POSITION

Subject: FEBEG's position regarding the public consultation on a proposal for amendment to ELIA's LFC block operational agreement

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Overall remark

FEBEG thanks ELIA for having the opportunity to react to *ELIA's Public consultation on the public consultation on a proposal for amendment to ELIA's LFC block operational agreement*[1]. The comments and suggestions of FEBEG are not confidential.

General feedback

FEBEG members are deeply concerned and very worried about the decision of ELIA to bring aFRR contracted reserves down to 117 MW. We regret this proposed change, which we understand is mainly triggered by a willingness to reduce capacity procurement costs.
While we acknowledge that aFRR procurement costs have increased due to the recent rise of natural gas price, **we are not convinced that the proposed change will induce a decrease in capacity procurement costs**. We also want to remind ELIA that there are several important elements next to those procurement costs. We list the main – non-exhaustive – ones below:

- **The negative signals given to the market participants: such drastic interventions are extremely detrimental to a sustainable liquidity of the market, as it is impacting severely investors' confidence**, especially in a context of increasing need for flexibility means.
- The unwillingness to take an in-depth look at the total costs, to only look at the procurement costs is not a fair approach, it is biased and may result in a sub-optimal overall outcome. ELIA should perform a thorough cost-benefit-analysis taking into account all impacts of its decision on the balancing market, e.g. volatility and height of imbalance prices, liquidity of non-contracted free bids, …
- The impact on operational security and the lack of a neutral benchmark analysis with surrounding countries before taking/proposing such decisions.
- The aFRR dimensioning methodology should be respected, it is not acceptable to use "reverse engineering" to obtain a result that was fixed beforehand, such an approach is very worrying for the market parties and has a negative impact on the confidence in the processes and regulatory framework for all stakeholders. FEBEG fears that

[1] https://www.elia.be/en/public-consultation/20220516_Public-consultation-on-a-proposal-for-amendment-to-Elia-s-LFC-block-operational-agreement

taking into account the full historically activated IGCC volumes, while not updating other parameters in the methodology, is too optimistic and not realistic in view of the non-guaranteed nature of these volumes.

Our concerns and remarks are further detailed below. We start with the latter point as it requires the most attention.

aFRR Dimensioning Methodology

We would like to remind that in the current version of the LFCBOA, a 'static' probabilistic method to dimension the aFRR needs is used, based on a time series of two years of expected variations between quarter-hours of LFC block imbalances. The *aFRR reserve capacity needs* are determined by the capacity that can cover 79% of the historic 15' LFC block imbalances variations. This 79% target is fixed since 2016 as, based on an empirical assessment, it was found to result in a sufficient FRCE-quality. The fact that the IGCC netting is not taken into account ex-ante (we like to underline that its availability cannot be guaranteed) makes, among others, that procuring only 79% of the absolute variations still yields a sufficient FRCE quality. **In other words, if IGCC netting would be taken into account, one cannot simply assume that 79% would still give a sufficiently robust outcome from grid security perspective**.

In addition, in the currently used methodology, the expected variations between quarter-hours of LFC block imbalances are determined based on two years of historic data that are extrapolated by taking into account the expected system evolutions between the period represented by the historical records and the period for which the FRR needs are determined. **The recent increase of renewable production suggests that older data sets might not be an accurate reference to be used in the dimensioning** for future time periods. See infographics with *Figure 1* (Historical ACE & SI) to represent this evolution. Furthermore, SOGL also invites TSO to make use of representative and recent datasets in the determination of contracted reserves. See *Figure 2* (extract of SOGL Art. 157).

