CONSULTATION REPORT

Elia's methodology to determine the required balancing capacity

November 17, 2021

Content

1. Introduction

Elia launched a public consultation of the stakeholders on the LFC Means. In line with Article 228 of the Belgian Federal Grid Code, the LFC Means specifies the methodology to determine for each balancing service the balancing capacity of aFRR and mFRR to be procured. This new proposal is limited to the necessary change to the mFRR capacity products following the removal of the mFRR Flex capacity product.

Note that the methodology to dimension the required reserve capacity is determined in the LFC block operational agreement which specifies the dimensioning rules for Frequency Restoration Reserves or 'FRR' in execution of Article 228 of the Belgian Federal Grid Code. It should also be noted that only the "Request for amendment of Elia's LFC Means" was subject to consultation. The explanatory note, as well as the LFC Means with track changes compared to the previous version, were published for information.

This consultation aimed to receive any comments from market participants and stakeholders regarding the consulted document and the consultation period was set from Friday October 1 to Friday October 22, 2021. In total, Elia received two non-confidential answers to the public consultation:

- **FEBELIEC**
- **FEBEG**

All relevant information to this consultation can be found on Elia's webpage (**link**). The feedback received during the consultation did not result in modifications of Elia's proposal. The proposal for amendment is submitted for approval to CREG on November 17, 2021.

2. Answers to the feedback of FEBELIEC

- *"Febeliec continues to oppose phasing-out this product, as it has done for the past years. Febeliec would like to stress that for certain flexibility, such as demand side response but also storage, a neutralization period between activations is an important feature. By abolishing the mFRR Flex product and only sourcing a mFRR Standard product without such neutralization period, Elia puts certain types of flexibility at a big disadvantage. At best, partial volumes can be recuperated in mFRR Standard products (albeit with lower overall volumes for the same combination of assets), at worst these volumes will complete leave the market, thus decreasing liquidity and possibly even leaving insufficient liquidity in the market to cover Elia's balancing capacity needs at a reasonable cost for the system."*

First of all, Elia would like to remind that the rationale for phasing-out the mFRR Flex product is to ensure that the procured mFRR capacity ensures the availability of a corresponding volume of energy bids, at any time, in accordance with the FRR dimensioning methodology. Balancing capacity products with a neutralisation time do not fulfil this condition and are therefore considered as a capacity product of lower quality, potentially endangering system security.

Elia acknowledges that certain delivery points in the balancing market may require a neutralization time but reminds that the mFRR Flex product is not the only option to access the balancing market with such delivery points. Alternative options are already available for market parties owning flexible assets like offering non contracted energy bids or a

capacity product within a portfolio (their own portfolio or via a third party aggregator) where the neutralisation time is covered by the other delivery points within the portfolio.

With the change introduced by Elia in the dimensioning of mFRR needs along the years and the regular communication of the status of mFRR Flex phase-out in WG balancing, BSPs have already converted a significant volume of mFRR Flex product into mFRR Standard product. Based on the remaining volumes which are prequalified in mFRR Flex only (i.e. that cannot offer mFRR Standard), the potential loss of liquidity resulting from the phase-out seems limited.
In addition, , Elia shows in section 4 of the consultation note that there is a margin of about 200MW (in average) above the capacity volume to be procured. Considering also that Elia has prequalified larger mFRR Standard volumes which are not offered on the daily auctions currently but could be offered in the future, Elia does not share Febeliec's concerns about an overall lack of liquidity on the mFRR capacity market.

- *"Historically, Febeliec wants to point out that Elia has already made numerous changes to the balancing products that were designed for or at least better cater to the specificities of demand side response and storage, such as the ICH product (discontinued), the R3DP product (discontinued), the first mFRR Flex product (discontinued) and the latest adapted mFRR Flex product (to be discontinued on request of Elia), while such products in the past have shown clear value for the system in Belgium and abroad (e.g. recently when the electrical system encountered some severe issues, interruptible contracts with consumers in Italy and France saved the European system from collapse) and this at a reasonable cost, in most cases much cheaper than the standard products (as could for example also be seen in the winter 2018-2019, when in Belgium at a certain point 6 out of 7 nuclear plants were unavailable and prices for mFRR balancing capacity were rapidly increasing, yet much less so for the flex product."*

Concerning the evolution of mFRR Flex product, as explained in section 1 of the consultation note, the move towards a single, fully "firm" product has been announced since 2016 already; the market has then been given time to adapt and prepare to this situation. Elia carried out in 2018, a "study on the evolution towards a daily procurement of mFRR" and, among other things, further analyzed the possible evolution towards a Standard mFRR balancing capacity product. Elia concluded in that report of 2018 that moving to a unique standard mFRR balancing capacity product (instead of keeping the two products mFRR Standard and mFRR Flex) was the way forward, subject to certain conditions to be met (e.g. daily procurement) and a sufficient transition period to be foreseen for the current mFRR Flex providers to reorganize their portfolio of flexibility. In the meantime, the conditions presented in that report were implemented.

