Position paper of the National Regulatory Authorities of Baltic Capacity Calculation Region

on

The Baltic Capacity Calculation Region Transmission System Operators' proposal for the methodology for the market-based allocation process of cross-zonal capacity for the exchange of balancing capacity for the Baltic Capacity Calculation Region in accordance with Article 41(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

29 November 2024

1. Introduction and legal base

This document elaborates an agreement between the Baltic Capacity Calculation Region (CCR) National Regulatory Authorities (NRAs)[1] of 29 November 2024, on the Baltic CCR Transmission System Operators' (TSOs)[2] proposal for the methodology for the market-based allocation process of cross-zonal capacity for the exchange of balancing capacity for the Baltic CCR in accordance with Article 41(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (EBGL)[3] (hereinafter Methodology).

This agreement of Baltic CCR NRAs shall provide evidence that a decision on the Methodology does not, at this stage, need to be adopted by the Agency for Cooperation of Energy Regulators (Agency) pursuant to paragraph 7 of Article 5 of the EBGL. It is intended to constitute the basis on which the Baltic CCR NRAs will each subsequently make national decisions pursuant to paragraph 6 of Article 5 of EBGL to approve Methodology, submitted by TSOs.

The Baltic CCR NRAs must take their decisions to approve proposals regarding Article 5(3)(h) and Article 41(1) of the EBGL, based on this agreement, by **23 April 2025** at the latest.

The legal provisions relevant to the submission and approval of the Methodology, and this Baltic CCR NRAs' agreed opinion of the Methodology, can be found in Articles 3, 5(3)(h), 5(6), 5(7), 6(1), 6(2), 12(3)(j), 38(1)(b), 39, and 41 of the EBGL. Also, in Article 64(2a) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (IME)[4].

Article 3 of the EBGL

1. This Regulation aims at:

(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;

(d) contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union while facilitating the efficient and consistent functioning of day-ahead, intraday and balancing markets;

(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;

[1] Estonian Competition Authority, Public Utilities Commission of Latvia, National Energy Regulatory Council of Lithuania, Energy Authority of Finland, Swedish Energy Markets Inspectorate, Energy Regulatory Office of Poland
[2] Elering AS, AS "Augstsprieguma tīkls", Litgrid AB, Fingrid Oyj, Svenska kraftnät, PSE S.A.
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02017R2195-20220619
[4] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R0943-20240716

(f) facilitating the participation of demand response including aggregation facilities and energy storage while ensuring they compete with other balancing services at a level playing field and, where necessary, act independently when serving a single demand facility;

(g) facilitating the participation of renewable energy sources and support the achievement of the European Union target for the penetration of renewable generation.

2. When applying this Regulation, Member States, relevant regulatory authorities, and system operators shall:

(a) apply the principles of proportionality and non-discrimination;

(b) ensure transparency;

(c) apply the principle of optimisation between the highest overall efficiency and lowest total costs for all parties involved;

(d) ensure that TSOs make use of market-based mechanisms, as far as possible, in order to ensure network security and stability;

(e) ensure that the development of the forward, day-ahead and intraday markets is not compromised;

(f) respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation;

(g) consult with relevant DSOs and take account of potential impacts on their system;

(h) take into consideration agreed European standards and technical specifications.

Article 5(3) (h) of the EBGL

3. The proposals for the following terms and conditions or methodologies and any amendments thereof shall be subject to approval by all regulatory authorities of the concerned region:

[…]

(h) for each capacity calculation region, the methodology for a market-based allocation process of cross-zonal capacity pursuant to Article 41(1).

Article 5(6) of the EBGL

6. Where the approval of the terms and conditions or methodologies in accordance with paragraph 3 of this Article or the amendment in accordance with Article 6 requires a decision by more than one regulatory authority, the relevant regulatory authorities shall consult and closely cooperate and coordinate with each other in order to reach an agreement. Where the Agency issues an opinion, the relevant regulatory authorities shall take that opinion into account. Regulatory authorities or, where competent, the Agency shall decide on the terms and conditions or methodologies submitted in accordance with paragraphs 2, 3 and 4, within 6 months following the receipt of the terms and conditions or methodologies by the Agency or the relevant regulatory authority or, where applicable, by the last regulatory authority concerned. The period shall begin on the day following that on which the proposal was submitted to the

Agency in accordance with paragraph 2, to the last regulatory authority concerned in accordance with paragraph 3 or, where applicable, to the relevant regulatory authority in accordance with paragraph 4.

Article 5(7) of the EBGL

7. Where the relevant regulatory authorities have not been able to reach agreement within the period referred to in paragraph 6, or upon their joint request, or upon the Agency's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the Agency shall adopt a decision concerning the submitted proposals for terms and conditions or methodologies within 6 months from the day of referral, in accordance with Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942.

