

Remarks and suggestions in response to the public consultation of the methodology for the dimensioning of the aFRR needs

In this short reaction, Belgian Offshore Platform responds to the public consultation of the methodology for the dimensioning of the aFRR needs as launched by Elia on 2nd of June 2020.

BOP remains at disposal for further questions and clarifications when deemed necessary.

General remarks

The new aFRR product, to be launched over summer 2020, will be based (partially) on a daily procurement basis with a 4-hour resolution, unlocking dynamic dimensioning possibilities. The proposed new dimensioning methodology has to be robust towards increasing renewable generation capacity, challenging balancing quality through variability and limited predictability, as mentioned in the document under public consultation¹.

BOP is convinced that dynamic dimensioning is a step in the right direction towards the energy system of the future with larger share of renewables, as it will allow for optimizing the required balancing needs as function of (expected) system conditions.

It is however noted that Elia dimensions and procures relatively low aFRR volumes compared to the peak load in the LFC block² and compared to its neighbouring countries. Compared to the ENTSO-e empirical noise method, which is deemed useful for comparing countries, only about half of the volumes are procured in Belgium³.

Furthermore, the proposed reliability level of 99%, is at the low end of the range determined in the literature study (99.0 to 99.995%) and the lowest of all neighbouring countries⁴. For instance Germany uses the 99.95% reliability level.

BOP observes that Elia is minimalistic in the dimensioning and procurement of the aFRR needs.

Storm events

It is mentioned that in the latest long-term projections for aFRR (in the adequacy and flexibility study from 2016), measures and volumes that would be required dealing with exceptional situation, like loss of the offshore wind power generation due to storm events, were excluded⁵.

From the available document it is not clear weather offshore storm events are excluded in the proposed methodology and/or these storm events are included in the 99% percentile of the expected aFRR activations. Please provide some clarification.

¹ Document under consultation, Executive Summery, page 4, second paragraph.

² Document under consultation, page 5.

³ Document under consultation, page 24 and Figure 9

⁴ Document under consultation, §2.2.2 and §2.2.3.

⁵ Document under consultation, page 12, last paragraph

In BOPs opinion, as communicated in previous consultations for instance regarding the storm procedure, storm events are not fully predictable. Also the document under consultation mentions several times the 'limited predictability' of renewable capacity, especially offshore wind power⁶, which challenges the power system balancing.

Current forecast models are able to predict the occurrence of a storm during the next day, but with a certain inaccuracy in relation to the beginning and the end of the storm. These small inaccuracies in terms of intensification at the start and fading at the end of a storm, can however lead to significant imbalances in real-time, when aggregated over all the wind parks.

The responsibility of the BRP is to anticipate the 'predictable' imbalance risk and the responsibility of Elia to manage the residual risk. The BRP should anticipate and balance their portfolio as good as possible. There are sufficiently strong incentives in place to guarantee this correct BRP behaviour, via imbalance tariff, alpha-factor etc. Further improving the energy markets to attract more liquidity and to be able to better react more closely to real-time can further reduce the residual imbalance. But as long as the accuracy of the most-recent forecast at the latest possible moment in time to change the nomination schedules, is not accurate enough to correctly predict the storm behaviour, the residual forecasting risk relating to storm events should be considered in the dimensioning of the balancing reserves.

The dynamic dimensioning method is an opportunity to include this forecasting risk in the balancing reserves without unnecessarily increasing the related costs, since storm events are typically short in duration and could be procured for only 1 (or a few) 4-hour blocks per event. It might even be more cost-effective compared to activating slow-start units under the storm procedure, as currently foreseen to cover residual risk of the storm impact.

BOP urges that the residual forecasting risk relating to storm events is to be included in the data processing of the dynamic dimensioning method (if not already the case) and that the reliability has to be set higher than the 99% percentile in case the residual forecasting risk relating to storm events is not fully covered.

⁶ E.g. document under consultation, executive summary, page 14