

Position Paper

Public Consultation on the proposal made by all Transmission System Operators on the pricing methodology for balancing energy and cross- zonal capacity

Berlin, November, 18th 2019

1. Introduction

The German Association of Energy and Water Industries (BDEW) represents ca. 1,900 members of the electricity, gas and water industry.

In the energy sector, BDEW represents companies active in generation, trading, transmission, distribution and retail.

BDEW welcomes the opportunity to comment on ACER's proposals on the pricing methodology for balancing energy and cross-zonal capacity and the efforts undertaken in this project.

As the German TSOs organized within BDEW are, among others, responsible for the original drafting of the proposal, the following BDEW comments have been developed without the German TSOs.

2. Questions

TOP 1 Balancing energy pricing period

In the Proposal on pricing methodology the TSOs introduce the term balancing energy pricing period ('BEPP'), which, in accordance with Article 2(2)(d) of the Proposal on pricing methodology is defined as follows:

“balancing energy pricing period’ means a time interval for which cross-border marginal prices are calculated.”

In their letter sent to ACER, the RAs agreed that the timing of the BEPP in Articles 4, 5, 6, and 7 of the Proposal on pricing methodology should be clarified to be consistent with the market time unit as defined in Article 2(19) of Regulation 543/2013, i.e. ‘market time unit’ is: “the period for which the market price is established or the shortest possible common time period for the two bidding zones, if their market time units are different.”

The BEPP definition proposed by TSOs is consistent with the market time unit definition provided in Regulation 543/2013, hence the Agency proposes to not use the term BEPP, but instead the term market time unit ('MTU'), defining it for each process (e.g. aFRR MTU, mFRR MTU, RR MTU).

Regarding the duration of the BEPP for the different processes, the Proposal on pricing methodology set it equal to the imbalance settlement period ('ISP'), i.e. 15 minutes, for the platforms for the exchange of balancing energy from replacement reserve ('RR') and mFRR, and equal to the optimisation cycle of the Activation Optimisation Function ('AOF') for the platform for the exchange of balancing energy from frequency restoration reserves with automatic activation ('aFRR').

One regulatory authority has expressed concerns that if the aFRR MTU would be set to optimisation cycle this would distort incentives on both balancing service providers ('BSPs'), to provide bids and actually deliver activated volumes, and on BRPs to support system balance. The incentives on both BSPs and BRPs are best achieved if the imbalance price is equal to

the balancing energy price and the latter being equal to the marginal price of either the positive balancing energy or the negative balancing energy. Another concern with the aFRR MTU equal to optimization cycle is that it could incentivise BSPs to add mark-ups above their marginal costs as a price per optimisation cycle pays each bid effectively a different average price for the volume delivered per ISP. The concerned regulatory authority, therefore proposes that the aFRR MTU is set to 15 minutes and the CBMP would be the outcome of a “multi-round auction” determining the final marginal price after the end of the 15 minutes period per uncongested area and per direction. This regulatory authority is of the view that in such a setup, positive and negative balancing energy would be paid the marginal price equal to the respective selected bid (maximum or minimum depending on whether it’s positive or negative balancing energy) if activated in the same 15 minute period. Such an approach would be compliant with the EB Regulation as it provides either one (positive or negative) or two (positive and negative) prices per imbalance settlement period.

The Agency observes that the proposed aFRR MTU by the TSOs equal to the optimisation cycle is also legally compliant with the EB Regulation as it establishes at least one price, per imbalance settlement period (Article 30(1)(c) of the EB Regulation) and sets the marginal price of all activated balancing energy bids in each activation cycle (Article 30(1)(a) of the EB Regulation). While the Agency acknowledges that the aFRR MTU equal to optimisation cycle does not achieve perfect incentive to BRPs to support system balance, it notes perfect incentive on BRPs to support system balance can only be achieved if all balancing energy products across different processes receive the same marginal price which is equal to the imbalance price. As regards the concerns with mark-ups, the Agency considers that each optimisation cycle applies marginal pricing principle and it expects that in the absence of market power, the competition between BSPs in each optimisation cycle will not give BSPs the opportunity to apply mark-ups on bid prices.