Moreover, in the methodology for Standard Products for Balancing Capacity of 17th of June 2020, ACER has defined the implementation timeline as 18 months after publication of its decision. Therefore, all TSOs must implement the Methodology for Standard Products for Balancing Capacity by 17 December 2021. This implies that from then onwards balancing capacity products that do not fit the definition of a standard product will be regarded as specific products, for which regulatory approval is needed. As explained in WG balancing of 15/09, Elia has not found a sound justification to develop a specific mFRR capacity product.

Elia notes that the exceptional situation of the market observed in winter 2018-2019, required additional "adequacy products" (e.g. strategic reserve) which goes beyond the single framework of the mFRR capacity.

- *"Based on figures presented by Elia during the last WG Balancing of 15/09/2021, it can be seen that between May 2020 and August 2021, because of the steep reduction of mFRR Flex bought as of 2021, volumes offered for mFRR Flex have dried up (which is logical, when hardly any demand still exists) yet the volumes of mFRR Standard being offered have not significantly increased. Even more so, in the summer months, had the total volume of mFRR to be acquired not been reduced significantly at the beginning of 2021, offered volumes of mFRR standard alone would not have been sufficient to cover the needs (and at some points on the graph even hardly covered the reduced needs). It is clear that the quite healthy margins of mid 2020 have severely disappeared by summer of 2021 and this without any fundamental product changes. The observed increased costs on the balancing markets are according to Febeliec to a large extent due to the reduced liquidity in the balancing markets, to which the de facto (and soon maybe de jure) removal of mFRR Flex has greatly contributed."*

As mentioned in section 4 of the consultation note, Elia observed that important changes in the dimensioning of mFRR means in the period of mid-2020 and early 2021 were followed by market evolutions. First, the increase of minimum volume of mFRR Standard in July 2020, was followed by an additional offered volume of the same product (conversion of mFRR Flex into mFRR Standard). The second important change in the calculation of the balancing means was the increase of reserve sharing of 200MW in January 2021. This triggered another adaptation in the balancing market where offered volume in mFRR standard stabilized in average to 900MW (i.e. approximately 200 MW below the average volume offered as mFRR Standard over the period July to December 2021). As correctly mentioned by Febeliec about the offer of mFRR Flex "drying up" when demand for the product had decreased, such decrease in the offered capacity can be explained by the reduction in contracted volumes. Indeed, the BSP expecting that some (more expensive) flexibility would not be selected may decide to not participate to the auction on a daily basis. This explains (partly at least) that not all the volumes prequalified for mFRR are offered in the daily mFRR capacity auctions. Although additional liquidity and competition would be welcome, the current liquidity in mFRR Standard product is considered as sufficient by Elia for securing the procurement of upwards mFRR reserves.

Elia regularly analyses the balancing market on various criteria and indicators. Among other things, the increased costs on the balancing market (both capacity and energy) are carefully looked by Elia where various causes could provoke the increase of costs on balancing markets in recent months (e.g. fuel prices, DA market prices, CSS, major overhaul of units, etc.). The lowering of the liquidity resulting from a reduction in offered mFRR Flex product corresponds to the decrease of the contracted mFRR capacity. Elia does not see therefore how the "removal of mFRR Flex" could have contributed to any cost increase.

- *"As Elia is planning to move in 2022 towards the European MARI platform for mFRR, with a much more stringent new mFRR standard product (e.g. 12,5 instead of 15 minutes full activation time, which is a very hard target for virtually all flexibility) and ever shifting implementation deadlines in Belgium and abroad because market actors signal they are not ready to deliver this product in the original timing, Febeliec is extremely surprised to see that Elia, as opposed to for example its French colleagues, does not apply for a derogation to maintain the mFRR Flex product (with a sufficient volume to be contracted) until the impact of the switch to the MARI platform is known and it is ensured that this platform will deliver upon its promises (and not be connecting various national balancing markets with severely reduced liquidity because of the more stringent*

product, ultimately leading to higher costs and potentially even insufficient balancing capacity in case cross-border capacity would not be sufficiently available to share balancing reserves)."