We also like to remind that a **study on aFRR dimensioning, published by ELIA in 2020**, recommended a '**dynamic' methodology** which dimensions the aFRR needs on a daily basis, for every block of 4 hours, based on expected aFRR activations of the next day. This new methodology was aimed to be more robust, and less based on historic empirical judgements. **IGCC netting was foreseen** to be taken into account in this dimensioning, and thanks to its dynamic nature, a better judgement could be made on system evolutions. **FEBEG supported these evolutions, including the proposed timeline for implementation in 2022.**

In fact, since 2019, the currently used methodology resulted in an increase of the aFRR need, with in the most recent exercise a need of 151MW of aFRR capacity. But, as ELIA intended to implement its new (dynamic) methodology, ELIA has been limiting the maximal positive and negative aFRR needs at the same value as calculated in 2019, i.e. 145 MW. See infographics *Figure 3*.

In the LFCBOA which is proposed today, ELIA is proposing to maintain a static dimensioning, but with two important changes:

- The historic timeseries are not any longer extrapolated to take into account the expected system evolutions (such as increase of renewable production)
- Historic IGCC netting is taken into account

Regardless of these changes, ELIA proposes to maintain the empirically determined 79% share of the absolute variations of LFC block imbalances.

FEBEG considers that the proposed methodology is intellectually incorrect, as it can be expected that FRCE quality will decrease. This approach only considers the beneficial effects (the netting of the volumes through IGCC) while ignoring the evolutions the grid needs to cope with (increase of renewable capacity) that have already materialized in recent history and will continue for the years to come. **Indeed, applying the same (low) percentage based on an outdated dataset boils down to using a reverse-engineering approach which is not acceptable for market parties, not from grid security perspective. At the very least FEBEG would expect that such a significant 'methodology' change would be backed by a robust additional research and tests demonstrating that this will not lead to lower level 1 and 2 FRCE quality.**

Operational security impacts and benchmark with surrounding countries

In fact in **ELIA's 2020 study**, it was already demonstrated that Belgium has a more or less average (not bad, but also not "top of class") performance in terms of the legal minimum criteria (FRCE level 1 & 2), and that ELIA procures little aFRR in comparison with its neighbouring counties. See infographics *Figure 4* (Benchmark of FRCE level) and *Figure 5* (Benchmark of aFRR procured volumes). It **concluded** therefore **to have little margin for aFRR means reductions as the available aFRR means procured are already relatively low** compared to other countries and FRCE-management of individual LFC blocks is important to maintain stable frequency in the European synchronous zone. Furthermore, SOGL art 128 clearly states that FRCE level 1 and 2 should not be exploited to reduce contracted reserves. See infographics *Figure 6*.

Based on ELIA's own study and benchmark check, FEBEG can only come to the conclusion that ELIA will be less capable maintaining the Belgian grid balanced and is entering unknown territory. This further strengthens our concerns with the proposed methodology changes and the lowering of aFRR means.

We would like to remind ELIA that it is their primary responsibility to ensure grid security and hence to dimension reserves that allow them to do so.

Total costs analysis

It is true that aFRR capacity procurement costs have increased, however, we strongly believe that decreasing procurement cost is not the only things that should be looked at. To the contrary, we think ELIA should strive to decrease the sum of the total costs: procurement/direct costs plus balancing/indirect costs. Those indirect costs that BRPs are exposed to and that will be passed through to the final customers are equally important. Focusing only on the direct costs – that is to say the procurement cost – only shows a part of the picture and can result in an overall sub-optimal (higher total costs) outcome.

We wish also to underline that contracting smaller aFRR volumes will probably have major impacts on the aFRR activation merit order, which will translate into more frequent and extreme imbalance tariffs as those units with smoother activation prices would no longer be selected:

1. A decrease in the procured aFRR volume could have as a negative side effect that market participants bid higher in the voluntary aFRR activations market as they have to recover opportunity costs from just one market. Consequently, there is a risk that higher imbalance prices for the BRPs will be transferred to some extent to the customers.
2. It is foreseeable that the number of mFRR activations will increase; which will most probably push the imbalance prices even more up. In this respect we like to remind that FEBEG has always been advocating for better alignment of aFRR and mFRR activation, this could also be a good way to mediate the impact.
3. As of right now, aggregators have the ability to set relatively high activation prices. With procured aFRR volume decreasing it can be expected that aggregators take an increasingly higher share in the market which can result in more frequent imbalance price peaks. Febeg wants to remind that imbalance prices should provide the right incentives to the BRPs by reflecting as much as possible the physical reality and the real time value of electricity and that too opportunistic behaviour is limited.

