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Response of EnBW Trading GmbH on the draft ACER consultation paper "Framework Guidelines on Electricity Balancing"

General remarks

We support the aim to create a non-discriminatory, competitive and efficiently functioning internal energy market. In this respect the draft framework guidelines (and the corresponding network code) on electricity balancing can be considered as another important part in the set of network/market design codes. Insofar we also see need that a strict coherence between the various network codes is ensured

Regarding balancing, we believe that it should be driven by efficiency, particularly by using all possibilities of cross-border trade. For example we support that there should be no reservation of cross-border capacity for balancing. For any remaining balancing needs, a harmonised balancing regime is important, taking into account the market needs while respecting security of supply.

Furthermore, we are very sceptical regarding the notion in the FG to "require TSOs to promote the offer of unused generation capacity after day-ahead and intraday market in the balancing markets" is misleading. For an efficiently functioning balancing market a compulsory participation is not necessary.

Currently, we see various national balancing models that are more or less developed. We believe that well working systems should be recognised and features taken into account when drafting the framework guidelines. Thus we believe that any measures should be subject to a detailed cost-benefit analysis before final implementation. This cost-benefit analysis should be performed in close cooperation with the market to ensure a proper assessment of all directly and indirectly inflicted costs. This is relevant as the FG includes different concepts that may lead to similar results causing different costs (particularly in implementation); they may even be overlapping and thus consistency needs to be ensured. Examples are the concepts of imbalance netting, "incentivising of BRPs to support the system's balance in an efficient way", introduction of short term balancing energy markets as well as possible use of variable energy prices in balancing reserves. The costs and risks for implementation of the proposed changes differ significantly. Hence, particularly the benefits of major changes to the market design (likely to be more costly and risky) should be certain and should clearly outweigh the associated costs.

In any case the balancing system should not lead to a reduced attractiveness of balancing reserves resulting in a reduced participation in the market with increased costs for providing the reserves (capacity price). Against this background we are not convinced that the proposed rules for procurement of balancing reserves are yet clear enough to be implemented. For example:

- does the proposed pricing method (marginal pricing) also apply to reserve capacity auctions;
- how the distribution of costs for capacity should be done, particularly considering margins;
- how shall regional security levels be ensured and the dimensioning of reserves be determined.

Finally, we believe that it is important to clarify which provision actually does relate to which product (the draft text is not always clear).

Q1: Do you consider that harmonisation of the pricing method is a prerequisite to establish a TSO-TSO model with common merit order list for balancing energy? Do you support the use of the pay-as-cleared principle?

When considering the long-term model of a fully integrated balancing market with central activation of balancing energy, harmonisation of the pricing method is essential.

However, during intermediate steps a strong cooperation between TSOs and competition among associated BSPs should be fostered in order to achieve overall benefits. Harmonisation during this transitional period (which will certainly last for several years) has to be done carefully and in particular any market distortions need to be avoided.

The FG does not include any motivation and justification for defining pay-as-cleared (marginal pricing) as the common pricing method for balancing energy. We believe that findings from day-ahead market supporting marginal pricing are not applicable to the balancing energy market and we will give an example where marginal pricing has adverse effects to the total system cost and the transparency of settlement.

As bidding behaviours under different market designs is hard to predict it is also difficult to predict the overall benefits of the various pricing systems. Furthermore, conclusions or theoretical considerations drawn from day-ahead markets cannot easily be applied to balancing energy auctions. Day-ahead markets and balancing energy markets differ significantly, as in coupled day-ahead markets the preconditions for all market participants are fairly similar (weekday structure, major holidays, seasons, fuel prices), while the reasons for imbalance that are causing demand for balancing energy are short-termed and local (e.g. plant outages, wind flanks, cloud coverage, accounting errors). Also, in day-ahead market coupling the common demand is aggregated and the settlement algorithm can avoid ill side-effects that can be introduced by the necessarily sequential ("greedy") activation of balancing energy.

In general, activating the least expensive units for balancing from a common merit order will lead to efficiency in generation costs, regardless of the pricing method used in settlement. This efficiency has to be preserved by the pricing mechanism. In the example given in the Annex, a situation is described where CMO activation with marginal pricing will lead to an increase of total (not individual) cost compared to the no-integration case and unreasonable additional costs for some BRPs.

A system where additional costs on one side exceed the savings elsewhere cannot guarantee to be efficient in the long run. For example, imbalance netting (IGCC) has a "price-damping effect" in every situation and will, therefore, be advantageous for all participants.

Furthermore, prices for imbalance settlement have to be fair, reproducible and comprehensible. Effects for imbalance are local and should be charged locally. However, we are of the opinion that a system with marginal pricing would cause "smearing effects" in imbalance pricing.

With pay-as-bid settlement, the advantage in generation costs, by activating the least expensive units, will be preserved. Also, with a pay-as-bid pricing system a more seamless integration with the continuous (i.e. pay-as-bid) intraday market can be expected.

Q2: Do you think the "margins" should not exceed the reserve requirements needed to meet the security criteria which will be defined in network code(s) on System Operation?

The concept of security margins is a useful measure for a step-by-step approach to integration, giving full respect to system security.