Finally, the Agency finds it important that aFRR prices are fully consistent with the aFRR cross-zonal exchanges (i.e. exchanges should always occur from low price areas to high price areas). As aFRR cross-zonal exchanges are determined within each optimisation cycle, the prices driving these exchanges must be determined by the same optimisation. In case the aFRR prices would be corrected after the end of the ISP, the consistency between prices and exchanges would no longer be ensured, hence aFRR balancing energy could often be exchanged from high price area to low price area, because the prices that determined the optimal exchanges would not be the same prices that would be paid for those exchanges. In the context of integrated balancing market, this would question the very basis of market integration which is to facilitate efficient cross-zonal exchanges.

1. Do you agree with the replacement of the term BEPP with MTU?

BDEW is opposing the usage of the term MTU for the aFRR-BEPP for the following reasons:

Firstly, the optimization cycle of the load-frequency controller is not a “market” time unit. Neither activities nor bids of market participants are based on this time interval. Thus, the term MTU is misleading as it implies a deliberate market action, which is not applicable in this case.

Secondly, if the MTU definition under Regulation 543/2013 would be applied for aFRR, it should then also consistently be applied for all the other provisions in Regulation 543/2013 accordingly. This would mean that TSOs would be required to e.g. publish data and forecasts on load, as well as the unavailability reportings on an optimization cycle basis. However, it is assumed that these consequences were not considered in the proposal.

In general, it is important not to confuse the terms and definitions used elsewhere (e.g. market time unit is differently defined in CACM).

2. Do you agree with setting the aFRR MTU equal to the optimization cycle? If not, how would you support the requirement for pay-as-cleared pricing and how would you address the inconsistency between the cross-zonal exchanges and the prices?

BDEW does not agree to set the BEPP according to the optimization cycle. Beyond previous arguments, additional reasons against the approach are explained in the following.

Firstly, setting the BEPP according to the optimisation cycle is suggesting an artificial accuracy as the determination of CBMP per optimization cycle according to the bid selection of the AOF is arbitrary. The BSP that is remunerated (in a metered TSO-BSP settlement scheme) is not the one that was actually activated and had its balancing energy accepted in subsequent BEPPs. The same holds for the determination of a congested situation (which is highly relevant for pricing). The criterion that is chosen to decide, whether a BEPP is declared congested or not, is the outcome of the momentary AOF selection result reflecting TSO demands and current usage of CZC. This is just a snapshot that might never actually occur but be outdated by TSOs' controller dynamics and subsequent BSP activations affecting available CZC.

Secondly, with the optimization cycle BEPP as well as the ISP BEPP large volumes of balancing energy are settled at the bid price. While some of the non-AOF volumes actually originate from the discrepancies created by the control demand model chosen for realizing the exchange of balancing energy between TSOs, most of the volumes can be attributed to accepted balancing energy during deactivation of a bid in the following ISP. In fact, a BSP is facing different incentives (remuneration schemes) on delivering balancing energy, depending on the time of activation. Furthermore, it is unclear how these volumes and prices are reflected in the imbalance settlement.

As an alternative approach for the determination of the aFRR-CBMP we could consider a "sliding window" equal to the FAT (not to be mistaken with three BEPPs of 5 minutes per ISP). The CBMP per optimization cycle is calculated as in the current proposal, but it is preserved for the full FAT (5 minutes) or until a higher price was reached in a subsequent BEPP. This way the actual dynamics of the aFRR process are reflected in the pricing. At the same time this approach can be applied across ISP boundaries to guarantee a consistent marginal pricing remuneration of all accepted balancing energy, which is required for BSP bid preparation. No ex-post reward for bids activated earlier in the ISP would occur as it would be need with an ISP BEPP. Finally, the concern related to an ISP BEPP of setting a high price for the full ISP by short activation spikes will be alleviated.

TOP 2: System constraints

The TSOs in the Proposal on pricing methodology specify additional provisions for pricing the standard balancing energy product bids selected for system constraint activation purpose. TSOs propose two optimisation runs to distinguish bids activated for balancing energy and bids activated for system constraints, specifying different pricing rules for the two: marginal pricing and pay-as-bid (in case the marginal price is lower than the bid price), respectively.

The RAs could not conclude on whether the approach proposed by the TSOs properly meets the requirements of the EB Regulation, with respect to marginal pricing, or if all the selected bids should be priced at the marginal price of a single optimisation run. In the annex of their letter sent to ACER, they included arguments in favour of both options.

