Subject:	FEBEG comments on ELIA's public consultation on the amendment to LFC block
Date:	24 March 2023
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FEBEG thanks ELIA for having the opportunity to react to ELIA's public consultation on a proposal for amendment to Elia's LFC block operational agreement[1].

The inputs and suggestions of FEBEG are not confidential.

General comments

As a general comment, FEBEG is disappointed with the proposed modifications. We always pleaded for the fast implementation of a dynamic procurement as it was proposed by ELIA in 2020. We are now in 2023 and we can only observe that very few steps towards dynamic aFRR procurement have been made, only the steps towards a fixed procurement were instead implemented.

The current fixed procurement of 117 MW is applicable until further notice and is not the outcome of an appropriate methodology but is rather the result of an arbitrary choice.

The most disappointing element in the proposal under consultation is the idea to add a feedback loop – relying on past year and month performances – which will add a static nature to the reserves dimensioning exercise. It **will prevent a rapid increase/decrease of reserves when needed, and therefore dampen and minimize the potential advantages of a dynamic procurement approach.**

We find this approach very surprising because ELIA seemed to be rather convinced about the need to implement a dynamic dimensioning in 2020.

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[1]   https://www.elia.be/en/public-consultation/20230224_Public-consultation-on-a-proposal-for-amendment-to-Elias-LFC-block-operational-agreement

Federatie van de Belgische Elektriciteits- en Gasbedrijven vzw
Fédération Belge des Entreprises Électriques et Gazières asbl
Federation of Belgian Electricity and Gas Companies

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Detailed comments

Dynamic Procurement

In the study on aFRR dimensioning published by ELIA in 2020, a 'dynamic' methodology was recommended 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 aimed to be more accurate and robust, and less based on historic empirical observations. 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 and still supports these evolutions. Unfortunately, the timeline for implementation presented by ELIA at the time is no longer valid as a go-live was initially foreseen in 2022.

Feedback loop with FRCE quality

While FEBEG still supports the dynamic dimensioning approach, some new elements of the methodology are deviating from the initial purpose. By adding a feedback loop, ELIA will apply a correction factor on the aFRR activation probability. This raises several major concerns as (i) the **methodology** proposed by ELIA will result in a more static exercise, (ii) the **dataset** used to make the computation might not be a representative sample of data to rely on and (iii) ELIA would be in situation where **arbitrages** could be made between reserve dimensioning and grid security. The latter is in our view not acceptable.

- **Methodology**

aFRR needs are determined by multiplying aFRR activation probability with a correction factor. This correction factor takes as inputs the yearly and monthly performances, each of them being floored/ capped at respectively 80% or 120%. The multiplication of yearly and monthly performance with floor and caps means that the correction factor cannot be lower than 64% (0.8 x 0.8= 64%) and greater than 144% (1.2 x 1.2 = 144%).

FEBEG considers that:

- **The multiplication of yearly and monthly performance does not seem to make sense.** It can lead to a correction factor that has nothing to do with the real performance. Take a fictive example where yearly performance is 0.9 and monthly is 0.9, then the result of the correction factor is 0.9 x 0.9 = 0.81. This 0.81 has nothing to do with the realized performance. This multiplication will inflate dimensioning if L1 & L2 are greater than 1 and deflate when smaller. This is not a fair representation of the performance. An average (i.e. (0.9+0.9)/2 = 0.9) would make more sense;

- **The caps and the floors are set artificially at resp. 80% or 120% and are not explained.** We understand that safeguards can be needed but how have those cap and floor have been defined?

- **Relying on yearly performance will not catch the trend nor the seasonality of the ACE and it will not address the evolutions the grid is facing**. It seems to be an indicator too far in the past (certainly with recent game changers such as fixed procurement on 117 MW).

- **Using past performance is actually in contradiction with dynamic procurement** which aims at dimensioning the reserves according to the needs of a given day. It is as such a step backwards from the principles of dynamic procurement.

- **The yearly and monthly performance are defined based on 5% and 30% criteria**. If ELIA ever intends to use those performance indicators, it should at the very least update them based on the L1 & L2 criteria's that ENTSOE is about to publish in May 2023. Needless to say that a performance indicator relying on old loose criteria does not make sense at the moment European guidelines invite TSO's to tighten those criteria.

- Finally, ELIA expects that aFRR volumes will increase over time (towards 2026). FRCE target parameters will be tightened by ENTSO-E to the benefits of frequency quality. In such case the feedback loop will lead to a smaller decrease (or potentially even an increase) of the volumes. FEBEG is wondering – if such a conclusion is made – what is the need to implement this feedback loop in October 2024.

FEBEG also question the timing of the daily FRR dimensioning process. We read that the FRR needs will be published before 7 AM D-1 on ELIA's website. How will this work in practice given that aFRR capacity auction is in D-2 at 4:00 pm. Will the aFRR auction be done before the dimensioning process?

