

Explanatory document to the amended proposals
for the Nordic aFRR capacity market concerning
the common and harmonised rules and processes
for the exchange and procurement of aFRR
balancing capacity, and for the application of a
market-based allocation process for the exchange
of aFRR balancing capacity

in accordance with Article 33(1) and Article 38(1) of the
Commission Regulation (EU) 2017/2195 of 23 November 2017
establishing a guideline on electricity balancing

23 August 2024

Introduction

This document gives background information and the rationale for the Nordic TSOs amendments to the proposals the common and harmonized rules and processes for the exchange and procurement of aFRR balancing capacity in accordance with Article 33(1) and for the application of the market-based allocation process for the exchange of aFRR balancing capacity in accordance with Article 38(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

Amendment to the methodology for the application of the market-based allocation process for the exchange of aFRR balancing capacity

The amendment to the methodology for the application of the market-based allocation process for the exchange of aFRR balancing capacity in accordance with Article 38(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing is a direct consequence of introducing a trilateral mFRR capacity market between Denmark, Finland and Sweden. Introducing this trilateral market demands a separation between aFRR and mFRR related to the application of the market-based allocation process for the exchange of balancing capacity. The amendment is therefore completely related to smaller changes in wording, such that it is explicitly stated, that the methodology for the application of the market-based allocation process for the exchange of aFRR balancing capacity refers only to aFRR.

Amendment to the methodology for the common and harmonized rules and processes for the exchange and procurement of aFRR balancing capacity

The aFRR capacity market time unit has been defined explicitly and determined to be one hour. This is in line with the European Harmonized Cross-zonal Capacity Allocation methodology and the Nordic methodology for the market-based allocation process according to EB GL article 41, that gives the possibility for the market time unit to be the same as for the day-ahead market or a multiple of the day-ahead market time unit.

The determination of the aFRR capacity market time unit of one hour allows the Nordic TSOs to transition to higher time resolution, when it is relevant and valuable according to transmission capacity calculation methodologies and common grid models. When entering 15-minute time resolution in SDAC common grid models are still on hourly resolution, meaning that allocating capacity on 15-minute basis in the capacity markets would not change or influence the capacity calculation in any way.

The optimization function of the aFRR capacity market is though taking 15-minute day-ahead market prices into consideration when evaluating the cost of cross-zonal capacity as the methodology of ACER decision 20/2022 pursuant to Article 41 of EB GL constitutes.

Appendix

Summary of Public Consultation

A public consultation for Amendments to methodologies for the Nordic aFRR capacity market was held from February 16th 2024 to March 18th 2024. During the public consultation the Nordic TSOs received 3 responses.

The responses were submitted by UPM Energy, Elisa and Fortum, and the documents are attached as an appendix.

A summary of the text is provided below alongside a response from the Nordic TSOs. The summary is divided into topics.

Time resolution

UPM: “UPM sees that the aFRR capacity bids should be procured on hourly resolution which would lead to better optimization of assets. (...) Planning of the capacities in 15-minute resolution would not improve accuracy of the delivered capacities and would even increase complexity of the planning and bidding on aFRR capacity markets.”

Elisa: “We see that a market time unit longer than 1 hour could be harmful for new technologies (such as batteries) and therefore suggest including a statement that the aFRR capacity market time unit is at most 1 hour.”

Fortum: “if TSOs want to use a different MTU than the energy MTU (15 min) this should be properly motivated as the induced cost for market participants and society is relevant.”

Response from Nordic TSOs

The TSOs acknowledge the support for hourly resolution in the mFRR capacity market instead of changing to 15-minute time resolution with the day-ahead market. This is also the intention behind the amendment of the paragraph. The TSOs do not intend to have a time resolution shorter or longer than an hour for the capacity markets.

The Nordic TSOs want to align the Nordic capacity market methodologies with the European Harmonized Cross-zonal Capacity Allocation methodology and the Nordic methodology for the market-based allocation process according to EB GL article 41, where the MTU for the balancing capacity market will be the same as that for the day-ahead market or a multiple of the day-ahead market time unit. This alignment secures future compatibility with the harmonized methodology as well as it allows the Nordic TSOs to transition to higher time resolution, when it is relevant and valuable according to transmission capacity calculation

methodologies and common grid models. When entering 15-minute time resolution in SDAC common grid models are still on hourly resolution, meaning that allocating capacity on 15-minute basis in the capacity markets would not change or influence the capacity calculation in any way.

The inclusion of 15-minute prices from SDAC is taking into consideration according to A41. This will be done by using the highest price of the four quarters within the hour, which will indirectly favour SDAC.

Co-optimization of aFRR and mFRR

UPM: “UPM suggests the developing [of] a calculation and procurement algorithm where the capacities are solved simultaneously as a pool and the market participants should not be made to decide on which market to bid.”

Response from Nordic TSOs

It is a valid point that market participants would prefer a common clearing for aFRR and mFRR capacity making it easier to optimize the bidding. However, this change will be introduced in the common European harmonized methodology. This co-optimization is rather difficult to implement, and the TSOs have not yet found the best way to introduce this co-optimization. At the same time, the TSOs see a great value creation in the common aFRR capacity market and trilateral mFRR capacity market. This value creation should be realized as soon as possible, which is why the co-optimization will only be introduced later with the harmonized methodology.

Bids can be linked by exclusive bid linking such that if one bid is not chosen in the aFRR market it can be chosen in the mFRR market.

Reservation of cross-zonal capacity

Elisa: “We see that the TSOs should be very cautious while allocating the cross-zonal capacity for balancing purposes before day-ahead auction as the effect to the day-ahead prices can be very hard to forecast precisely. (...) We highlight that the process is transparent and continuously monitored and improved.”

Response from Nordic TSOs

The Nordics already have a decision (A41) on the market-based allocation process, which is not consulted here.

The TSOs strive to make the reservation of cross-zonal capacity as transparent as possible with continuous monitoring.