According to the section 4.4 of the explanatory document supporting the Proposal on pricing methodology, the selection of bids for system constraint purposes “can be used in cases, where the cross-zonal capacity which was already allocated to market participants in the previous time frames exceeds the physically available cross-zonal capacity.” To Agency’s understanding, this reason represents a situation where already allocated capacities ('AAC') is higher than net transfer capacity ('NTC'), which implies that available transfer capacity ('ATC'), calculated as $NTC - AAC$, is negative. Therefore, the proposed setup for the use of “interconnection controllability” can be expressed as setting the ATC to a negative value. In case such modification is known to TSOs before the auction that determines the activation of balancing energy bids, these modified cross-zonal capacities ('CZC') should be used for the auction in order for the market outcome to reflect true fundamentals at the time of market clearing.

Given that, pursuant to Article 30(1)(d), the pricing methodology should “give correct price signals [...] to market participants”, and since the available CZC is one of the fundamentals affecting the price signals, the cross-border marginal balancing energy price ('CBMP') should be calculated taking into account the actually available CZCs, pursuant also to Article 37(1) of the EB Regulation. The approach proposed by the TSOs does not respect this principle, since the proposed calculation of CBMP does not reflect the fundamentals (available CZCs). To this end, the Agency notes that in a zonal market model any cross-zonal congestion should affect the marginal prices with the zones, whereas the congestion inside the zones should not affect the zonal marginal prices.

Therefore, The Agency proposes to delete the provisions for pricing bids selected for system constraint purposes and treat all bid selections on the platforms as activations for balancing energy purpose, pricing them all at the CBMP.

3. Do you agree that the purpose of using balancing energy bids for system constraints should be considered as an update of the CZC?

We are not concerned with the actual labelling of the process, be it the update of CZC or the interconnector controllability as long as it is not balancing. This, however, seems to have changed compared to the original TSO proposal, where interconnector controllability was

clearly an activation purpose other than balancing and not included in the CBMP. These actions, whatever the cause for negative ATCs is, are definitely responding to system constraints.

4. Do you agree that the CBMP should reflect actually available CZC at the time of the auction?

We assume that the auction in question is referring to the balancing energy auction that is taking place close to real-time. The CBMP should, however, reflect actual congestions on the available CZC occurring after AOF selection and cross-zonal activation of bids. While the CZC and the respective “supply” for each bidding zone is known at balancing energy gate closure time, the (TSO) demand is only available in real time. This is when the clearing takes place.

If auction is referring to the AOF clearing in each optimization cycle, as stated previously, a CBMP determined with a FAT BEPP would be most appropriately reflecting the actual congestion situation.

TOP 3: Pricing of SA and DA mFRR bids

The Proposal on pricing methodology specifies two different pricing rules for SA and DA mFRR bids. The CBMP for SA mFRR bids is the marginal price of all selected SA mFRR bids resulting from the AOF, which performs the SA mFRR auction. After the SA mFRR auction, the activations of DA mFRR bids are held on a continuous basis and the CBMP for DA mFRR bids is defined as:

(a) For delivery during the ISP in which DA mFRR bid was activated: the marginal price of all selected DA mFRR bids (being the highest bid price of all selected DA mFRR bids for positive balancing energy, or the lowest for negative balancing energy, respectively) or the CBMP from SA mFRR auction, whichever is higher in case of positive balancing energy, or lower in case of negative balancing energy, respectively.

(b) For delivery in the next ISP: the marginal price of all selected DA mFRR bids (being the highest bid price of all selected DA mFRR bids for positive balancing energy, or the lowest for negative balancing energy, respectively) or the CBMP from SA mFRR auction of the next ISP, whichever is higher in case of positive balancing energy, or lower in case of negative balancing energy, respectively.

Taking into consideration the concerns for having sufficient liquidity for the mFRR product, as well as providing incentives to BSPs to offer DA mFRR bids, the Agency supports the proposal of TSOs and does not see the need to amend the Proposal on pricing methodology with respect to pricing of SA and DA mFRR bids.

