TSOs consultation on a methodology for pricing balancing energy and cross-zonal capacity used for the exchange of balancing energy or operating the imbalance netting process

EFET response – 13 November 2018

We thank the TSOs for the opportunity to comment on their draft proposal of a methodology on pricing of balancing energy and cross-zonal capacity used for the exchange of balancing energy or operating the imbalance netting process. We are also grateful to ENTSO-E for the organisation of workshops on the subject on 20/21 June and 16 October 2018 as they provide useful insights into the TSO approach to this methodology.

Article 3:

Article 3.1: The price for balancing energy from standard product bids activated for balancing purpose shall be the XBMP of the respective process.

We agree and support the implementation of cross-border marginal pricing (Pay-as-Cleared) for the remuneration of balancing energy. The pricing proposal of the TSOs rightly implements this key principle of the Electricity Balancing Guideline (EB GL) for the RR and mFRR process. We however do not consider that the pricing proposal for aFRR is true Pay-as-Cleared, rather a hybrid between Pay-as-Bid and Pay-as-Cleared, and hence do not consider this compliant with article 30 EB GL (see our comments on article 6 for more details).

Article 3.3: In case of price indeterminacy, the XBMP shall be determined by the AOF.

The article, or the rest of the pricing proposal, does not include a description of the AOF and its functioning.
Article 5:

Article 5.5: For the part of the accepted bid energy volume of a direct activation of mFRR […]

Consider reformulating, as the long sentence is hard to follow. From the explanation given in the explanatory document, EFET agrees with the approach: using the maximum of the XBMP for schedule activated mFRR of the respective ISP and the XBMP for direct activated mFRR of the ISP for which the bid was submitted.

Article 6:

Article 6.1: The BEPP for standard aFRR balancing energy product bids is equal to the optimisation cycle of the AOF.

As stated previously in our comments to the TSOs consultation of December 2017, we do not support the proposal of the TSOs to set the Balancing Energy Pricing Period (BEPP) on the optimisation cycle of the AOF (currently 4 seconds). We support marginal pricing calculated over a quarter-hour BEPP for reasons of technical simplicity, easier readability for BSPs and BRPs, and improved clarity of the price signal in the other market timeframes.

An optimisation cycle BEPP is closer to Pay-as-Bid than Pay-as-Cleared

We do not believe that the optimisation cycle BEPP of 4 seconds, with 225 marginal prices over an Imbalance Settlement Period (ISP) averaged into one, can be considered as delivering a true marginal pricing scheme. Instead, we rather see this proposal as a weighted average price scheme based on a number of sub-periods.

Towards BSPs, an optimisation cycle BEPP would create the issue of providing one price but subsequently participating to 225 separate auctions, each with a separate clearing price. It blurs the distinction between Pay-as-Bid and Pay-as-Cleared, as it artificially reduces the infra-marginal rent that is the basis for a bidding strategy in Pay-as-Cleared systems. Towards BRPs, the optimisation cycle BEPP results in a drastically suppressed price signal – if there is at least some alignment between imbalance energy pricing and imbalance settlement price – by providing a weighted average price of the individual activation cycles.

The imbalance settlement period should remain the reference for balancing energy pricing

The concept of a Balancing Energy Pricing Period is a concept that was never discussed in the EB GL, where only the ISP is mentioned for pricing towards BSPs and BRPs.

For market participants, the only relevant time period is the ISP, set in the EB GL at 15 minutes. It is the basis for pricing signals towards BRPs as well as the reference for the pricing of the energy by BSPs. This price signal will guide all actions taken by market participants in other timeframes, as intraday, day-ahead and forward markets.
are all forward markets of the balancing timeframe. We see no fundamental reason to differentiate the aFRR process from other balancing processes (RR, mFRR), which use the ISP of 15 minutes as BEPP. Moreover, the ISH methodology does not provide any guidance on how to combine the different values from each BEPP into the calculation of the imbalance settlement price.