Elia analyzed the mFRR balancing market in the last 2 years before making a proposal for the phase-out of the mFRR Flex product. Based on its analysis (and in particular based on the volumes prequalified as mFRR Standard), Elia found no arguments to justify to maintain mFRR Flex as a specific product. Elia will pay great attention however to the readiness of the market to move to the new mFRR design (incl. the 12.5 minutes full activation time mandated by the European Implementation Framework for mFRR) to give a final confirmation of its entry into force.

- *While Febeliec understands that mFRR Flex might introduce some additional operational questions (which however have up until now always been handled without too many problems), Febeliec strongly advises against the abolition of the mFRR Flex product before the overall impact of the MARI platform is known and well understood and the platform has clearly shown to be true to its promises. Febeliec urges Elia to be much more cautious, as it knows that its members together with all other consumers will have to cover the costs for any miscalculations and not Elia or its shareholders.*

The energy bids related to mFRR Flex are activated today based on a second merit order list, that is called upon only when the first merit order list encompassing all free bids and energy bids related to mFRR Standard is depleted. This activation order has been adopted to limit the risk to trigger a neutralization time, during which the dimensioned reserves need is not covered. The mFRR balancing platform (MARI) does not foresee such "double merit order list". Sending the energy bids related to mFRR Flex to MARI could therefore significantly increase the triggering of neutralization times, which is unacceptable from an operational security perspective.

The alternative is to define a specific product for balancing energy bids related to mFRR Flex, and to activate these bids only if the volumes obtained on MARI in scheduled and direct activation is insufficient to satisfy Elia's mFRR demand. Such approach entails several major disadvantages in terms of operational complexity (3 operational decisions within a quarter-hour instead of one today), complexity of the rules, complexity and transparency of the settlement, impact on the liquidity of the platform, administrative burden, etc.

Last but not least, creating an mFRR Flex-related energy product would require to create a specific product and to comply with the requirements of article 26 of EBGL.[1] As indicated already, Elia does not consider that the need for the

[1] Extract of EBGL article 26

This proposal shall include at least:
(a) a definition of specific products and of the time period in which they will be used;
(b) a demonstration that standard products are not sufficient to ensure operational security and to maintain the system balance efficiently or a demonstration that some balancing resources cannot participate in the balancing market through standard products;
(c) a description of measures proposed to minimise the use of specific products subject to economic efficiency;
(d) where applicable, the rules for converting the balancing energy bids from specific products into balancing energy bids from standard products;
(e) where applicable, the information on the process for the conversion of balancing energy bids from specific products into balancing energy bids from standard products and the information on which common merit order list the conversion will take place;
(f) a demonstration that the specific products do not create significant inefficiencies and distortions in the balancing market within and outside the scheduling area

mFRR Flex product can be sufficiently demonstrated to justify the submission of a request for the creation of a specific product, but will pay great attention to the readiness of the market to move to the new mFRR design to give a final confirmation of its entry into force.

For all these reasons, Elia does not consider feasible, not adequate to maintain an mFRR Flex product after the accession to the mFRR balancing platform.

- *Febeliec thus most strongly urges Elia and the regulator to extend the mFRR Flex product until sufficient experience is gained with the MARI platform, especially as some doubts about this platform have already lead to significant delays in its introduction and even derogations in some countries. Febeliec thus opposes the modifications proposed by Elia in its methodology to determine the required balancing capacity.*

As indicated above, the phase out of the product is intended to be completed before the entry into force of the new mFRR design.

Elia remarks also that the reasons for requesting derogations are multiple and do not reflect a lack of trust in the mFRR balancing platform. The future derogation that Elia will ask to the regulator regarding the delay to the connection to European mFRR platform is among other things to give additional time and comfort to market parties for the implementation of the new mFRR design and explicit bidding, taking into consideration the other challenges and deadlines for other balancing product (cf. overlapping review of the aFRR energy and capacity designs).