5. Do you agree with the proposed approach for pricing SA and DA mFRR bids?

BDEW does not agree with the proposed approach for pricing SA and DA mFRR bids, as the BSP cannot know in advance if the bid is required for one or two ISPs. This does make pricing balancing capacity highly unclear. Furthermore, the question should be answered how bids for mFRR balancing energy can be differentiated between scheduled activated and direct activated bids. Thereby it should be considered that a direct activation can make a scheduled activated bid invalid.

To improve the functioning of the mFRR joint activation process and avoid costly complexity, we strongly recommend that the system should be built around the Scheduled Activation (SA) product only. An accurate dimensioning of automatic and manual reserves, especially as the two processes would be running in parallel, would in our view make Direct Activation (DA) of the mFRR product unnecessary. Restricting the standard mFRR product to SA would benefit the system by significantly reducing complexity, lowering cost, and improving transparency. We recommend deleting this definition and adapting Article 7 accordingly. In case both scheduled and direct activatable bids are nonetheless maintained in the proposal, we are concerned about consequences for trade, especially on CMOL definition and functioning.

The proposed pricing approach appears to be the only remaining solution, when maintaining the two activation options. As detailed in our response to the ISH proposal, the impact of mFRR-DA prices and volumes in both ISPs on the imbalance settlement needs to be clarified.

TOP 4: Technical price limits

Pursuant to Article 30(2) of the EB Regulation *“in case TSOs identify that technical price limits are needed for efficient functioning of the market, they may jointly develop as part of the proposal pursuant to paragraph 1 a proposal for harmonised maximum and minimum balancing energy prices, including bidding and clearing prices, to be applied in all scheduling areas.”*

The Proposal on pricing methodology does not include any technical price limits. However, in the annex of their letter sent to ACER, all RAs questioned why TSOs do not identify technical price limits as needed for an efficient functioning of the market, as they prevent the occurrence of erroneous prices. RAs agree with the inclusion of technical price limits, which should not limit prices that are the result of a normal functioning of the platforms.

Based on consultation with RAs, the Agency proposes to set a technical price limit that should not affect the balancing energy market. Therefore, the Agency proposes to set it equal to 99,999€/MWh.

6. If not, what price limit do you consider as not interfering with the balancing energy market results?

BDEW agrees with the proposed technical price limit.

TOP 5: Pricing volume during deactivation of aFRR bids

The Proposal on pricing methodology identified two cases where accepted volume from an aFRR bid is priced differently to CBMP. The first case is a general one, specified in the Articles 3(5) and 3(6) of the Proposal on pricing methodology, where the general pay-as-bid rule is described for each positive accepted volume with a bid price higher than the CBMP (and negative energy volume with bid price lower than the CBMP, respectively). The second case is specified in Article 7(6) of the Proposal on pricing methodology and refers to the accepted bid energy volume from aFRR bid that has no bid price for the respective BEPP. In this latter case, each TSO, according to the Proposal on pricing methodology, will ensure the pricing of this bid in accordance with the terms and conditions for BSPs.

Both cases refer to the accepted energy volume of a bid during deactivation. The first case is when deactivation takes place during the ISP equal to the validity period of the bid (i.e. the bid was activated and then deactivated within the same ISP). The second case covers the deactivation after the end of the ISP related to the validity period of the bid (i.e. the bid was activated in one ISP and its deactivation still delivers energy in the next ISP, where the bid price is no longer valid). The Agency understands this difference in the two cases, but given that the activation (preceding the deactivation) was determined by the bid's price, the accepted volume is regarded as having the bid price, even though the bid validity period has expired. Therefore, the Agency proposes to align the pricing of the two cases, which is that during the deactivation of aFRR bid, the accepted volume of such bid will be settled at a price equal to CBMP of the given optimisation cycle or its bid price whichever is higher in case of positive balancing energy, or whichever is lower in case of negative balancing energy, respectively.

7. Do you agree with aligning the pricing in these two cases as proposed by the Agency? If not, please specify and justify your preferred solution.

Generally, BDEW agrees with aligning the pricing of energy volumes for deactivating bids. With the alternative FAT-BEPP approach, as proposed in our answer to question 2, no further alignment between the described cases and no distinction between CBMP and bid price would be required. In case of an ISP-BEPP, all of the accepted volumes in the first case will be priced with the CBMP, an alignment with the second case is not immediately obvious.

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