
Energinet, Fingrid, Statnett and Svenska kraftnät proposal for establishment of common and harmonized rules and processes for the exchange and procurement of aFRR balancing capacity in accordance with Article 33(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

Date of the approval

DISCLAIMER

This document is released on behalf of Energinet, Fingrid, Statnett and Svenska kraftnät only for the purpose of the public consultation on proposal for establishment of common and harmonized rules and processes for the exchange and procurement of aFRR balancing capacity in accordance with Article 33(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing. This version of the proposal for establishment of common and harmonized rules and processes for the exchange and procurement of aFRR balancing capacity does not in any case represent a firm, binding or definitive TSOs' position on the content.

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Energinet, Fingrid, Statnett and Svenska kraftnät, taking into account the following,

Whereas

- (1) This document is a common proposal developed by the Transmission System Operators Energinet, Fingrid, Statnett, and Svenska kraftnät (hereinafter referred to as “Nordic TSOs”) regarding a proposal for the exchange and procurement of aFRR balancing capacity in the Nordic LFC block. This proposal is hereinafter referred to as the “Proposal”.
- (2) The Proposal takes into account the general principles and goals set in the the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (hereinafter referred to as “EB GL”). It also takes into account and respects the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereinafter referred to as the “SO GL”), in particular Articles 165 and 167, and more generally Chapters 1 and 2 of Part IV Title VIII.
- (3) The objectives of EB GL, as stated in Article 3(1) are, inter alia: (a) fostering effective competition, non-discrimination and transparency in balancing markets; (b) enhancing efficiency of balancing as well as efficiency of European and national balancing markets; (c) integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security; (e) ensuring that the procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of balancing markets while preventing undue distortions within the internal market in electricity.
- (4) The objectives of SO GL, as stated in Article 4(1) are, inter alia: (c) determining common load-frequency control processes and control structures; (f) promoting the coordination of system operation and operational planning; (g) ensuring and enhancing the transparency and reliability of information on transmission system operation; (h) contributing to the efficient operation and development of the electricity transmission system and electricity sector in the Union. As stated in Article 4(2), when applying this regulation the system operators shall: (b) ensure transparency; (c) apply the principle of optimisation between the highest overall efficiency and lowest total costs for all parties involved; (d) ensure TSOs make use of market-based mechanisms as far as possible, to ensure network security and stability; (e) respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation.
- (5) The Nordic TSOs are mutually willing to exchange aFRR balancing capacity within the Nordic LFC block and have for that reason developed common and harmonised rules and processes for the exchange and procurement of this balancing capacity. Thereby this Proposal fulfils Article 33(1) of EB GL.
- (6) Pursuant to Article 5(3)(b) of EB GL, this Proposal is subject to approval by each relevant regulatory authority in accordance with Article 27 of Directive 2009/72/EC.
- (7) Article 33 of EB GL further specifies requirements that shall be taken into account in this Proposal: (i) the exchange of balancing capacity shall be based on a TSO-TSO model taking

into account the available cross-zonal capacity and the operational limits defined in relevant chapters of SO GL; (ii) all TSOs shall submit all aFRR balancing capacity bids from standard products to the capacity procurement optimisation function and include them in the procurement process, with the exception of conditions described in Article 26 and Article 27 of EB GL; (iii) all TSOs shall ensure both the availability of cross-zonal capacity and that the operational security requirements set out in SO GL are met, and describe the methodology by which this is done; (iv) TSOs shall not increase the reliability margin due to the exchange of aFRR balancing capacity.

- (8) Pursuant to Article 33(1) of EB GL, this Proposal shall respect the requirements of Article 32 of EB GL regarding procurement rules for FRR balancing capacity.
- (9) This Proposal shall also respect and take into account Article 34 of EB GL regarding the transfer of the obligation of balancing service providers to provide balancing capacity.
- (10) Pursuant to Article 38(1) and Article 41(1) of EB GGL, the methodology for the market-based allocation of cross-zonal capacity for the exchange of aFRR balancing capacity, as described in this Proposal, is contained in a separate proposal. Article 41(1)(c) requires a detailed description of the pricing method and the sharing of congestion income for this methodology, which shall be detailed in this Proposal.
- (11) Pursuant to Article 12(3) (f), (g) and (h) of EB GL, the Proposal shall take into account that the Nordic TSOs shall publish, as soon as it becomes available, information on offered volumes and prices of procured balancing capacity, as well as information on the allocation and use of cross-zonal capacity for the exchange of aFRR balancing capacity.
- (12) The Proposal generally contributes to the achievement of the objectives stated in EB GL by:
 - a. Integrating balancing markets and fostering effective cross border competition, market liquidity and a level playing field for balancing service providers across the Nordic region;
 - b. Enhancing efficiency of balancing by enabling effective and market-based allocation of reserves between all scheduling areas within the Nordic region while contributing to operational security by improving the allocation of reserves necessary for secure balancing.
- (13) In conclusion, the Proposal contributes to the general objectives of EB GL and SO GL to the benefit of all market participants and electricity end consumers.

