

Questions and Answers

Nordic webinar - mFRR energy activation market – updated Implementation Guide

June 16, 2021

- 1. Are TSOs planning to publish more information about pre-processing and national attributes as it might have a huge impact on the results in the end? How is transparency and Nordic benefit ensured as national bid attributes lead to national markets before the Nordic market?**

Pre-processing of bids will be mostly based on national bid attributes, which to a large extent are voluntary for BSPs and should be seen as a possibility to let TSOs keep track of e.g., maximum activation time or resting time of some particular bids/assets.

Other national bid attributes such as locational information, period shift, fast and slow activation time will support the processes that are also a part of the balancing today. These processes are more manual today and will have to be automatized from go-live of automated mFRR energy activation market in November 2022. Thus, no additional national markets prior the Nordic market are foreseen.

The Nordic mFRR energy activation market will always have priority. Period Shift bids and bids for faster activation will be used after the Scheduled Activation. Slower activation bids will only be used in shortage situations.

The Nordic TSOs will not support the same national attributes and local processes are also expected to be different. More details are therefore available through the local stakeholder dialog.

- 2. Can different price areas get different regulation direction from the AOF (scheduled activation)?**

Yes. If two bidding zones have needs in different directions and netting is either not economical or possible due to unavailable transmission capacity, the bidding zones will get different regulation directions. In such cases the bidding zones will also get different mFRR balancing energy prices in the AOF run.

3. Is technical linking only used when you have bid available to direct activation?

Technical linking is used to indicate that bids belong to the same underlying asset. It must be used to indicate the same underlying asset for bids that are eligible for direct activation.

Another case where it must be used is for bids that make use of the national bid attributes for maximum duration and resting time.

4. Can you confirm that 'slower activation' will not continue over to MARI?

Slower resources will not be included in bid selection by the Nordic mFRR energy activation platform algorithms for scheduled and direct activation from go-live in november 2022. However, slower resources will be accepted by Svenska kraftnät and Energinet and activated in special situations, outside the algorithm clearing. For details, please contact Svenska kraftnät or Energinet.

Slower resources do not comply with requirements for standard mFRR energy product neither in the Nordic market and platform nor in MARI, which is the reason for not including them in the algorithm clearing. When connecting to MARI, there is however still a possibility to use such resources for balancing, if they are defined as specific products (described in [EBGL](#)).

5. Do you believe that the imbalance price will be communicated much faster after the end of ISP after mFRR energy activation market is live?

The mFRR activation prices and imbalance price will be calculated automatically and then be published as soon as possible after each ISP. The publishing will be in compliance with the requirement to publish the prices at the latest 30 minutes after the end of the ISP.

6. The Nordic TSO's have said earlier you want to be proactive with mFRR and balancing following the single balance discussions, but with the algorithm for mFRR energy activation market you will look with completely fresh eyes on each quarter meaning it will be hard to be proactive with activation if I understand it correctly?

Proactive means that Nordic TSOs activate mFRR based on imbalance forecasts.

Balancing reactively would mean that mFRR is activated when large part of aFRR capacity is activated, and aFRR activation is replaced with mFRR activation. The Nordics have, so far, a limited amount of aFRR (among other issues), and thus being reactive is not used as balancing philosophy. Further, the mFRR balancing energy product and activation process will from start of Automated Operation in November

2022 be more rigid than is currently the case, increasing the importance of correct imbalance forecasts.

7. Can direct and scheduled activation be activated in opposite directions at the same time? If so, how will direct activation be compensated?

Yes. Direct activations will most often be used in case of large, unexpected incidents, which may require activation in the opposite direction of the already activated volumes. Activation of mFRR in both directions during the hour also happens today (e.g., 8 % of the hours in 2018). There will be separate mFRR balancing energy prices for up and down regulation from start of Automated Operation in November 2022, as is the case today.

8. Have you considered aggregated units for mFRR? Is it a limitation for your optimization algorithms if the location of the assets is spread around the whole price area?

Portfolio-bidding (where the units are aggregated to single regulating power bids for a whole bidding area) will still be allowed in the automated Nordic mFRR energy activation market. Requirements for more detailed locational information of bids may vary between the Nordic TSOs (as it also varies today). The Nordic and European algorithms cannot take locational information within a bidding area into account and thus this bid attribute will not be forwarded to the platforms, but used locally by TSOs e.g., for congestion management purposes.

9. If a BSP is activated, will the BRP receive energy according to expected ramp and delivery, or will the energy be according to actual delivered energy from the BSP?

Please see the [memo on "Product Activation Process" for the mFRR energy activation market](#) where this is described in more detail. From start of Automated Operation in November 2022 the volumes will be set to a block volume both to the BSP and the BRP. From 15 min ISP it is intended to use the standard product profile as imbalance adjustment to the BRP.

10. If period shift is available for a bid, could this still be used for scheduled activation?

Yes. Period shift attribute is an extra attribute on a standard product bid for scheduled activation and/or direct activation. Bid selection for scheduled activation will be performed before bid selection for period shift activation for the bids that indicate that they may be used for period shift.

11. Period Shift: What is the ramping period when activating period shift?

There is no strict ramping requirement for period shift as long as it is delivered according to bid. In practice, this will either be production or consumption that can ramp up very quickly so that they deliver what they are supposed to, or it is production that ramps down or up earlier than originally planned and then the ramping profile is of less importance.

12. We have found out when working with the aFRR Capacity Market the bid updates and cancellation is described in the same way. But if you are active in more than one bidding zone sending in a change for one bidding zone in the xml message without including the other bidding zones where you are active completely deletes the bids in these zones. How does this work for mFRR?

The update and cancellation principles are different for the aFRR Capacity Market and the mFRR energy activation market. In the aFRR Capacity Market a new bid message for the same day completely replaces previous messages for the same day. In the mFRR energy activation market only the time series to be updated need to be included in a new bid message, and only those time series will then be changed. This is described in more detail in the chapter on Update and cancellation principles in the respective implementation guides.

13. What is the deadline for the TSO to acknowledge the BSP's activation response?

There has not yet been defined a deadline for the TSO to acknowledge the BSP's activation response. We see that it could be useful and will consider defining such deadline.

14. Will it still be possible for the TSOs to activate bids ahead of time? For example, today the TSO sometimes activates several hours ahead.

From the go-live of the automated mFRR energy activation market in November 2022 activation of standard mFRR energy bids ahead of time and for the longer period than 15 min at a time is not foreseen. Energinet plans to activate slower resources 15 min at a time as well. However, in some fallback situations it cannot be ruled out that activation for a longer period might be needed.

15. It's hard to understand the attributes how they are supposed to be used by BSP. They are so many and gives so much flexibility. But in the end the biggest concern is activation. Seems that TSO has a large flexibility upon scheduled/direct activation that BSP has to handle also. Some more words had been useful to understand what we need to handle.

The use of bid attributes is described and illustrated in the [Implementation guide](#) and in the slides from the Nordic webinar (held on the 16th of June). The Implementation guide includes indication of which bid attributes are mandatory and which are optional. Complex attributes are optional, and simple bids are better for the algorithm. It could be sufficient for a BSP to only indicate whether bid is divisible or indivisible. TSOs probably use mainly scheduled activation, and BSP has possibility to participate only in scheduled activation, if direct activations at any given moment are not suitable. Please, contact TSOs (contact information can be found [here](#)) with your questions regarding bid attributes and activation.