrument used for “proxy hedging” will be the biggest challenge if the Virtual Hub instrument is to cover the whole CORE region. We are sceptical that market participants will prefer a CORE Hub instrument whose price will be likely less correlated and entail more volatility for most of the bidding zones in CORE in comparison with BZ contracts today used for “proxy hedging”.

In an effort to forecast the effects on forward markets of setting up regional virtual hubs, Energy Traders Europe, Eurelectric and Europex commissioned Compass Lexecon to perform a forward-looking, quantitative study – which shows that setting up regional virtual hubs in the CORE region would bear more risks than benefits.

Preliminary results, based on virtual hub prices calculated from forward prices of underlying zones weighted by each zone’s electricity consumption, indicate that:

- Price spreads between local zones and existing natural hubs (like Germany or Hungary) are less volatile than when using a VTH
- Local zones correlate better with existing natural hubs than with a VTH
- Price spreads distribute unevenly with existing natural hubs or VTH

All this means that proxy hedging is generally safer and less costly in existing hubs like Germany or Hungary than it would be on a regional virtual hub. As a consequence, hedging will mostly remain on local zones and existing natural hubs, while some market participants from a few specific zones may find an interest and start hedging on regional virtual hubs. This will have the adverse effect of splitting liquidity between regional virtual hubs and existing natural hubs, with efficiency losses compared to the existing setup. This will translate into higher hedging transaction costs for market participants, and ultimately higher costs for consumers.

Requiring TSOs to issue zone-to-hub LTTRs is unlikely to remedy this de-optimisation of forward markets: they would be less adequate instruments than current zone-to-zone LTTRs as traders should continue to proxy hedge on existing natural hubs. And they would increase the TSOs’ financial exposure, with LTTRs disconnected from physical cross-border lines.

In summary, virtual hubs in the CORE Region are no silver bullet to improve forward markets and should be discarded from inclusion in the review of the FCA Regulation. Instead, market participants and operators call the European Commission to focus on preserving liquidity in existing hubs and improving the design of zone-to-zone to facilitate hedging on the more efficient natural hubs.

The final results of our study will be communicated to the European Commission mid-October 2024.

**23.1. System price / hub: If you have experience with the trading on the Nordic electricity forward market: Please provide feedback on the current market design of the Nordic region based on a system price**

Europex member Nord Pool helped to design and operate the Nordic organised wholesale spot and forwards markets from its multi-country inception in 1996 when Sweden and Norway were set up together in a DA Implicit Auction Zonal Model, featuring a Spot Area System Price with an unconstrained supply/demand equilibrium which disregards cross-zonal capacity limits. The System Price was set up as underlying reference for Forward/Future “proxy hedge” and trade across the Nordics to bundle forward liquidity into one contract. Since mid-1998 also Finland was added into the System Price Area and since 2006 also Denmark, thus forming a truly Nordic System Price reference. In 2001, based on market requests, it was complemented with a contract providing “basis risk” management, i.e., EPADs reflecting the price difference between a given Nordic BZ and the Nordic System Price contract.

**23.2. System price / hub: If you have experience with the trading on the Nordic electricity forward market: Would forward market based on zonal futures and zone-to-zone LTTRs be more appropriate for the Nordic Market to achieve higher liquidity for all Nordic market participants?**

NO.

**Please comment on your answer**

The introduction of LTTRs in the form of FTRs options or obligations is not needed or adding any value across the Nordics because there has since long been a model for bundling Nordic forward liquidity via one “proxy trading” contract, i.e., the Nordic System Price Futures, and a contract to manage BZ energy “basis risks”, namely EPADs, as explained in the previous question.

Furthermore, since the four-country Nordic synchronous grid is set up with 12 BZs and with about 20 cross-zonal interconnectors, the number of LTTRs that would be needed per delivery period (monthly, quarterly, yearly) would be about 40 which would severely undermine overall liquidity, if not erase it altogether for significant parts of the Nordics. Also contrary to EPADs, the LTTR FTRs offered today in continental Europe do not provide a direct “basis risk” hedge against a BZ price, but only a hedge against the BZ spread between two (adjacent) BZs, thus there would be a need for significant liquidity in e.g., zonal futures to manage the basis BZ risk.

**24.1. Firmness of products: How does the non-financial firmness of cross-zonal instruments impact your interest in such instruments?**

This is for market parties and TSOs to assess. However, we would expect that while keeping the risk for TSOs manageable, non-firmness reduces both the price of these products and the ability of these products to complete a hedge based on a (financially firm) future.