Furthermore, a limitation of the contracted capacity to 117 MW will probably lead to a **decrease of the liquidity of non-contracted reserves**, i.e. if only one CCGT is selected instead of 2. On top of that, looking at the growing intermittency and the increasingly volatile imbalance prices – as a result of, among others, alpha component and technology neutral integrated merit order – a large share of the non-contracted reserves will therefore no longer (or to a lesser extent) be offered to ELIA, therefore **ELIA shouldn't overly rely on free bids to balance the system.**

Finally, **it is far from certain that a decrease of the contracted capacity from 145MW to 117MW will automatically lead to a lower total procurement cost**. Already today up to ~100MW out of the 290MW aFRR band is being delivered by other technologies than CCGT's. The remaining ~190MW aFRR band can be delivered by 1 CCGT unit. By decreasing the to be contracted (symmetric) capacity with 28MW, 1CCGT will still be needed. The consequence,

at moments where power price is low and gas price is high (CCGT out of the money), is that **the same cost will need to be divided by fewer MW's**. This will **set the reference cost for all other market participants at a higher level**. Bottomline is that Elia will pay a higher price per MW for the MW's needed from a CCGT and as a consequence will pay a higher price equally for all other volumes. **The resulting total procurement cost is therefore likely to be higher rather than lower.** At moments where power price is high and gas price is low (CCGT in the money), it is expected that the procurement cost would indeed be lower.

Signals to the market

Looking at all the above, it is very worrying that **ELIA is giving the signal to developers that a stable framework cannot be expected**. **This is problematic as those developers need a reliable framework and a well-functioning aFRR market to develop their business cases.** In view of the large share of new capacities that need to be found to maintain Belgian Adequacy in the context of the Belgian capacity market, and the high need of existing and new flexibility sources in the Belgian System – as pointed out in the MOG 2 study for offshore – this evolution is most unfortunate. When ELIA lowers the reserve needs, it is sending a message to existing assets that are currently actively and reliably participating to the balancing markets and the security of supply: as these assets are no longer needed, they might leave the market. **The loss of investors' confidence can further degrade the liquidity in the market, resulting in the opposite of what ELIA (and FEBEG) are striving for, namely a competitive and well-functioning market with sufficient liquidity to ensure that the Belgian Grid is robust and reliable at an acceptable and correct cost for all.** Therefore, FEBEG emphasizes again the importance of having a **stable framework and enough reserve dimensioning for the following years** instead of a yearly stand-alone exercise.

Conclusions

Based on the above arguments, and as mentioned in the introduction, **FEBEG members are deeply concerned and very worried about the decision of ELIA to bring aFRR contracted reserves down to 117 MW**. FEBEG is of the opinion that **the proposed approach does not rely on a robust and consistent methodology and moving ahead with the proposed revision would be extremely negative for investors' confidence, and thus the future of the aFRR market**. ELIA risks to increase overall costs (once all costs are factored in) in the short and definitely in the longer run with such interventions.
There has been a large amount of studies conducted by ELIA on FRR dimensioning on which FEBEG members gave open feedbacks, and which were widely supported by many other stakeholders. In this context, we regret that the efforts made to implement a performing methodology are discarded.

We invite ELIA to rather build up on these studies and the identified implementation plan of aFRR dynamic procurement to safeguard a robust operational grid security in a long-term stable environment for investments.

Finally, as a general recommendation, we urge Elia to make proper cost-benefit-analyses not only limited to ELIA's perimeter but also including costs incurred by the market participants of its proposals. It is not sustainable to consistently reduce ELIA's costs by simply shifting the burden to the market parties (alpha component, CCMD, …).