An ISP BEPP would reflect the value of energy and congestions in the shortest market timeframe

As mentioned above, the relevant period for market participants is the ISP. This is the shortest timeframe where a price signal is sent to the market. The TSOs argue that an ISP BEPP would artificially create congestions over the whole ISP, while it may only be present in one or a few optimisation cycles. However, as the price signal emerging from such congestion(s) will be reflected in the imbalance price, we see no reason for it to be broken down in 4-second bits and averaged out over the whole period. The correct reflection of congestion towards market participants at every second interval should not be an objective of the platform. Market participants are not seeking cross-border congestion transparency at this granularity as they can anyhow not act upon it. For market participants, the ISP is the maximum granularity that is visible and relevant, and if congestions occur during an ISP, it is correct to reflect this for the entire ISP.

Simplicity or transparency from an algorithmic point of view also does not necessarily equal simplicity or transparency towards the market. If markets have to integrate 225 prices – including traceability through which congestions they were caused – to check or calculate the balancing energy and imbalance settlement price, it is demonstrably inferior from a transparency and simplicity perspective to a single marginal price per uncongested area.

We also remind the TSOs that contrary to what was aired at the workshops at some occasions, an ISP BEPP will not lead to de-coupling the different areas. A price differential just means the absence of price convergence – which is not a goal of the EB GL as such – it does not mean that markets are isolated and there is no competition between these markets. The argumentation that ‘effective’ competition is fostered by artificially increasing the moments of price convergence fully misses the driving forces behind competition. BSPs are pricing their bids with a lead-time of 25 minutes for a full validity period. BSPs at that moment have no view on the potential appearance of congestion, the size of the imbalance and their impact on the clearing price. Potential exposure to cross-border bids is a more forceful driver behind a competitive market when setting bids compared to a slicing of the validity period into numerous pricing sub-periods. Moreover, BSPs are still in competition even at times of congestion, as part of the imbalance energy may already have been activated across borders prior to the occurrence of congestion. As a result, if BSPs would have increased their pricing in the expectation of congestion, they may simply forego activation as they have moved too far in both the Common Merit Order List and Local Merit Order List. This is very similar to the day-ahead market, where also competition – and its price effect – is present in times of price decoupling. On the contrary, by undermining the marginal pricing (pay-as-cleared) principle through the use of control cycle “BEPP”, the Pricing Proposal is actually reducing the effective competition as the incentive for BSPs to bid at marginal price is being reduced.
An optimisation cycle BEPP would increase complexity and reduce visibility in the pricing of balancing energy

The optimisation cycle BEPP would entail a significant increase in data and complexity for both BSPs and BRPs. The TSOs claim it will be simpler from an algorithmic perspective. However, such an exponential increase in data to process and check would be problematic for market participants. It furthermore poses questions in terms of transparency towards BRPs, as the imbalance settlement price will be partially determined by the outcome of the 225 clearings of each activation cycle. This would be detrimental to the transparency of the imbalance settlement price.

The optimisation cycle BEPP would result in 151,200 clearings per week (against 672 for a 15-minute BEPP) that can differ from BSP to BSP as their bids may or may not be included in any of the 151,200 clearing outcomes. The necessary IT infrastructure and operational requirements to perform the necessary checks would pose an entry barrier to smaller market participants. True Pay-as-Cleared schemes are proved to be conductive to market entry, any departure from it should be considered a step backward for ease of market entry.

The TSOs also claim that the optimisation-cycle BEPP of 4 seconds will be more transparent. However, the TSOs have not included binding transparency requirements in their proposal. Judging from experience on, e.g. day-ahead flow-based market coupling, getting full transparency on TSO data in a way that enables market participants to use it for their modelling is particularly difficult (even with precise regulatory requirements in the example of flow-based).