- *"Additionally, if the mFRR Flex product were not to be discontinued but a derogation granted for extending its lifetime in order to ensure that sufficient liquidity remains in the mFRR market in light of the recent evolutions and expected future evolutions, Febeliec most strongly insists that the current approach where a fixed volume (almost equal to the entire mFRR need) is required to be sourced in mFRR Standard and only the (very limited) complement in mFRR Flex is replaced by a mechanism as was applied before with minimum and maximum thresholds for each of the products, where for a (much lager than currently is the case) share of the mFRR needs mFRR standard and mFRR Flex are put in competition with each other, in order to ensure that the cheapest and thus most cost efficient combination can be sourced. Febeliec considers indeed that the current artificial reduction of the mFRR Flex volumes that can be sourced leads to a suboptimal outcome, as it so severely limits the potential to be selected for a party offering mFRR Flex that the supply and liquidity automatically dried up. Elia's conclusion that this shows a lack of interest in the product is incorrect as this incorrect presumed lack of interest is only the result of its arbitrary choice to severely limit mFRR Flex volumes to be contracted. Febeliec thus strongly insist for real competition between both the mFRR standard and Flex products and this for a substantial share of the overall mFRR needs, which would then automatically reveal a market optimum, taking into account realistic boundary conditions on minimum mFRR standard volumes."*

Elia insists that the decision to phase-out the mFRR Flex product is not arbitrary, but fully consistent with the (consulted and approved) FRR dimensioning methodology which considers firm capacity. The mFRR Flex and mFRR Standard products are not equivalent from a system security perspective, and simply "putting them in competition" and procure the cheapest product while the product requirements are very different does not seem a right approach. The stepwise reduction of the balancing capacity that could be satisfied with mFRR Flex has been decided only to give the opportunity

to market parties to adapt and to facilitate the transition to the use of mFRR Standard only, transition which is now coming to an end.

- *On the specific topic of non-contracted versus contracted mFRR capacity, Febeliec refers to its (future) answer to the consultation on the daily prediction of non-contracted balancing energy bids. Febeliec however already urges Elia and the regulator to be more ambitious in some of the timelines put forward in this study and is surprised to see that Elia is extremely cautious on this point yet takes a very incautious and maybe even very risky approach towards the abolition of mFRR Flex. Febeliec regrets that different risk standards seem to be applied, and not necessarily to the benefit of reducing overall system costs.*

Elia confirms it received the remarks of FEBELIEC in the consultation on the daily prediction of non-contracted balancing energy bids and will answer this question in the corresponding consultation report.

3. Answers to the feedback of FEBEG

- *" Reserves dimensioning and balancing product specifications are at the same time critical for the grid security and critical for the visibility of BSP's (i.e. investing in existing and/ or new capacities). We agree with the very pragmatic approach of Elia on the phase-out of mFRR Flex. This product does not seem to be necessary in the balancing market and does not go either in the direction of relying on standard (as opposed to specific) products requested by EBGL."*

Elia takes note of this remark.

- *"Firstly, BSPs do not seem to be attracted anymore by mFRR Flex. The offered volumes have impressively decreased over time; leading market parties to disregard this product.*

  Secondly, it seems that specific products are no longer necessary no matter what the dimensioning of reserves is. Those units that used to participate to mFRR flex may still be offered (i.) as non-contracted bids and/ or (ii.) by being combined with other units and hence complying with the mFRR STD requirements. Next to that , the assets with a need of neutralization time (being a characteristic of mFRR Flex) can find a work-around either by participating to non-contracted or by managing efficiently a pool of several assets (i.e. activate other units).

  Thirdly, FEBEG finds the Figure 1 of the document very insightful: A large share of mFRR flex has been replaced by mFRR STD as of 1/07/2020. It means that most of capacities offered in mFRR Flex could equally be offered in mFRR STD."

  However, FEBEG is worried by the trends and correlation between reserve dimensioning and the total volumes offered by BSPs (read the liquidity) since the decrease of total mFRR procured (6/01/2021). The offered volumes drastically decreased."

In its monitoring of the balancing market, Elia observed the evolution and adaptation of the market after each major change in the reserve dimensioning. In term of liquidity for the capacity market, Elia can count on a margin of 200 MW in average. The general decrease in the offered mFRR capacity could be explained by the reduction in contracted

volumes following mFRR needs; the BSP expecting that some (more expensive) flexibility would not be selected may decide to not participate to the auction on a daily basis.

In the past years, Elia has prequalified larger volume of mFRR standard product than what is offered today in the daily capacity auction. Depending on market conditions and BSP strategy, these volumes could be offered again in the near future.