Infographics

Figure 1: Evolution of ACE and SI Quality

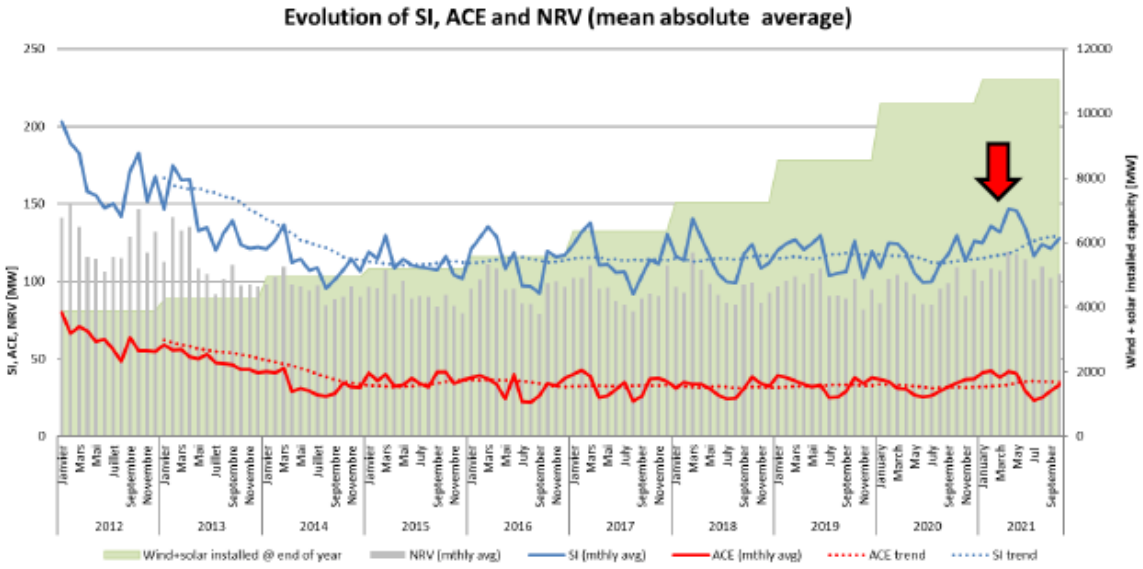

Figure 2: Extract from SOGL Art. 157

"all TSOs of a LFC block in the CE and Nordic synchronous areas shall determine the required reserve capacity of FRR of the LFC block based on consecutive historical records comprising at least the historical LFC block imbalance values. The sampling of those historical records shall cover at least the time to restore frequency. The time period considered for those records shall be representative and include at least one full year period ending not earlier than 6 months before the calculation date."

Figure 3: Historical aFRR needs

[MW]	Upward FRR Needs*	Symmetric aFRR Needs*
2013	1260	140
2014	1241	140
2015	1240	140
2016	1203	140
2017	1183	144
2018	1190	139
2019	1039	145
2020	Dynamic	145(151)

Based on Elia's volume assessments (Final Decisions CREG)

Table 1 shows that aFRR needs remained fixed at 140 MW until 2017 when the reliability target was fixed at 79% which was observed to provide sufficient ACE / FRCE-quality. **However, as from 2019, aFRR needs started increasing following the increased variability in the LFC block imbalances induced by the integration of variable renewable energy (wind and solar).** This was found to further increase to 151 MW in 2020 but it was decided to freeze the volume to 145 MW while awaiting the assessment of the current methodology towards potential improvements in this study.