Nonetheless, we acknowledge that full firmness increases the risk on TSOs as congestion revenues might be lower than the LTTR FTR payout, in cases of for example lengthy unplanned outages. In other words, full firmness might become a trade-off with the volumes issued by the TSO.

#### **24.2. Firmness of products: Should cross-zonal instruments issued by TSOs be fully firm?**

YES.

#### **Please elaborate on pros/cons**

Either the TSO or the market participant incorporates the risk. From our perspective, full financial firmness is beneficial because it would make LTTRs (assuming this is the instrument chosen by the TSO to support forward hedging opportunities) more compatible with financial power derivatives.

#### **24.3. Firmness of products: In case LTTRs are concluded on a firm basis and in an obligation-type, how should the counterparty risk of TSOs be managed, in order to ensure holders of the LTTRs are able to collect the payout that is owed to them?**

In case of LTTRs in the form of obligations, they should ideally be cleared in order to protect TSOs from the counterparty risk. However, this also means that TSOs will have to post collaterals.

#### **24.4. Firmness of products: Do you see any financial stability risk arising from the non-firmness of those instruments (i.e., counterparties not receiving their forecasted payouts and being left unhedged)?**

No, counterparties are aware of the contract details which include non-firmness and will reflect that in their market orders (prices). Those who want a fully firm contract can already now engage in OTC or exchange trading with proper firm contracts such as zonal and regional Futures, spread contracts and EPADs.

#### **24.5. Firmness of products: Should LTTRs be concluded on a firm basis, what sort of risk mitigation tools do you believe the SAP should be subject to in order to manage the risks?**

For the counterparty risk, which becomes more relevant with the switch from options to obligations, please refer to our answer to question 24.3. Firmness as such does not pose any additional risk to SAP, but to TSOs, as they cannot anymore cancel the LTTRs in case of force majeure. There is no direct measure SAP or TSOs can take to manage this risk, other than to reduce the amount of volumes they issue. Alternatively, TSOs may plan grid outages more towards periods when this causes the least risk of price-based congestions between BZs, and to strengthen grid infrastructures to sustain unplanned outages without affecting the allocation of cross-zonal capacities in the coupled SDAC market which in cases of congestions

result in Congestion Revenues that backs-up the expected payouts from the LTTR FTRs (and also if instead offering equivalent, alternative, instruments).

**25. Revenue adequacy: How to maintain revenue adequacy for TSOs (i.e. that day-ahead congestion income is sufficient for LTTR payout)? Should revenue adequacy be maintained for each market time unit or on a less granular basis (f.e. at least daily monthly or annually)?**

Revenue adequacy always depends on two things: 1) the price difference between LTTR revenues and spot congestion income payout and 2) the volume of allocated LTTRs versus spot capacity allocation. Possible measures to increase the likelihood of revenue adequacy need to be taken with regards to both aspects: 1) ensuring LTTRs are adequately priced and 2) making sure LTTRs are not allocated for the given delivery period in a larger quantity than the capacity allocated in the spot market.

It should be up to the regulatory authorities and the TSOs to decide which time unit is best placed to look at revenue adequacy. However, it seems wise to select a time which allows for reaction and adjustment if a large revenue inadequacy is identified.

**26. Secondary market: Should there be an active secondary market for cross-zonal instruments issued by TSOs?**

YES.

**Please comment on your answer**

If we consider the current LTTR FTR options design and increase the frequency of auctions, there should be some mechanism allowing MPs to sell the LTTRs in subsequent auctions or via buy-back by relevant issuing TSO(s). The same would apply in the case of LTTR FTR obligations.

In the case of TSOs instead offering equivalent alternative measures such as Futures/EPAD obligations to support forward hedging opportunities, there would not be a need for a secondary market facilitation by the issuing TSOs as those products are tradable and cleared on power exchanges.

**27.1. Secondary market: If a secondary market for cross-zonal instruments were to be organized, how and where should this secondary market be organised: please select (several choices possible)**

Power exchanges.

**Specification**

Given secondary trading in LTTRs (FTRs) effectively means organising trading in financial instruments according to MiFIDII, power exchanges are best suited to organise this trading. Likewise, if a TSO, when needed according to Article 30.5(b) of the existing FCA Guidelines, provides support to deemed insufficient hedging opportunities via auctioning a pre-existing market instrument used in the given country/region (e.g., zonal contracts, spread contracts

or EPADs) the power exchanges and their connected clearing houses are effectively arranging secondary trading in the contracts primary auctioned by the TSO.