- **Dataset**

The aFRR activation risk will be identified by means of an algorithm trained on a set of simulated aFRR activations. However:

- The duration of this dataset corresponds to the last 2 years

  - The period where Elia downsized the aFRR procurement to 117 MW (i.e. August 22 till now) should have a larger weight as it is the most recent data;

- 'Exceptional events' are filtered out of this dataset

  - FEBEG is lacking visibility on the events that will be filtered out by ELIA. As a matter of principle, removing events should be very limited and duly justified.

  - For the sake of clarity, Market decoupling occurrences excluded from the dataset should not refer to the moments where ELIA cannot count on ATC's leftover to the balancing timeframe. FEBEG wants to remind that one reason to delay the connection to PICASSO was because Belgium was 'too often' isolated from other connected countries (read too low ATCs). We can hence conclude that too low ATCs is not an exceptional event.

- **Arbitrage**

As a matter of principle, a TSO should strive to achieve the best possible quality of FRCE level 1 & 2. Introducing a feedback loop based on past FRCE performance is a step towards arbitrating procurement costs and grid security. In this perspective, ELIA should compare the potential costs associated with a FRCE reduction versus the gain of procurement costs. FEBEG is worried that a deteriorating FRCE quality combined with an arbitrage 'price vs quality' would be much more costly to grid users than procuring 'additional' aFRR (hence not making an arbitrage).

Furthermore, ENTSO-E recommends not to use current FRCE target parameters as dimensioning criteria and ELIA mentions that "these are included in the method as an automatic correction rather than a dimensioning criterion". FRCE parameter being used in the dimensioning criterion or in the correction factor will impact in both cases the final outcome according to FEBEG.

ELIA already decreased its aFRR procurement in the course of summer 2022 to 117 MW. In its presentation on reserve dimensioning of 15 February, ELIA indicates a deteriorating trend of the FRCE quality. This observation raises some questions:

- Is it enough to procure a fixed amount of 117 MW?

- Is it a sound approach to procure a fixed amount and does it address sufficiently the evolutive challenges of the grid (new intermittent technology penetration, seasonal volatile pattern of ACE, etc)?

- Can Belgium do without 'freeriding' on the aFRR procurement of surrounding countries? Do we know in which extent ELIA grid variability is solved by means of foreign aFRR activations (read: to which extent do we count on neighbouring countries to solve pure Belgian issues)?

- If ELIA is counting on foreign aFRR activations, are Belgian aFRR activations helping surrounding countries in the same proportion?

FEBEG fears that the answer to each of these question is each time 'No'.

- **Planning**

FEBEG regrets the planning announced in the workshop held on 15 February. It was confirmed that the fixed procurement (117 MW) would not be modified until the implementation foreseen on 1st October 2024. This is a very unfortunate decision as the current dimensioning does not rely on a valid methodology as pointed out by FEBEG in its answer to the consultation of 22 June, and it does not tackle neither the deteriorating FRCE quality identified by ELIA. As a reminder, ELIA itself claimed this was a temporary measure being the consequence of high procurement costs.

Operational security impacts and benchmark with surrounding countries

In the study published by ELIA in 2020, it was already demonstrated that ELIA only has an average performance in terms of the legal minimum criteria (FRCE level 1 & 2), and that ELIA procures little aFRR in comparison with its neighbouring counties. It concluded therefore to have little margin for average 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.

FEBEG is very concerned with the proposed methodology changes, as it fears ELIA will be less capable of maintaining the Belgian grid balanced.

Signals to the market

Additionally FEBEG believes that ELIA is giving an incorrect signal to developers as there would not be a stable long-term environment for investments. Those developers are basing their business cases on a stable and well-functioning aFRR market. In view of the large share of new capacities that need to be found to maintain Belgian's 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.

Conclusions

FEBEG wants to again remind that **the dynamic dimensioning as consulted in 2020 should go-live as soon as possible**. It will improve the current static methodology and tackle the structural changes (new energy mix, new technologies, …) the grid is exposed to.

FEBEG is worried that ELIA's proposal on LFC BOA is very static and does not capture the increasing variability of the grid. Relying on past FRCE performances, applying fixed caps / floors on the yearly + monthly performances + correction factor, filtering out relevant data from the data sets are biased choices that minimize the rapid evolution of energy world. **FEBEG does not support the introduction of a feedback loop as it is moving away from the dynamic assessment of reserves needs**.

FEBEG is worried that the proposed approach does not rely on a robust and consistent methodology. There has been a large amount of studies conducted by ELIA on FRR dimensioning on which FEBEG members gave trustworthy feedbacks. In this context, we regret that the efforts made to implement a performing methodology are discarded. We invite ELIA to reconsider them. The identified implementation plan of a dynamic procurement of aFRR as presented in 2020 should be updated. It will ensure at the same time a strong operational grid security and a long-term stable environment for investments.