SUBMIT THE FOLLOWING PROPOSAL TO ALL RELEVANT REGULATORY AUTHORITIES:

Title 1 General provisions

Article 1 Subject matter and scope

This Proposal shall be considered as the common proposal of Energinet, Fingrid, Statnett and Svenska kraftnät for the establishment of a regional aFRR capacity market in accordance with Article 33 of EB GL. The proposal for the exchange and procurement of mFRR balancing capacity shall be subject to a separate process.

Article 2 Definitions and interpretation

1. For the purposes of the Proposal, terms used in this document shall have the meaning of the definitions included in Article 2 of EB GL, Article 2 and 3 of SO GL and of Regulation (EC) 714/2009, Directive 2009/72/EC, Commission Regulation (EU) 543/2013.
2. In the Proposal, unless the context requires otherwise:
 - a) the singular indicates the plural and vice versa;
 - b) the table of contents and headings are inserted for convenience only and do not affect the interpretation of the Proposal; and
 - c) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

Title 2 Nordic aFRR capacity exchange Proposal

Article 3 Prequalification of aFRR capacity

Balancing service providers participating in the aFRR capacity market shall be prequalified in accordance with the prevailing prequalification process with the connecting TSO.

Article 4 High level design of the aFRR capacity market

1. The market area equals the Nordic LFC block. The aFRR capacity market shall apply the same bidding zones as the day-ahead market.
2. The aFRR capacity market shall apply the same market time unit resolution as the day-ahead market.
3. The predefined volume of balancing capacity to be procured consists of a separate volume for upward aFRR and downward aFRR capacity.
4. The predefined volume of aFRR capacity will be procured daily for a predetermined set of market time units (hereinafter “MTU”).
5. Any changes in the predefined procurement volumes and the MTU shall be announced to market participants in advance.

6. The aFRR balancing capacity will be procured on a daily basis via a daily tender.
7. The gate closure time for balancing service providers to submit aFRR capacity bids will be 20:00 CET two days prior to the day bids are valid. The aFRR capacity market will use the same time zone as the day-ahead market.
8. The procurement optimisation function selects aFRR capacity bids and allocates cross-zonal capacity (hereinafter “CZC”) for the purpose of exchanging balancing capacity in accordance with Article 10. The results of the procurement are notified to the bidders without undue delay.

Article 5

Product and bid characteristics

1. The following aFRR capacity product characteristics shall be consistent with the prevailing terms and conditions for balancing service providers related to aFRR energy activation in the Nordic LFC block:
 - (1) Full activation time
 - (2) The minimum bid quantity
 - (3) The maximum bid quantity
 - (4) The bid granularity
2. The aFRR capacity bid shall include the following information:
 - (1) Price in €/MW
 - (2) The volume of the bid in MW
 - (3) The MTU(s) for which the bid is valid
 - (4) The bidding zone for which the bid is issued.
 - (5) Divisibility of the bid where single bids less than 50 MW can be marked as indivisible
 - (6) The direction of the bid (upward regulation or downward regulation)
3. The following links between bids may be used:
 - (1) Bids with same volume, direction and prices of consecutive MTUs can be linked, meaning that all these bids must either be rejected or accepted
 - (2) An upward bid can be linked with a downward bid of the same MTU, meaning that both bids must either be rejected or accepted. Bidding curves cannot be combined with linking of upward- and downward bids
 - (3) It will be possible to present a single bid as a bid curve, where only one bid of the group of bids constituting the bid curve can be selected.