The fear of short price spikes should not be a reason to justify an optimisation-cycle BEPP

We also do not agree with the concern raised in the consultation document regarding the problems posed by the potential occurrence of price spikes when using a quarter-hour BEPP. The simplistic transposition of currently observed prices to a newly defined market using Pay-as-Cleared is misleading.

Similarly, there is no clear reason why congestion during a sub-ISP period should be isolated to this period. Price convergence should not be achieved artificially by measuring it during a finer time-resolution. If at any moment during an ISP, the activation of a local bid is required for congestion reasons, such congestion should be reflected towards BSPs and BRPs during the relevant Imbalance Settlement Period.

The application of the 4-sec BEPP for settlement remains unclear

It is unclear, how an optimisation cycle BEPP should be combined with metered TSO-BSP settlement with a 4-second BEPP. Which volumes should be used for settling at variable marginal prices throughout the ISP? The BSP will deliver the activated balancing energy within the FAT (with or without ramping constraint), but not within the BEPP relevant for pricing. A BSP that is activated for two BEPPs (with different prices) within one ISP will have a certain volume of balancing energy delivered that has to be
somehow split between the two prices. From our point of view, there is no straightforward way to do this.

*Market participants need to maintain trust in the overall consultation process*

Process-wise, EFET regrets the choice of the optimisation cycle BEPP despite a clear preference of market participants for the 15-minute BEPP and the understanding from the workshop of 20/21 June 2018 that mitigating measures are being investigated. None of this is reflected in the Pricing Proposal or the Explanatory Document.

**Article 6.2:** The XBMP for selected standard aFRR balancing energy product bids in positive direction in an uncongested area shall be equal to the highest price of all selected standard aFRR balancing energy product bids in positive direction in the same uncongested area.

When changing the BEPP to 15 minutes, Article 6.2 needs to be reformulated, to ensure that any activations occurring before the congestion remain relevant for determining the respective XBMPs. This holds for all uncongested areas a certain TSO area has been part of during the ISP, the XBMP has to be the maximum of any uncongested XBMP and the XBMP of the congested situation of the same ISP.

With the example in Figure 2 of the explanatory document happening within one ISP, first uncongested than congested, the marginal price for area A should be MP_A set at by A2, but the marginal price for area B should be MP_AB instead of MB_B. The activation of B4 within the ISP must not be ignored.

**Article 6.3**

Amend along the lines of our comment on article 6.2.

**Article 7:**

**Article 7.1:** Each TSO using specific products and submitting them to the common merit order list as a result of a bid conversion shall determine the price for the specific product bids representing the selected standard product bids.

The conversion of specific products into standard products and their inclusion in the CMOL poses questions, as these bids will be governed by different terms and conditions, set at national level. The pricing methodology for specific products that are converted to standard products for participation in the CMOL should therefore be more prescriptive. There should be specific and binding rules on how specific products have to be priced if they are to be admitted to the CMOL through a bid conversion mechanism. This should include elements such as marginal pricing (pay-as-cleared), Balancing Energy Gate Closure Time, and minimum and maximum delivery time.

It also raises the question why TSOs use these specific products if they can be easily converted into standard products.
Article 8:

Article 8.1: Each standard balancing energy bid selected for system constraint purpose shall be remunerated with its bid price if it fulfils the following criteria

- (a) The bid is selected by the AOF in an optimisation with activation for system constraint purpose.
- (b) The upward bid price is higher than the XBMP of an optimisation without system constraint purpose but otherwise identical input parameters as the optimisation in (a).
- (c) The downward bid price is lower than the XBMP of an optimisation without system constraint purpose but otherwise identical input parameters as the optimisation in (a).

We agree with the pricing proposal put forward by the TSOs for bids activated for other purposes than balancing, i.e. remuneration Pay-as-Cleared unless the bid is the marginal bid, in which case it is remunerated Pay-as-Bid.

We refer to our response to the consultation on Activation Purposes for further reflection on the reasons for activation of balancing energy bids for other purposes than balancing (the categorization “system constraints” is too vague).