**27.2. Secondary market: Do you see benefits in the possibility of transferring Financial Transmission Rights from the SAP to a power exchange?**

A registry of LTTR holders will provide equal and fair access to all possible parties who could organise secondary trading.

**27.3 What are your views about the possibility for the SAP to match opposite bids for LTTRs without the allocation of cross-zonal capacity where possible?**

First, it should be clear that in the case of FTRs, no physical capacity is allocated. Capacity is looked at to assess how much volume TSOs can put on the market to keep the risk for TSOs (and thus grid tariff payers) to an acceptable level. This is because typically the congestion revenues collected by TSOs are used to back-up the potential payout to holders of the forwards instruments issued by TSOs.

In other words, LTTR FTRs entitle their holders to a portion of the congestion income (in case there is a positive spread between the bid and the actual spread in the spot market) which TSOs collect from the SDAC market whenever there has been a congestion resulting in different prices between relevant adjacent bidding zones.

Second, in order to be able to provide an assessment on what is referred to as “opposite bids” it would be valuable to first receive a clarification of what this means in practice. Generally, we believe TSOs should not start acting as market operators. TSOs becoming competitors to existing market operators would have no added value and even be counterproductive.

**27.4. What are your views about the possibility for SAP to optimize the allocation of yearly, quarterly and monthly products when they cover the same delivery period?**

We believe SAP should not optimise the split between the different maturities. The split between different maturities should depend on market demand, which might differ from zone to zone and ultimately, should be judged and motivated by the TSOs issuing the volumes in given instruments, e.g., LTTRs or alternative equivalent instruments available in the free market.

**(b) Alternative designs to support cross-zonal hedging in the forward markets**

**29. What other measures could be necessary to improve the availability of hedging opportunities so that hedging needs can be addressed with hedging products that are both liquid and provide efficient hedge?**

Referring also to our answer to Q.11, we believe that regulatory stability is one of the key drivers for more hedging opportunities. The positive trends towards further liberalisation in many countries and more investments into renewables as well as increased industrial



electrification across the whole continent are reasons to believe that liquidity in European forward power markets will continue to rise.

However, the most important elements that could hamper this trend are governments fixing the prices of new investments as well as changes to financial regulation that may deter further interest in European forward power markets. For example, changes to the ancillary activity exemption which exempts most energy firms from onerous requirements to engage in financial trading as well as the imposition of position limits could severely hamper the liquidity of forward markets.

**30. Are the forward hedging instruments offered by TSOs necessary to support the functioning the forward market? Can cross-zonal price risks be sufficiently hedged with other available products listed by power exchanges (spreads, EPADs)?**

We recognise that in some areas TSO market activity could be beneficial. Nevertheless, it should not be considered the default approach in areas where liquidity is thin without first having assessed the underlying factors which may hamper liquidity. This should even more be the case for bidding zones which are generally regarded as “liquid”, for which, however, NRAs did not refrain from requiring TSOs to auction LTTRs (e.g., the German-Luxembourgian bidding zone and its borders).

Hence, we call for objective liquidity assessments before any decision to involve TSOs in forward markets. If this concludes that TSOs have to be active in the forward market, we believe there should be discretion for the TSO to decide how to do so. Issuing LTTRs should not be considered the default solution. As the existing FCA Guidelines already allows for, equivalent measures may be adopted, which we can also imagine being traded directly on exchanges through experienced commodity trading houses (in centrally organised auctions).

**31.1. Among these key evolutions proposed by various stakeholders to improve the LTTR design, please select your favorite one(s): [no comments allowed]**

Other model.

**Potential other model, please define**

Overall, we believe that TSOs involvement in forward markets should follow the four following principles, thereby ensuring that the financial risk TSOs become exposed to is proportionate to the hedging needs they may satisfy:

1. An objective liquidity assessment method by the relevant NRAs is needed to confirm whether TSOs’ support to hedging opportunities is necessary.
2. TSOs should not be forced to support hedging instruments that do not stem from market demand. On the contrary, TSOs’ involvement should focus on enhancing already existing market-based hedging instruments facilitating market participants’ hedging needs over different bidding zones or regions.
3. TSOs should enjoy large discretion on how to support forward markets.



4. TSOs should use an efficient methodology to determine the volumes they bring to the market.

On the contrary, the introduction of zone-to-hub LTTRs as the standard choice for TSOs' support would not reflect overall market demand in continental Europe and would leave no discretion for TSO.

**31.2. Alternatively to issuing LTTRs, TSOs could allocate capacities to support other products. The two models below have been identified by stakeholders. Please select your favorite one:**

Other model.