- *"In parallel, we experience unprecedented imbalance tariffs in terms of price range and occurrences since several months. Figure 1 suggests that no new capacity has been offered over the last months.*

  FEBEG concludes that reserve dimensioning is the most important factor when it comes to investments in existing and new capacities. Imbalances prices is to be seen as an incentive to balance its positions as a BRP. Nevertheless, imbalance seems not a good indicator for attracting new capacities. It supports previous FEBEG statement on the counterproductive aspect of scarcity component (aka Omega factor)."

Elia remarks that the comment about imbalance tariff is out of scope of this consultation, as it relates to the Balancing Rules.

This notwithstanding Elia is of the opinion that a well-designed real time price that is allowed to back propagate to the ID and DA prices (through e.g. the removal of the DA balancing obligation) offers the best guarantee to valorize the reserve capacity at its true value. Indeed as the value of the reserve capacity reflects the opportunity cost of this capacity not being offered to the DA markets, ensuring that the DA market price reflects as much as possible market players' expectation of the real time energy price is in our view the soundest economic approach.

As already indicated during the recent workshop on the imbalance price, Elia is happy to engage in a discussion with market parties, to see how the current imbalance price could further evolve to ensure that at all times it does reflect the real time situation of the Belgium control block and provides the right incentives to the market parties to keep it balanced. In addition, through the relaxation of the balancing obligations, we are also introducing the opportunity for the real time price to back propagate to the ID and the DA market.

- *"Finally, the phase-out of mFRR flex is welcome from a regulatory point of view. It avoids i. market distortion, ii. defining an unnecessary specific product (targeted to specific technologies only) hampering the technology-neutral spirit of the balancing market, iii. it creates one single integrated merit-order instead of two different MO (easier, fairer and more transparent) and it is consistent with the choice to participate to European energy bids platform."*

Elia takes note of this remark.

- *"Ultimately, FEBEG wants to take the opportunity to remind/ question Elia on some very important aspects of the reserve dimensioning.*
- ***Market liquidity**: FEBEG understands the current concerns about market liquidity. Decreasing reserves probably helped to decrease the total costs of mFRR reserves. However, it also seem to contribute to lower market liquidity. One can think about, but not limited to, permanent decommissioning of existing assets. In this perspective, LFC means is a lot more than the output of a model as non-quantifiable elements need to be duly taken into account."*

- ***"Lont-term & stable regulatory framework**: A stable and long-term regulatory framework is key when it comes to investments/ divestments. FEBEG calls Elia's attention on dimensioning reserves consistently through the years. Reserves size is a key element looked at when it comes to investing in existing or new units. Lowering reserves needs is a message sent to existing assets participating actively and reliably to balancing markets and security of supply. Febeg calls Elia's attention on the importance of having a stable enough reserve dimensioning through the years instead of a yearly stand-alone exercise."*

Elia acknowledges the importance of a stable and regulatory framework and does it utmost best to communicate on new evolutions and trends. Elia elaborately explained on various occasions in the Working Group Balancing how the dimensioning of reserve will evolve. It should be noted also that a reduction of balancing capacity (i.e. contracted reserves) is always justified by an analysis demonstrating that sufficient balancing energy is available to cover the reserved needs. It cannot result therefore in a liquidity issue for balancing energy.

Elia wants to remind that on longer term, capacity shortages, in the energy or the balancing market, relates to the adequacy discussion. Ensuring stable revenue streams to BSPs is not an objective of Elia's reserves procurement. Elia however agrees that a healthy market requires sufficient foresight and transparency. It is exactly for this reason that reserve capacity requirements are accounted in the adequacy simulations, compliant with the ERAA guidelines.

- ***"Analysis with other TSO's**: Belgium will soon join European energy bids platforms (PICASSO & MARI). FEBEG is wondering whether the reserves sharing exercise should not be done in close cooperation with surrounding TSO's. Relying on foreign reserves implies that other TSO's would rather be conservative in their national dimensioning. Some events the grid must cope with (e.g. massive renewable intermittency) can disregard the notion of borders or national TSO."*

Elia remarks that the possibilities and conditions for taking into account of sharing agreements in the reserve dimensioning are clearly defined in the system operation guideline and that Elia satisfies with all corresponding requirements. This question is out of scope of the present consultation.

Project SPOC

Thomas Oldenhove - Thomas.oldenhove@elia.be

Elia Transmission Belgium SA/NV

Boulevard de l'Empereur 20 | Keizerslaan 20 | 1000 Brussels | Belgium