Article 6(1) of the EBGL

1. Where the Agency, all relevant regulatory authorities jointly or the relevant regulatory authority require an amendment in order to approve the terms and conditions or methodologies submitted in accordance with Article 5(2), (3) and (4) respectively, the relevant TSOs shall submit a proposal for amended terms and conditions or methodologies for approval within 2 months following the request from the Agency or the relevant regulatory authorities. The Agency or the relevant regulatory authorities shall decide on the amended terms and conditions or methodologies within 2 months following their submission.

Article 6(2) of the EBGL

2. Where the relevant regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies within the 2-month deadline, or upon their joint request, or upon the Agency's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within 6 months, in accordance with Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942. If the relevant TSOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in Article 4 shall apply.

Article 12(3) (j) of the EBGL

3. Each TSO shall publish the following information as soon as it becomes available:

[…]

(j) approved methodologies referred to in Articles 40, 41 and 42 at least one month before the application.

Article 38(1) (b) of the EBGL

1. Two or more TSOs may at their initiative or at the request of their relevant regulatory authorities in accordance with Article 37 of Directive 2009/72/EC set up a proposal for the application of one of the following processes:

[…]

(b) market-based allocation process pursuant to Article 41.

Article 39 of the EBGL

1. The market value of cross-zonal capacity for the exchange of energy and for the exchange of balancing capacity or sharing of reserves used in a co-optimised or market-based allocation process shall be based on the actual or forecasted market values of cross-zonal capacity.

2. The actual market value of cross-zonal capacity for the exchange of energy shall be calculated based on the bids of market participants in the day-ahead markets, and take into account, where relevant and possible, expected bids of market participants in the intraday markets.

3. The actual market value of cross-zonal capacity for the exchange of balancing capacity used in a co-optimised or a market-based allocation process shall be calculated based on balancing capacity bids submitted to the capacity procurement optimisation function pursuant to Article 33(3).

4. The actual market value of cross-zonal capacity for the sharing of reserves used in a co-optimised or a market-based allocation process shall be calculated based on the avoided costs of procuring balancing capacity.

5. The forecasted market value of cross-zonal capacity shall be based on one of the following alternative principles:

(a) the use of transparent market indicators that disclose the market value of cross-zonal capacity; or

(b) the use of a forecasting methodology enabling the accurate and reliable assessment of the market value of cross-zonal capacity.

The forecasted market value of cross-zonal capacity for the exchange of energy between bidding zones shall be calculated based on the expected differences in market prices of the day-ahead and, where relevant and possible, intraday markets between bidding zones. When calculating the forecasted market value, additional relevant factors influencing demand and generation patterns in the different bidding zones shall be taken duly into account.

6. The efficiency of the forecasting methodology pursuant to paragraph 5(b), including a comparison of the forecasted and actual market values of the cross-zonal capacity, may be reviewed by the relevant regulatory authorities. Where the contracting is done not more than two days in advance of the provision of the balancing capacity, the relevant regulatory authorities may, following this review, set a limit other than that specified in Article 41(2).

Article 41 of the EBGL

1. By two years after entry into force of this Regulation, all TSOs of a capacity calculation region may develop a proposal for a methodology for a market-based allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves. This methodology shall apply for the exchange of balancing capacity or sharing of reserves with a contracting period of not more than one day and where the contracting is done not more than one week in advance of the provision of the balancing capacity. The methodology shall include:

(a) the notification process for the use of the market-based allocation process;

(b) a detailed description of how to determine the actual market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves, and the forecasted market value of cross-zonal capacity for the exchange of energy, and if applicable the actual market value of cross-zonal capacity for exchanges of energy and the forecasted market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves;

(c) a detailed description of the pricing method, the firmness regime and the sharing of congestion income for the cross-zonal capacity that has been allocated to bids for the exchange of balancing capacity or sharing of reserves via the market-based allocation process;

(d) the process to define the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves pursuant to paragraph 2.

2. Cross-zonal capacity allocated on a market-based process shall be limited to 10 % of the available capacity for the exchange of energy of the previous relevant calendar year between the respective bidding zones or, in case of new interconnectors, 10 % of the total installed technical capacity of those new interconnectors.

This volume limitation may not apply where the contracting is done not more than two days in advance of the provision of the balancing capacity or for bidding zone borders connected through DC interconnectors until the co-optimised allocation process is harmonised at Union level pursuant to Article 38(3).

3. This methodology shall be based on a comparison of the actual market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves and the forecasted market value of cross-zonal capacity for the exchange of energy, or on a comparison of the forecasted market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves, and the actual market value of cross-zonal capacity for the exchange of energy.

