Comments of EnBW Energie Baden-Württemberg AG on the Revised Network Code on Electricity Balancing

The Network Code on Electricity Balancing is a cornerstone for the development of a fully integrated and well-functioning European energy market. In particular with an increasing share of intermittent generation, a reliable balancing mechanism is required to adequately cover the balancing needs. Furthermore, through appropriately defined market roles and responsibilities, the balancing system should provide the necessary incentives for market parties to become active in all markets across the timeframes (forward, day-ahead and intraday).

In order to achieve this, we would like to address the respective requirements in the following key messages that should in fact be reflected throughout all the relevant Network Codes. We also provide comments on specific provisions of the revised Network Code on.

Clear market roles are essential for well-functioning markets

Each Balancing Responsible Party (BRP) is responsible for his individual balance of generation and load. In order to fully meet this responsibility, **BPRs need to be given the maximum possibilities to balance their position up to real-time**. This also means that market participants need to incorporate short-term forecasts into their load/generation schedules, leading to a minimization of the remaining need for balancing energy. Subsequently, TSOs should "only" be responsible to cover the residual imbalance. The necessary balancing services for this task are provided by BSPs which do meet the specific requirements and should be procured in a market-based way.

In this context we would also like to emphasize that a key element of a common European electricity market is the way the dispatch is organized. We are of the strong opinion that the so-called self-dispatch should be the leading approach and the clear target model, where generators, storage operators and demand response operators compete on an equal basis. Self-dispatch also ensures a clear separation of market roles, especially between BSPs (offering balancing services) and TSOs (purchasing balancing services).

Most integration benefits originate from well-functioning and coupled intraday markets

The incentives for BRPs set out by the balancing mechanism should strongly encourage market participants to become active in the intraday market; i.e. in order to provide this incentive relying on the balancing mechanism needs to be more expensive than self-balancing by being active on the intraday market.

All of the short-term flexibility should become available in the intraday market. With the integration of intraday markets throughout Europe the needed flexibility can be put to the best use where it is required. Most of the expected gains (€3 bn per year) from integration of balancing markets as modelled in the Impact Assessment for the EU Commission¹ can in fact be realised through improved intraday market functioning and integration. Hence, the goal should be that with every development in the balancing system, intraday markets should also be strengthened.

¹ Mort Mac Donald, 2013, "Impact Assessment on European Electricity Balancing Market", Available at: http://ec.europa.eu/energy/gas_electricity/studies/doc/electricity/20130610_eu_balancing_master.pdf.

Already today a large contribution to the short-term correction of the system imbalance comes from intraday trading. Most of the trading activity is taking place shortly before Gate Closure Time, reducing the resulting TSO balancing needs.



Intraday transactions at EPEX Spot (German price are; 01/2013 - 07/2014)

Balancing energy market reduces liquidity in the intraday market

With extending the submission of balancing energy bids up to real time, a similar and most likely overlapping market to the already existing intraday market would be established. This will have adverse consequences on intraday market liquidity and prices.

The current gate closure times for BRP activity allow trading and position changes up to 15 minutes before real-time. A balancing energy market will either run in parallel with local intraday markets or gate closure times for local intraday markets (PX and OTC) and position changes would need to be moved away from real-time. **Neither of these options is acceptable, as existing liquid intraday markets markets need to be preserved.**



Additionally, the **resulting incentives for BRPs (via the price for imbalance settlement) to stay in balance would be clearly reduced**, as in most situations the imbalance prices will actually resemble the prices at intraday and day-ahead markets. In a system where the prices for balancing energy are fixed at the procurement of reserves, uncertainties regarding plant availabilities, provision and pricing are incorporated in the energy price. This is similar to a risk premium for short-term flexibility, which a BRP has to pay when unduly relying on the balancing mechanism; this premium is passed on to BRPs via the imbalance settlement process.



Thus, EnBW strongly recommends that any provision that could restrict intraday trading opportunities, in particular **introduction of a balancing energy market should only be designed as an option and not as an obligation** in the Network Code Balancing. A short term market for balancing energy can only be an intermediate step towards a liquid intraday market.

No pre-fixing of pricing method for balancing energy

Any expected benefit of the introduction of a marginal-pricing (pay-as-cleared) scheme for settlement of balancing energy on the resulting BRP incentives (as opposed to pay-as-bid) is depending on unpredictable reactions of market participants' bidding behavior. An established market design with pay-as-bid pricing can deliver equivalent incentives for BSPs and BRPs. With regard to general applicability for all balancing products and across TSOs, marginal-pricing causes a lot more difficulties and unwanted side-effects than pay-as-bid (see below). Hence, an initial provision of marginalpricing is not justified.