As mentioned in the opening remarks, we consider the topics dimensioning and procurement (incl. payment) of balancing reserves not sufficiently detailed in the FG. Therefore, the assessment of margins, as an integral part of procurement of reserves, is difficult.

Q3: Do you support to aim at similar target models for frequency restoration reserves and for replacement reserves? Do you think a distinction should be made between manually activated and automatically-activated frequency restoration reserves in terms of models of exchanges and/or timeframes for implementation?

Yes, we think that a distinction should be made between manually activated and automatically-activated frequency restoration reserves. Without a full integration of balancing markets a harmonisation of automatically activated reserves is technically and organizationally cumbersome. On the other side balancing energy with an activation duration of an entire balancing period (manually activated) can easily be shared and settled among TSOs; as there is always a unique assignment of bids to TSO per balancing interval.

We are of the opinion that imbalance netting, as an equivalent for automatically activated FRR, can be applied with minor technical and regulatory modifications. And this imbalance netting would avoid most of the inefficiencies in activation of balancing energy ("contrary activation" where one TSO uses upward regulation and another TSO uses downward regulation at the same time).

Q4: Do you support the timeframes for implementation?

We generally support the proposed timeframes. In order to address the complexity of balancing frameworks we would see a pragmatic step-wise approach with specific milestones where also cost-benefit checks can be done serving as indicator for possible adjustment needs I the further implementation process.

Q5: Do you consider regional implementation objectives as relevant milestones which should be aimed at in these framework guidelines on electricity balancing and the Electricity Balancing Network Code(s)?

Yes we would support this as balancing is of regional nature recognising the responsibility of local TSOs. Thus we think that regional initiatives such as the IGCC are a pragmatic approach which could serve as good model which should be extended further across the EU. Experience with the IGCC shows that e.g. pragmatic and easy to implement measures such as the imbalance netting do lead to quick results.

Q6: Do you consider important to harmonise imbalance settlement? Do you think these Framework Guidelines on Electricity Balancing should be more specific on how to do it?

Generally, we agree that harmonisation of incentives is necessary and thus we support a single symmetric imbalance price.

We appreciate that the FG acknowledges the fundamental connection between costs for balancing and imbalance pricing that is essential for a non-discriminatory, transparent, fair and objective settlement of imbalances. This relationship might even be stressed more clearly.

We also think that the imbalance settlement period should be set at 15 minutes, as this allows for a fair cost allocation, in line with the "scheduling world". For a realistic and fair pricing of actually delivered balancing energy an even shorter period (down to 1min) is necessary.

Annex

Example of a bilateral TSO-TSO Balancing market with CMO and marginal pricing

This is an example of the effects of the pricing method in a TSO-TSO model with CMO. Each TSO makes bids of local BSPs available in a CMO.

A		
Gen	**MWh**	**Price**
G10	20	51,0
G11	210	51,5
G12	30	52,4
G13	10	53,0
Bids blocked (security margin to be used solely by TSO A)		

B		
Gen	**MWh**	**Price**
G20	20	46,0
G21	30	47,0
G22	10	48,0
G23	25	49,0
G24	50	50,0
G25	10	51,0
G26	40	53,0
G27	20	54,0
Bids blocked (security margin to be used solely by TSO B)		

This example can be applied only to reserves with a unique assignment of bids to TSO per interval (manually activated FRR and RR).

TSO B needs 175MWh, TSO A later needs 230MWh

TSO B will first activate G20 – G25 of area B, plus G10 and 10MWh of G11 of Area A
TSO A will then activate the rest of G11 and G12

The interconnection is not congested, common settlement price is 52.4 €/MWh

Total system cost

Without integration
TSO A activates G10 and G11 at a total cost of 230 * 51.5€/MWh = 11845 €
TSO B activates G20 up to G26 at a total cost of 175 * 53.0€/MWh = 9275 €
21120 €

With integration
TSO A settles with a total cost of 230 * 52.4€/MWh = 12052 €
TSO B settles with a total cost of 175 * 52.4€/MWh = 9170 €
21222 €

In total, integration with marginal pricing increases the total system cost in this situation by 102€.

BRP settlement

BRPs in area A will have an imbalance settlement price of 52.4 €/MWh instead of 51.5 €/MWh, solely because of balancing integration.

- Imbalance pricing should be reasonable and reflect (only) the costs induced by the respective system status.

Settlement with pay-as-bid

It has to be ensured, that the sequence of activation does not have an effect on settlement -- as it is done with settlement according to the most expensive locally activated bid in marginal pricing. In pay-as-bid the same feature can be achieved by decoupling activation from Inter-TSO settlement.

- Activation is based on the CMO
- Initial settlement is done TSO-specific – every TSO selects his least expensive bids
- Settlement is then done by remaining optimization along the CMO, as in activation

In the example TSO A will pay for G10 and G11, TSO B will pay for the rest and will still benefit from G12 over G26. Total system is cost 15€ (10MWh * (53 – 51.5)€/MWh) less than without integration.

The TSO settlement can, in fact, be based on different bids than the activated ones, but each TSO's cost will not exceed his costs without integration. This way the most efficient generation will activated, the maximum welfare is achieved and the total cost will always be smaller than without integration.

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