Figure 4: Benchmark of FRCE level 1 & 2

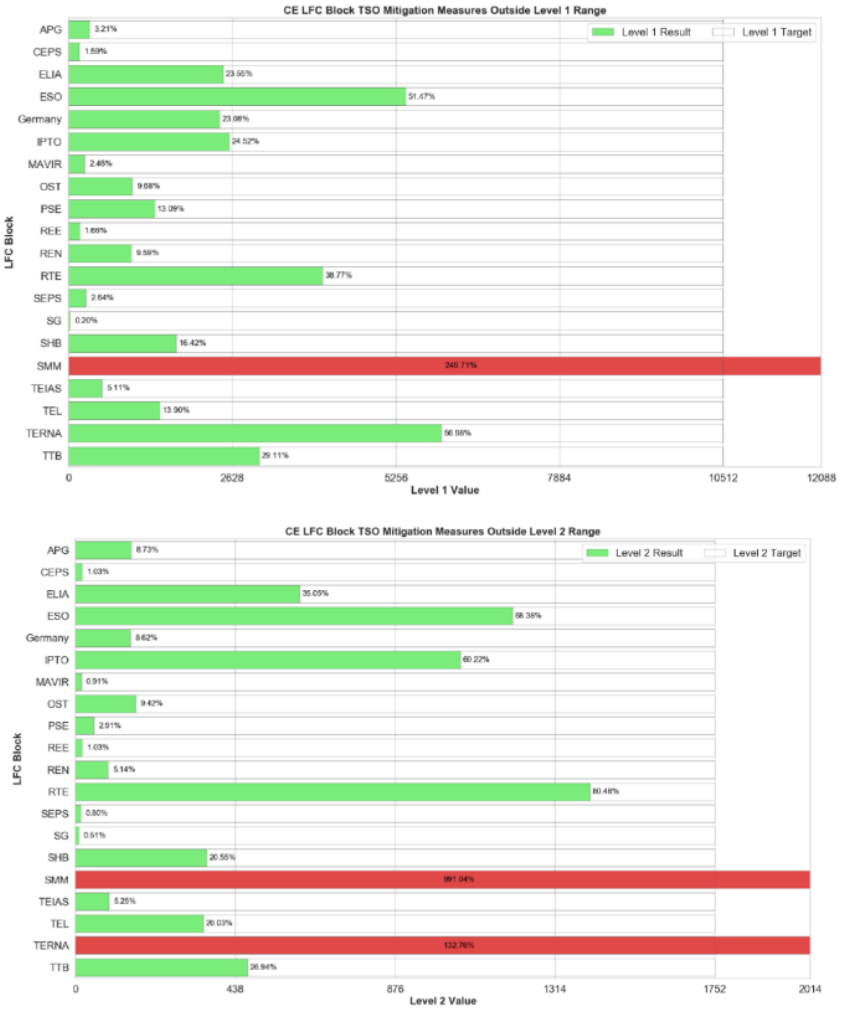

Figure 8: Level 1 and Level 2 performance in 2018 (ENTSO-E LFC block monitor 2018)

Figure 5: Benchmark of aFRR procurement

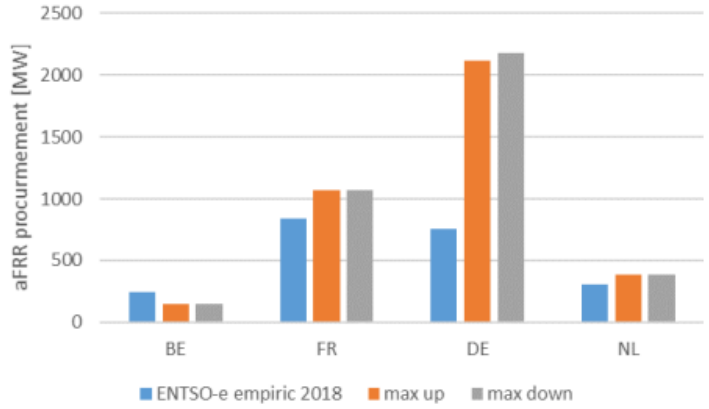

Figure 6: SOGL Art 128

The objective behind the level 1 and level 2 parameters is to provide quality targets for the individual ACE quality of each LFC block. Since it is the responsibility of each TSO in its LFC block to keep ACE as low as possible, the level 1 and level 2 parameters must not be exploited in order to reduce reserves or reserves activation. These parameters should rather be interpreted as an absolute warning limit that shows that quality of ACE is below the required standard and that respective countermeasures have been reported and will be implemented urgently.