Article 6

aFRR capacity bid submission

The bid format will be based on ENTSO-E Reserve Resource Process (EERP), a standardised bidding format for the procurement of Reserve Capacity. ENTSO-E’s Market Data Exchange Standard (MADES) communication protocol will be used for the exchange of data.

Connecting TSOs will have full access to all bids submitted to the platform, also when bidding data is sent directly to the host.

Article 7

Settlement of procured aFRR capacity

1. Until the Nordic activation optimisation function with activation of aFRR based on the Area Control Error of each bidding zone is established, although lasting for maximally 2 years, the BSPs will receive an availability payment for each MTU in which the aFRR capacity bid is accepted equal to the bid price multiplied with bid volume. After this point in time the settlement will be based on the principle of marginal pricing.
2. Full availability for energy activation will be required for accepted aFRR capacity bids with the exception for force majeure.

Article 8

Methodology for allocating cross-zonal capacity for aFRR capacity market

The Nordic TSOs shall allocate CZC to the aFRR capacity market in accordance with the separate proposal document submitted to the NRAs, entitled “Energinet, Fingrid, Statnett and Svenska kraftnät proposal for the methodology for a market-based allocation process of CZC 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”.

Article 9

The procurement volume of aFRR capacity

The Nordic TSOs shall ensure provision of aFRR balancing capacity in all bidding zones in the Nordic LFC block in accordance with the prevailing dimensioning rules. The Nordic TSOs shall determine the procurement volume of aFRR capacity in accordance with Article 32(1) of EB GL. Each TSO shall notify the BSPs, the regulatory authority and the neighbouring TSOs about the volume to be procured in due time before the procurement.

Article 10

aFRR capacity procurement optimisation and bid selection

1. The distribution of aFRR capacity between bidding zones pursuant to Article 9 is the starting point for the market optimisation algorithm and the bid selection process. In the optimisation process, bid selection together with CZC allocation are optimised to increase socioeconomic welfare, taking into account bids from BSPs and the forecasted value of CZC.

The outputs from the optimisation are:

- i. the selected bids,
- ii. allocated CZC (MW) for exchange of aFRR capacity per bidding zone border; the day-ahead market transmission (trading) capacities communicated to the power market on the day before delivery will be decreased by this amount.

2. The calculation of the value of CZC is detailed in the separate proposal document also submitted to the national regulatory authorities, entitled “Energinet, Fingrid, Statnett and Svenska kraftnät proposal for the methodology for a market-based allocation process of cross-zonal capacity 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”.
3. The Nordic TSOs shall establish and publish fall-back procedures which shall aim to minimize the market impact.

Article 11 **TSO-TSO settlement in the aFRR capacity market**

Until the Nordic activation optimisation function with activation of aFRR based on the Area Control Error of each bidding zone is established, although lasting for maximally 2 years, the Nordic TSOs will share the costs that arise from the procurement of balancing capacity. Cost allocation shall be according to a “Polluter-Pays-Principle” and based on short-term imbalances. After this point the exchange of balancing capacity shall be settled to the average of marginal bid values in importing and exporting areas (middle price)

Article 12 **Publication of information**

The Nordic TSOs shall publish:

- (1) Offered volumes as well as offered prices of procured balancing capacity bids. The bid data will be anonymised.
- (2) The CZC allocated for the exchange of aFRR capacity for each MTU on the following day will be published after the Net Transmission Capacities have been submitted to the day-ahead market together with the market values used as a basis for the allocation process.
- (3) The Nordic TSOs will, based on the aFRR capacity bid data, estimate the reduction in procurement costs compared to fulfilling the reserve requirements of the FRR dimensioning process without allocating CZC for exchange of balancing capacity. These estimated costs and benefits will be published within a week after the delivery day.

Title 3 **Final provisions**

Article 13 **Publication and implementation of the Proposal**

1. The Nordic TSOs shall publish the Proposal without undue delay after its approval by all national regulatory authorities in the Nordic capacity calculation region.
2. The Nordic TSOs shall implement the Proposal no later than 12 months after the approval by all regulatory authorities in the Nordic capacity calculation region in accordance with Article 5(3) of EB GL.

3. Each TSO shall implement the Proposal as common and harmonized rules and processes and as a common function enabling procurement and exchange of aFRR in the Nordic LFC block.

Article 14 Language

The reference language for the Proposal shall be English. For the avoidance of doubt, where TSOs need to translate the Proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 7 of EB GL and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the Proposal.