**Potential other model, please define**

See our response to Q.31.1. Both options are viable in case they reflect market demand and fit specific country-level/regional market features. To this end, TSOs should enjoy large discretion in deciding the most efficient instrument to support, thereby avoiding increased risks and, consequently, higher costs for end-consumers.

**32. What could be the adequate geographical scope of a regional system price and how should this scope be determined?**

We do not have a general comment on what is the adequate scope as it depends on many different factors. One key aspect is that there should be a significant correlation between price fluctuations in the countries/BZs included in a regional system price over time. Another is that a regional system price contract would enable the bundling of overall liquidity in the given region. Finally, to what extent market parties have expressed interest in trading via such a regional system price (hub) should also be considered.

Please also refer to our answer to Q.22.4.

**33. How should a system price be calculated (several choices possible)**

Other, please precise.

**Please provide details on your previous answer**

Both have pros and cons. Whether the one is better than the other is a case-by-case topic. Ultimately, it is key that market parties find that they can rely on and trust the given calculation method, which typically is reflected in their willingness to take forward trade/hedge positions in a given contract. Historically, this has been evident for the Nordic System Price Futures (Forwards) based on unconstrained spot market equilibrium. At the same time, different methods could be applied for the calculation of different Regional Virtual Hub indexes and the method chosen should be up to the discretion of the party computing it and based on expressed market needs to use such an index for forward trading and hedging.

**34.1. Do forward markets need to be supported with market makers? choose one: [no comments allowed]**

It depends.

### **34.2. Should market making be (choose one): [no comments allowed]**

Voluntary (subject to commercial arrangements).

#### **34.2.2 How should market making costs be covered?**

If voluntary, exchanges provide incentives. Market making costs should be covered solely through commercial arrangements between market participants and power exchanges, avoiding mandatory schemes. This approach offers greater flexibility, allowing market makers to choose products and spreads that align with their trading strategies and risk appetites.

If mandatory, public budget needs to be used.

#### **34.3.1 What entities would be most suitable to act as market makers? (several choices possible)**

- Large market participants with physical assets.
- Large market participants without physical assets.

#### **Potential other entity, please precise**

If voluntary, any market participant fulfilling the conditions set by the exchange can act as a market maker.

#### **34.3.2. Under which conditions/requirements should those entities act as market makers?**

This should be proposed by the exchange on a case-to-case basis and not be set by law. A part of an exchange's core business is to grow liquidity, which also entails the use of market makers at their appropriate remuneration.

### **(c) Role of Single Allocation Platform (SAP)**

#### **35.1. If you traded LTTRs: On a scale from 0 to 10, how satisfied are you with current SAP (JAO) services?**

0.

#### **37. What should be the role of the SAP in your view? Should SAP be involved in the organization of the secondary market for LTTRs and how exactly?**

The role of SAP should only consist of LTTR issuance (if that is deemed the instrument the TSO(s) would choose to support forward hedging opportunities). No secondary market needs to be facilitated by SAP.

#### **38.2. What should be the potential changes to the current knowledge, functioning and organization of the SAP to facilitate secondary markets for LTTRs?**

All organisational / prudential / surveillance / reporting requirements attached to MiFIDII, EMIR and other financial regulation applicable to financial instruments. However, we refer back to Q.37. We do not believe SAP should be running secondary markets.

**40. CfD coupling: Should the allocation of transmission capacity to support the forward markets be performed by SAP or by a nominated exchange? Please provide details supporting/explaining your response.**

First, referring to our responses to Q.27.3, TSOs do not allocate transmission capacity. Second, it is unclear what is meant by CFD coupling.

Any professional entity with experience in organising auctions can issue LTTRs or equivalent instruments for TSOs to support forward markets. There should be no exclusive monopoly for this service.

**41. In your view, what would be the potential impact of the application of financial regulation (EMIR, MIFID, etc), should JAO undertake activities that are regulated under the financial rulebook (e.g., operating a secondary market for trading in financial transmission rights)? What is your view on the appropriate regulatory oversight set-up, considering the various activities JAO engages in (shadow auction for DA market, data services for capacity calculation and allocation, ...)?**

Having JAO undertaking activating regulated under the financial rulebook will come with a very high burden for which we do not think the TSOs need to bear the cost of, and also considering that there are numerous professional entities which can deliver these regulated services.

## **About**

Europex is a not-for-profit association of European energy exchanges with 34 members. It represents the interests of exchange-based wholesale electricity, gas and environmental markets, focuses on developments of the European regulatory framework for wholesale energy trading and provides a discussion pladorm at European level.

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