The prices for imbalance settlement should reflect the cost of recovering the respective BRP imbalances per LFC area/block. However, with marginal pricing the imbalance prices are not linked to the imbalance of the relevant area. In the previous version of the Supporting Document to the Network Code these adverse BRP incentives were explicitly stated ("BRPs might tend to balance themselves out over the uncongested area and not per LFC Area."). To avoid these issues, the Balancing Pilot Project 7 (establishing a CMO with marginal-pricing) intends to resort to a method called "local marginal pricing" that has other short-comings. BSP settlement is done according to the reserverequesting TSO, resulting in a situation where two BSPs connected to the same TSO are receiving different marginal prices. In a pay-as-bid settlement scheme seamless CMO integration is possible, without any adverse side-effects. Similar problems arise when applying marginal-pricing across multiple products.

Furthermore, several practical questions remain open on how to apply marginal pricing for continuously activated reserves, without obtaining arbitrary price signals. Settlement of balancing energy according to marginal-pricing is only considering the last activated bid, while pay-as-bid is using the energy-weighted average cost per Program Time Unit (PTU) instead. BRP imbalance settlement, on the other hand, is based on a BRP's average imbalance per PTU. Therefore, on a PTU-basis marginal-pricing does not reflect the respective imbalance situation (as also requested in Art. 52.1(a)).



We are of the strong opinion that any pricing method for Balancing Energy products should be thoroughly evaluated in the course of the required cost-benefit analysis. **There should not be an initial pre-fixing of a specific pricing method within the Network Code**, but rather be based on the outcome of the CBA.

Efficient harmonisation requires a considerate and gradual implementation

Currently, a number of different balancing arrangements are in place across Europe, each one adapted to the technical and legal requirements of the corresponding area. **We believe that the harmonisation of basic principles will in many cases be sufficient to foster integration of Europe-an electricity markets.** Furthermore, with relatively small adjustments a large portion of the potential gains can be achieved already without having to fully change systems. Any subsequent change needs to be carefully considered for the remaining potential benefit (e.g. with restricted cross-border capacity either cross-border exchange of balancing energy or imbalance netting can be utilized).

For example, several successful pilot projects, such as IGCC, have demonstrated that large benefits can be achieved easily, even between different balancing regimes. Thus, the potential benefit of any subsequent change to an existing system needs to outweigh the implementation costs and risks. Therefore, we propose a gradual implementation of balancing integration based on thorough costbenefit analyses.

Comments on specific Articles of the revised draft Network Code

Article 32 (BALANCING ENERGY GATE CLOSURE TIME)

- No. 4: A Balancing Energy Gate Closure Time shall:
 - (a) be after the Intraday Cross Zonal Gate Closure Time for manually activated Balancing Energy bids and avoid cross-zonal Intraday Market and Balancing Market taking place at the same time;
 - (b) ensure sufficient time for common processing of Balancing Energy bids; and
 - (c) ensure sufficient time for all TSOs of a Coordinated Balancing Area to perform all processes linked to the activation of Balancing Energy bids.

Reasoning:

We strongly recommend that any provision that could restrict the possibilities to self-balance in the intraday markets (local and cross-zonal) should be omitted. To preserve existing intraday markets operating close to real-time, the option of not introducing a balancing energy market – with the goal of avoiding "Intraday Market and Balancing Market taking place at the same time" – should be left open.

Article 39 (PROCUREMENT OF BALANCING ENERGY)

No 2: No later than one year after the entry into force of this Network Code, all TSOs shall develop a proposal for the pricing methods of each Standard Product for Balancing Energy. These pricing methods shall be based on marginal pricing (pay as cleared), unless TSOs complement the proposal with a detailed analysis demonstrating that a different pricing method is more the efficiency for European-wide implementation pursuing the general objectives defined in Article 10.

Reasoning:

We do not think that pre-defining one specific pricing method in the Network Code is an appropriate and efficient approach. Rather, we believe that the decision for a specific pricing method needs to be based on a thorough cost-benefit analysis.

Chapter 4, Article 43 (RESERVATION OF CROSS ZONAL CAPACITY FOR TSOs)

We propose to delete Article 43.

Reasoning:

We are of the opinion that the reservation of cross-border capacities by TSOs for balancing purposes should not be allowed, as such a reservation would withdraw transmission capacity from the market and thus reduce the ability for market parties to manage possible imbalances. Instead, we believe that the full available cross border capacity should be allocated to the market and used for forward capacity allocation, day ahead market coupling and cross border intraday trading. Any remaining unused capacity after the intraday gate closure can then be used for cross-border balancing.

Article 61 (IMBALANCE PRICE)

No 2: Each TSO shall determine the Imbalance Price:

- (a) for each Imbalance Settlement Period;
- (b) for each Imbalance Price Area; and
- (c) for each Imbalance direction.

Reasoning:

We strongly propose to have a single imbalance price. This single imbalance price is irrespective of the direction of the individual imbalance and irrespective of the type of portfolio (generation or demand).

Contact:

Market Design & Regulatory Affairs Email: Tel:

