JUNE 2024

Proposal for modification of the tariff for maintaining and restoring the residual balance of individual Balance Responsible Parties (BRPs)

In the context of the delay of the connection to the mFRR EU Balancing Platform

Context and legal basis

On 9th November 2023, CREG approved, in its Decision (B)658E/85, the tariff proposal for the period 2024-2027 introduced by Elia. This proposal included the determination of the tariff for maintaining and restoring the residual balance of individual Balance Responsible Parties (BRPs). This tariff is based on the costs incurred by Elia for maintaining a balance between generation and consumption in the Belgian control area for the quarter-hour in question and is intended to appropriately incentivize BRPs to balance their injection and offtake levels, as legally required by Article 12(5)(10) of the Electricity Act of 29 April 1999 and as per Paragraphs 4.2(2), 4.4, 4.5 and 4.6 of Annex 2 of the Tariff Methodology dated 30 June 2022.

For the 2024-2027 period, the tariff for maintaining and restoring the residual balance of individual BRPs is constructed according to the following table :

		System imbalance	
		Positive	Negative or zero
BRP imbalance	Positive	MDP – α	MIP + α
	Negative		

Table 1 : Currently applicable Tariff for maintaining and restoring the individual balance of BRPs

For the period before the first connection to a European platform for the exchange of balancing energy (MARI/PICASSO) and after the mFRR technical GO-live (i.e. the moment of entry into force of the T&C BRP developed in the context of the accession of Elia to the European platforms for the exchange of balancing energy), the MIP and MDP components are described in the T&C BRP, whereas the α component is described in the Tariff Proposal.

In the T&C BRP, it is clearly explained that the prices defined in bilateral TSO contracts in the framework of mFRR sharing agreements are excluded from the calculation of the MIP and MDP as from the mFRR technical GO-live. As such, the European regulation (and more specifically the ACER decision on the imbalance settlement harmonization methodology, hereafter “ISH”) does not prevent the TSO to take the prices of mFRR sharing agreements into account in the calculation of the imbalance price as long as the TSO is not connected to the European platforms for the exchange of balancing energy. When drafting the T&C BRP, Elia could hence have proposed to continue taking the mFRR sharing agreements prices into account after the mFRR technical GO-live and to only exclude these prices from the imbalance price calculation as from the first connection to a European platform for the exchange of

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balancing energy. However, considering the short period of time between the mFRR technical GO-live and the connection to MARI, a more pragmatic approach was proposed in the T&C BRP where it was foreseen to use the imbalance price formula developed for the connection to MARI, and hence excluding the mFRR sharing agreements prices, as from the mFRR technical GO-live. This approach was proposed in order to :

- avoid incurring costs to develop the new IT applications (to be deployed at the mFRR technical GO-live) to account for the mFRR sharing agreements prices whereas :
    - The time period between the mFRR technical GO-live and the connection to MARI was supposed to be limited,
    - The activation of mFRR sharing agreements was supposed to remain rare.
- avoid having to adapt the imbalance price formula too frequently (i.e. twice in a very short period of time), considering the impact on the operational teams of both the BRPs and Elia.

However, since this approach has been proposed in the T&C BRP, the context has changed. The mFRR technical GO-live was successfully organized on May 22nd 2024, but the connection to MARI, which, according to the last planning, was foreseen in June 2024, had to be postpone after the summer 2024 due to an insufficient progress of the Interoperability Tests (IOP Tests) with the MARI European Platform[1].

This evolution of the context has important implications : it means that during the upcoming summer – and hence a longer period than initially foreseen, BRPs might be exposed to an imbalance price that does not fully reflect the marginal prices of the activations made by Elia to cover the residual imbalance of the Belgian imbalance price area (and that does not even take a part of these activations into account in the price construction). Such a market design is deemed inefficient and dangerous:

- First of all, when the marginal prices of the explicit balancing activations made by the TSO, or at the request of the TSO, to cover the residual imbalance of the imbalance price area, are not used in the imbalance price construction, it does not encourage the BRPs to efficiently use the flexible resources of their portfolio to help balance the system, and it is therefore not aligned with the decentral balancing model applied in Belgium;
- Secondly, when cross-border activations are requested by the TSO (be it through the activation of mFRR sharing agreements or, in the future, via the European platforms for the exchange of balancing energy) to cover the residual imbalance of the imbalance price area, but are not taken into account in the construction

[1] As explained during the Working Group Balancing of May 21st 2024

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of the imbalance price, unhealthy "geographical arbitrage" could occur when the imbalance price areas of the uncongested area have imbalances in the same direction[2].
Indeed, this creates possibly important spreads between imbalance prices of different imbalance price areas that face similar imbalance situations. As a result, BRPs receive financial incentives to aggravate their imbalance in Belgium by importing from (in case the imbalance price areas are long) or exporting to (in case the imbalance price areas are short) other countries, as long as there remain ATCs in the corresponding direction. These financial incentives, resulting from spreads between imbalance prices of imbalance price areas with imbalances in the same direction, foster a "geographical arbitrage" between imbalance price areas and come with a high risk to create an important balancing margin which is then passed on the Belgian consumers through the grid tariffs.

In this context, Elia believes that the mFRR sharing prices should be re-introduced in the imbalance price calculations until the connection to the European balancing platforms, in order to mitigate the aforementioned risks and inefficiencies linked to an imbalance price design which is not based on marginal pricing.

Besides, Elia believes that this mitigation measure is urgent. Indeed, the summer outlook highlighted high risks of incompressibility situations, also due to limited accuracy of forecasts, and hence possible quite intensive use of mFRR sharing agreements during the forthcoming summer which precisely corresponds to the period between the mFRR technical GO-live and the connection to MARI.

Since incompressibility issues are typically faced by a broader area than just the Belgian imbalance price area, the re-introduction of mFRR sharing agreement prices in the imbalance price calculation is deemed necessary and urgent in order to decrease the risk of "geographical arbitrage" during the expected incompressibility situations of the upcoming summer. As from the connection to the European balancing platforms, this risk of "geographical arbitrage" is expected to automatically reduce thanks to the use of the cross-border marginal prices in the imbalance price calculation when Belgium faces imbalances in the same direction as its neighboring countries.

Elia would therefore like to propose the re-introduction of the mFRR sharing prices in the construction of the imbalance prices, in the exact same way as it was before the mFRR technical GO-live.

Theoretically speaking, this proposal would require the modification of the MIP and MDP that are described in the T&C BRP. Considering the urgency of the measure and the fact that a revision of the T&C BRP is subject to a long

[2] This is typically the case when Belgium faces incompressibility situations : the risk is then important that the neighboring imbalance price areas also present a positive imbalance.

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and incompressible regulatory trajectory, Elia suggests to re-introduce the mFRR sharing prices through an adaptation of the Tariff Proposal.

As mentioned above, the additional component of the imbalance price is described in the Tariff Proposal until the first connection to a European balancing platform, which gives some room to re-introduce the mFRR sharing prices through an additional incentivizing component.

The purpose of this revision is therefore to re-introduce the mFRR sharing in the imbalance price calculation, in order to come back to a similar situation as before the mFRR technical GO-live, but through an additional component instead of through the calculation of the main component.

Proposal to introduce an α' parameter

The proposal consists in introducing an additional incentivizing component alpha' (hereafter «α'») in the calculation of the imbalance price when energy is activated by neighboring TSO(s), at Elia's request, through mFRR sharing agreement(s).

For the 2024-2027 period, the tariff for maintaining and restoring the residual balance of individual BRPs would then be constructed according to the following table :

		System Imbalance	
		Positive	Negative or zero
BRP imbalance	Positive	MDP - α- α'	MIP + α + α'
	Negative		

Table 2: Proposed new Tariff for maintaining and restoring the individual balance of BRPs

Where α' would be defined as followed :

- For the period between the entry into force of the revised Tariff Proposal and the first connection to a European platform for the exchange of balancing energy (MARI/PICASSO) :
    - If a volume has been activated at Elia's request under the mFRR Sharing Agreements, then :
        - α'(t) (EUR/MWh) = MAX (MP_RSA_{up} (t) - MIP (t) ; 0) if SI(t) < -25 MW ;
          As a result, if the marginal price of the mFRR sharing activations requested by Elia in the upward direction is higher than the MIP (which is now calculated without taking the mFRR

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sharing activation prices into account), then the marginal price of the mFRR sharing activations will set the Imbalance Price[3], exactly as it was the case before the mFRR technical GO-live.

- α'(t) (EUR/MWh) = MAX (MDP (t) - MP_RSA_{down} (t) ; 0) if SI(t) > 25 MW ;
  As a result, if the marginal price of the mFRR sharing activations requested by Elia in the downward direction is lower than the MDP (which is now calculated without taking the mFRR sharing activation prices into account), then the marginal price of the mFRR sharing activations will set the Imbalance Price[3] , exactly as it was the case before the mFRR technical GO-live.
- α'(t) (EUR/MWh) = 0 if -25 MW ≤ SI ≤ 25 MW ;
  When the SI falls into the dead band, α'(t) is set to zero to ensure the consistency with the concept of the dead band in which the imbalance price is set by the Value of Avoided Activation, whatever the marginal price of the activations made by Elia.
  Note that the dead band does not increase the risk of "geographical arbitrage" described above : if BRPs massively import (resp. export) their imbalance to Belgium where the imbalance price is set by the Value of Avoided Activation, the SI will then leave the dead band range, and the imbalance price will again be set by the marginal activation price.
- MP_RSA_{up} (t) is the element relating to adjustment in the positive direction, at Elia's request, under the mFRR Sharing Agreements between TSOs. This element is equal to the maximum of the prices defined in the bilateral mFRR Sharing Agreement contracts with the TSOs that have activated an upward volume at Elia's request for the quarter-hour qh(t).
- MP_RSA_{down} (t) is the element relating to adjustment in the negative direction, at Elia's request, within the framework of the mFRR Sharing Agreements between TSOs. This element is equal to the minimum of the prices defined in the bilateral mFRR Sharing Agreement contracts with the TSOs that have activated a downward volume at Elia's request for the quarter-hour qh(t).

- If no volume has been activated at Elia's request under the mFRR Sharing Agreements for the quarter-hour qh(t), then α' (t) = 0 ;

[3] Note that, in this reasoning, the assumption is made that the additional component α is equal to zero. This situation is realistic in case of activation of mFRR sharing agreements since the α is equal to zero when the imbalance price already exceeds 400€/MWh (resp. is lower than -200€/MWh) without the application of α, which is quite likely when Elia starts activating mFRR sharing after having activated the whole locally available FRR means.

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- For the period starting with the first connection to a European balancing energy exchange platform (MARI/PICASSO), α'(t) =0.

In order to maintain, as far as possible, the status quo compared to the situation before the mFRR technical GO-live, a small adaptation is also proposed in the calculation of the cp of the α component:

cp is determined as a function of the values of MIP, MDP and α' according to:

- If SI (t) ≤ 0 :
  - If MIP (t)+α'(t) > 400 €/MWh; 0
  - If 200 €/MWh < MIP (t) +α'(t) ≤ 400 €/MWh; (400 − MIP(t) -α'(t))/ 200
  - If MIP (t) +α'(t) ≤ 200 €/MWh; 1
- If SI (t) > 0 ;
  - If MDP-α'(t) ≥ 0 €/MWh; 1
  - If -200 €/MWh ≤ MDP(t) -α'(t) < 0 €/MWh; (MDP(t) +α'(t) + 200)/ 200
  - If MDP(t) -α'(t) < -200 €/MWh ; 0

When α' is different from zero, the MIP (resp. MDP), based on the prices of locally activated mFRR and aFRR energy bids, will most of the time exceed 400€/MWh (resp. be lower than -200€/MWh) and both the cp and the α will hence be equal to zero whatever the value of α'. However, in some rare situations, it cannot be totally excluded that the MIP (resp. MDP), that don't take the prices of reserve sharing into account, fall in a range where the cp is different from zero, whereas the imbalance price including the α' falls outside this range (or at least further in this range). In order to base the calculation of the α on the imbalance price that is already reached before applying the alpha, and not only on the MIP (resp. MDP) that don't take the mFRR sharing activation prices into account, the calculation of the cp has been adapted and based on the value of MIP+ α'(t) (resp. MDP- α'(t)).

Legal justification

The re-introduction of the mFRR sharing agreement prices in the calculation of the imbalance price is based on the following elements:

- ISH allows the use of these mFRR sharing agreement prices in the calculation of the imbalance price until the first connection to a European platform for the exchange of balancing energy;
- ISH allows the use of additional incentivizing components to fulfil nationally defined boundary conditions;
- Article 30.6 of the currently applicable T&C BRP refers to the Tariff Proposal for the description of the additional component before the first connection to a European platform for the exchange of balancing energy;
- Article 4 of the BRP contract mentions that if there is a conflict of interpretation or any divergence between the BRP Contract and one or more components of the Tariffs, said Tariff component(s) shall take precedence.

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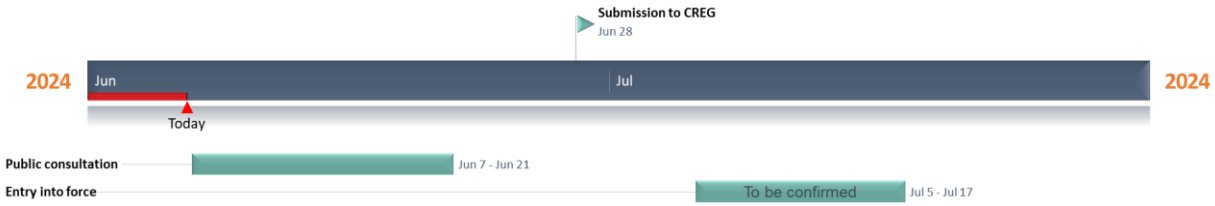
Considering those four elements, Elia proposes to re-introduce the mFRR sharing agreement prices in the calculation of the imbalance price through an additional incentivizing component α', and this in order to avoid distorting incentives for the BRPs in the decentral Belgian balancing model (nationally defined boundary condition).

Proposed implementation timeline



The proposal for modification of the tariff for maintaining and restoring the residual balance of individual BRPs will be publicly consulted from June 7 to June 21.
This proposal, together with the present explanatory note and the consultation report, is expected to be submitted to CREG on June 28.
In case of positive evaluation of the proposal by the CREG, the modifications are expected to enter into force between July 5 and July 17, depending on the time required by the CREG to make its decision and publish the updated Tariffs.

Impact of the introduction of the α' parameter

On the total imbalance costs and balancing margin

As explained previously, the purpose of the modifications explained in this note is to continue applying an efficient imbalance price formula, based on marginal activation prices, while awaiting the first connection to the European platforms. The objective is hence to maintain a market design which is as close as possible to the one that existed before the mFRR technical GO-live. The re-introduction of the mFRR sharing agreement prices in the calculation of the imbalance price, through the use of an α' parameter, is therefore not expected to have any impact on the total imbalance costs or on the balancing margin compared to the previous framework.

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On the imbalance price publications

According to the requirements described in the Balancing Rules, Elia will publish the 15' imbalance price on the first working day following the 15th calendar day following the month of the concerned quarter-hour on a validated manner.

The Balancing Rules also require Elia to publish the 15' imbalance price 15 minutes after the quarter-hour in questions on a non-validated manner, as well as to publish per minute information about the imbalance price, within the concerned quarter-hour and, if technically feasible with a maximum delay of 2 minutes. These per minute publications are non-validated values.

In accordance with the Balancing Rules, Elia will strive to provide as much information as possible to the market regarding the 15' and 1' imbalance price.

However, since the IT tools have not been developed to include the prices of mFRR sharing agreements in the calculations and publications of the imbalance price (for the reasons explained above), an UMM will be published each time mFRR sharing agreements are activated, in order to warn the market parties that the actual imbalance price could be more "extreme" (i.e. higher when the system is short, lower when the system is long) than the one indicated in the close to real time publications.

These UMMs would indicate that mFRR sharing activations took place at Elia's request and would specify which mFRR sharing agreement(s) were called in. Besides, these UMM could refer to publications allowing the market parties to :

- Know the exact mFRR sharing price applicable for the activated mFRR sharing agreement(s) in case the contracts with RTE, TenneT or National Grid are activated;
- Get a rough idea of the real-time value of energy in the German imbalance price area in case the contract with Amprion is activated.

Note that the 1' publications of the imbalance price will not be updated ex-post to account for the prices of mFRR sharing activations, contrary to the 15' imbalance prices that will be updated and validated on the first working day following the 15th calendar day following the month of the concerned quarter-hour.

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