

# The ten commandments of the wind industry on balancing markets

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As a general principle, the provision of balancing services should be provided voluntarily and be adequately remunerated, via market based mechanisms. These services should not result from mandatory requirements imposed by TSOs to all generators given the significant readiness costs that it would imply to upgrade wind power plants with such minimum capabilities

## PROCUREMENT RULES OF BALANCING SERVICES

### **1. Balancing capacity and balancing energy products should always be procured separately**

Some countries (e.g. Germany and Denmark for automatic Frequency restoration reserve- aFRR) require generators to have a contract for balancing capacity with a Transmission System Operator (TSO) in order to participate in the balancing market. The gate closure time for procuring balancing capacity has generally long lead times for which wind power producers cannot secure firm capacity (e.g. year ahead in Finland and the Netherlands, week ahead in Germany). Power generators should be allowed to offer balancing energy in the market without the need for a balancing capacity contract, as is the case in Belgium or in the Netherlands, where market players can bid balancing energy without a contract up to 1 hour before real time.

### **2. Upward and downward products should be procured separately**

Although there is a growing value to allow wind producers to bid for downward balancing, there is very little economic attractiveness for wind power generator to work at partial load in order to ensure upward capacity. The draft balancing guideline represents a good first step as it requires separate procurement of upward and downward regulation for secondary and tertiary reserves (automatic and manual frequency restoration reserves and replacement reserves, aFRR, mFRR, RR), which already happens in most countries. However, this is not the case for Frequency Containment Reserve (FCR) which is procured jointly in most countries, with some exceptions such as Ireland, Denmark and Belgium. A scheme for providing FCR, procured separately, on a voluntary basis and properly remunerated, should be explored.

### **3. Balancing products should be harmonized and shortened**

The duration of products has a high impact on the opportunity for wind power producers to offer balancing services. Balancing energy is in some cases procured on blocks of 1 hour, although some countries have time frames for FRR as short as 15 minutes (i.e. Italy, France and Belgium). Shorter timeframes can increase participation of wind power producers and are likely to reduce the overall cost of balancing.

### **4. Gate closure times should be shortened & harmonized across balancing areas**

The draft balancing guideline currently asks for a harmonization of the gate closure time for standard products (aFRR and mFRR), with a lead time not longer than 8 hours. Such a long timeframe would penalize wind power producers. WindEurope suggests a harmonisation to be set as close as possible to real time delivery for balancing energy, and not before the intraday market gate closure time.

## **5. The lead time for the procurement of balancing capacity should be shortened**

Shorter procurement timeframes for balancing capacity can help to reveal the true cost of balancing resources and will increase wind producers participation. One day ahead procurement could be a good compromised (note that Denmark has successfully introduced a lead time of 4 hours).

## **6. Aggregation of individual bids should be possible**

In addition to the move towards smaller balancing products foreseen in the Balancing Guideline (1MW for mFRR, vs. currently typically 5MW) allowing the participation of smaller units (especially demand side response), it is important that units can be aggregated while offering balancing services. Aggregated forecasts are more accurate, leading to a more reliable participation of wind power in balancing markets.

## **7. Delivery proof mechanism should be based on the available active power**

Currently the provision of control reserve is proven by comparing the real power production with the scheduled power production. This difference has to match the control reserve power. In the case of wind farms, this could be realized by down-regulating wind turbines or balancing them with storages. While this method has been applied during some demonstration projects in 2013 (Twenties), an alternative solution is to use the *available active power* mechanism. The latter is part of the grid codes in Ireland and Denmark, it is being considered in the UK and has been tested in various pilot projects (i.e. Regelennergie durch Windkraftanlagen, Germany; R2Wind, Belgium). This solution present economic potential and should be explored.

# BALANCING ACTIVATION COSTS AND IMBALANCE PRICING SYSTEM

## **8. Balancing capacity procurement costs should not be directly attributed to imbalanced parties**

According to the cost-causality principle, balancing costs (capacity procured + activated energy) should be allocated to the imbalanced balancing responsible parties (BRPs) through the use of imbalance charges. However, in several countries, balancing capacity procurement costs are disproportionally high. Possible reasons are:

- Sizing of reserves is not always optimal (e.g. conservative application of N-1 rule in small systems),
- Capacity is contracted to deal with network congestions (e.g. Italy, Great-Britain, Poland).

In addition, balancing capacity is generally contracted well before and for longer periods than the actual imbalances. Consequently, procurement costs of balancing capacity cannot be directly attributed to imbalanced BRPs. For this reason, balancing capacity costs are, in most cases, socialized among consumers while balancing energy costs are allocated to imbalanced BRPs through imbalance prices. WindEurope fully support this practice, in line with ACER's views. Finally, procurement rules should be optimized to

reduce as much as possible the cost of balancing capacity (cf. previous section), and converging the energy balancing cost to the overall balancing cost.

#### **9. Pricing of balancing products should be based on marginal pricing**

Overall, the terms of procurement do not allow the balancing energy prices to adequately reflect the scarcity value of balancing resources. The lack of marginal pricing is one barrier to such free price formation. While pay-as-bid pricing provides incentives to market parties to submit bids as close as possible to the expected marginal price (used in Germany, Belgium, Austria, Italy and Hungary), this is more difficult for small players that do not have the same possibilities to forecast prices. Moreover, no price caps should be applied on bid prices (e.g. regulated prices in France, Czech Republic and Slovakia).

#### **10. TSOs should use single pricing schemes without the use of penalties**

A dual imbalance price mechanism is supposed to give stronger incentives to deliver schedules as submitted. However, it could also incentivise strategic gaming behaviour (i.e. bidding towards system imbalance) and may excessively penalise wind energy generators, as wind forecasting can deviate up or down.

Moreover, the design of the imbalance settlement has to be a zero sum game for the TSO (not a source of revenues). Where a penalty component is added, this extra income is typically used by TSOs to reduce transmission tariffs, thereby resulting in a transfer of money from imbalanced parties to average users.

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