4. The pricing method, the firmness regime and the sharing of congestion income for cross-zonal capacity that has been allocated for the exchange of balancing capacity or sharing of reserves via the market-based process shall ensure equal treatment with the cross-zonal capacity allocated for the exchange of energy.

5. Cross-zonal capacity allocated for the exchange of balancing capacity or sharing of reserves via the market-based allocation process shall be used only for the exchange of balancing capacity or sharing of reserves and associated exchange of balancing energy.

Article 64(2a) of the IME

1. By way of derogation from Article 6(9), (10) and (11), Estonia, Latvia and Lithuania, may conclude financial contracts for balancing capacity up to five years before the start of the provision of the balancing capacity. The duration of such contracts shall not extend beyond eight years after Estonia, Latvia and Lithuania have joined the Continental Europe Synchronous Area.

The regulatory authorities of Estonia, Latvia and Lithuania may allow their transmission system operators to allocate cross-zonal capacity on a market-based process as set out in Article 41 of

Regulation (EU) 2017/2195, without volume limitations until six months after the day on which the co-optimised allocation process is fully implemented and operational pursuant to Article 38(3) of that Regulation.

2. The Methodology proposal

The Methodology proposal was consulted by the Baltic CCR TSOs through ENTSO-E consultation hub for one month from 13 August 2024 to 13 September 2024 in accordance with Article 10 of the EBGL. [5]

Baltic CCR Steering Committee sent the methodology to the Baltic CCR NRAs on 24 September 2024. The Baltic CCR TSOs' Methodology proposal, having been submitted by the respective TSO, was received by the last Baltic CCR NRA on 22 October 2024. Therefore, in accordance with Article 5(6) of the EBGL, the deadline for approval for the Baltic CCR NRAs is 23 April 2025.

The Baltic CCR NRAs, in accordance with Article 5(6) of the EBGL, have assessed, consulted and closely cooperated and coordinated with each other in order to reach an agreement on the Methodology proposal.

3. The CCR Baltic NRAs' position

The Baltic CCR NRAs acknowledge that the nature of the Methodology proposal is to amend the mathematical formulation of the objective function in Article 8(5) of the Methodology. The Baltic CCR TSOs have identified a mathematical mistake (error) in the Methodology currently in force which causes the algorithm to falsely estimate the value of cross-zonal capacity for the day-ahead market.

In the Baltic market-based cross-zonal capacity allocation and balancing capacity procurement algorithm, the optimal choice for allocating cross-zonal capacity for balancing is made by welfare evaluation in the objective function. The objective function evaluates the provision cost of balancing capacity (social cost of accepted bids) and the cost of provision of day-ahead energy. The numerical value of the objective function during optimization process is minimized, granting maximum welfare in a system with inelastic demands. The error exists in the assessment of forecast day-ahead welfare in the objective function and causes the algorithm to underestimate the welfare of the day-ahead market and favors the balancing capacity market when taking decisions on the allocating of cross-zonal capacity for balancing products.

Accordingly, the Baltic CCR TSOs have created the methodology amendment proposal to implement the correct formulation of the objective function in the methodology proposal.

After assessing the Methodology proposal, the Baltic CCR NRAs have concluded that the amendments proposed in the Methodology proposal are justified in aiming to improve the algorithm's performance to accurately forecast the value of cross-zonal capacity for the day-ahead market and to provide the optimal choice for allocating cross-zonal capacity for balancing. The Methodology proposal thus encompasses all necessary arrangements pursuant

[5] https://consultations.entsoe.eu/markets/proposal-for-amendment-of-methodology-baltic-ccr/

to Article 41(1) of the EBGL and takes into account the derogation pursuant to Article 64(2a) of the IME.

4. Conclusion

The Baltic CCR NRAs have assessed, consulted and closely cooperated and coordinated to reach an agreement on the Methodology proposal to conclude that the Methodology proposal meets the requirements of the EBGL and as such can be approved by the Baltic CCR NRAs. Thereby, the Baltic CCR NRAs must take their decisions to approve proposals regarding Article 5(3)(h) and Article 41(1) of the EBGL, based on this agreement, by **23 April 2025** at the latest.

However, the Baltic CCR NRAs acknowledge the importance of the Baltic power system's desynchronization from the Russian/Belarussian grid on 8 February 2025, and in order to ensure sufficient balancing capacity for the desynchronization period, the Baltic balancing capacity market shall start on the 7 February at the absolute latest. Considering the aforementioned timeline and the information disclosure requirement pursuant to Article 12(3)(j) of the EBGL, the Baltic CCR NRAs are making efforts to issue national decisions regarding the Methodology in due time before the desynchronization.