

Baltic balancing market rules

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Elering AS
AS “Augstsprieguma tīkls”
LITGRID AB

I Objective and Scope

The objective of the Baltic balancing market rules is to determine terms and conditions that are applicable for BSPs in order to participate in the Baltic balancing market and provide balancing energy upon connecting TSO's request and that are binding for each connecting TSO in order to ensure the participation of BSPs in the Baltic balancing market.

This document is publicly available Annex of Baltic TSOs' Agreement on the operation and settlement of the Baltic coordinated balancing area (hereinafter – Baltic TSOs' Agreement). The breach of the Baltic balancing market rules is not considered as a breach of the Baltic TSOs' Agreement. All disputes arising out of non-compliance with these rules shall be settled between the BSP and relevant TSO on a national level. All definitions and abbreviations used in this document must be applied and used as defined in Annex 1 of Baltic TSOs' Agreement. Annex 1 is publicly available.

II Baltic balancing market framework

1. The Baltic TSOs – Elering AS, AS “Augstsprieguma tīkls”, LITGRID AB shall organize and operate common Baltic balancing market.
2. In order to operate common Baltic balancing market and exchange balancing energy, Baltic TSOs shall apply TSO-TSO model pursuant to relevant European Commission regulations and guidelines, national legal framework of each Baltic country and mutual TSO-TSO agreements.
3. The Baltic TSOs are responsible to exchange the balancing energy in order to ensure the operational security and to maintain the balance in Baltic power systems. At the same time, each Baltic TSO remain responsible for maintaining operational security of its control area.
4. All Baltic TSOs shall cooperate to maintain balance within CoBA and minimize Baltic ACE.
5. ISP for Baltic CoBA is 60 minutes.
6. All Baltic TSOs shall use the following balancing energy products:
 - 6.1. Baltic mFRR standard product from BSPs within Baltic CoBA;
 - 6.2. mFRR standard products from BSPs outside Baltic CoBA that are compatible with Baltic mFRR standard product. These bids are reflected in Baltic CMOL with forecasted price;
 - 6.3. Baltic emergency reserve (ER) mFRR specific product from the BSPs within and outside the Baltic CoBA.
7. Baltic mFRR standard and ER mFRR specific products shall comply with the requirements set out in Table 1.

**Elering – AST – LITGRID Agreement on the operation and settlement of Baltic CoBA
Annex 10**

Table 1. Baltic mFRR standard and ER mFRR specific product specification

Parameter	mFRR standard product	ER mFRR specific product
Preparation period	Agreed during the phone call or an electronic message between Connecting TSO and BSP	
Ramping period	Not more than 15 min	
Full activation time	Not more than 15 min	
Minimum and maximum quantity	MIN = 1 MW; MAX = no restrictions; Resolution 1MW	
Deactivation period	Not more than 15 min	
Pricing method	Marginal for Normal activation; Pay as bid of BSP for special activation	Pay as bid of BSP
Minimum and maximum price	MIN not determined; MAX = 5000 EUR/MWh Accuracy 0,01EUR/MWh	
Divisibility	To be defined by BSP (Divisible or not divisible)	
Minimum and maximum duration of delivery period	MIN = 1 min; MAX = 60 min (but not more than until the end of ISP). Resolution 1 minute	
Validity period	60 min	Not determined
Mode of activation	Manual	
Minimum duration between the end of deactivation period and the following activation	Not determined	
Linking of bids	Linking of bids in time is not allowed. Bids can be linked in power for the same ISP, meaning that bid 2 can be activated only in case bid 1 is activated. If bid 1 is not activated, then bid 2 is unavailable. Linking of balancing energy bids is one directional.	
Settlement volume determination: required start of delivery end time of the order	Block product of between required start of delivery and end time of order. Energy is determined in 0,001 MWh accuracy	
Balancing energy gate closure time	H-45min	D-1 16:00 EET
Firmness of the bids	All received bids are firm (fixed). BSP has responsibility to inform TSO if there are unplanned technical restrictions to execute the bid after the balancing energy gate closure time but not later than activation order was provided.	All received bids are firm (fixed). Bid may be not available after activation for 12 hours or longer period.

8. Only BSPs approved by their connecting TSO can participate in Baltic balancing market by submitting their balancing energy bids to their connecting TSO and executing activated bids upon the connecting TSO's request.
9. The Nominated TSO is responsible for operation of the Baltic balancing market and initiating activation of balancing energy bids in normal system operation state.
10. Each connecting TSO shall be responsible for:
 - 10.1. maintaining operational security of its control area;
 - 10.2. initiating balancing energy bids for other purposes than balancing;
 - 10.3. ensuring BSP's energy bid compliance with the Baltic CoBA market requirements;
 - 10.4. ensuring information exchange between BSP within TSO's imbalance area and the Nominated TSO;
 - 10.5. performing balancing settlement within its imbalance area.

III Balancing energy bid submission and CMOL creation

11. BSPs may submit and update their balancing energy bids separately:
 - 11.1. mFRR standard product – upward activation;
 - 11.2. mFRR standard product – downward activation;
 - 11.3. ER mFRR specific product – upward activation;
 - 11.4. ER mFRR specific product – downward activation.
12. After balancing energy gate closure time all submitted balancing energy bids become firm and no further bid updates are allowed. Balancing energy gate closure time for a BSP to submit bids for its connecting TSO:
 - 12.1. for all ER mFRR specific product bids for the respective day is 16:00 EET the day before;
 - 12.2. for all mFRR standard product bids for the respective ISP is 45 minutes before the ISP.
13. Connecting TSOs verify bids received from BSPs:
 - 13.1. if the bid is verified, the connecting TSO shall include the bid in the respective merit order list (MOL) and forward it to the Baltic CoBA common Baltic balancing IT system in accordance with Baltic TSOs' Agreement;
 - 13.2. if the bid is rejected, the connecting TSO shall inform respective BSP without undue delay in accordance with the connecting TSO and BSP mutual agreement.
14. After receiving MOLs from all connecting TSOs, the Baltic CoBA common Baltic balancing IT system shall arrange and continuously update Baltic common merit order lists (CMOLs). All CMOLs are shared among all Baltic TSOs. Bids in CMOLs are arranged based on most advantageous price criteria (merit order). There are four Baltic CMOLs:
 - 14.1. mFRR standard product – upward activation (energy bid with lower price has higher priority);
 - 14.2. mFRR standard product – downward activation (bid with higher price has higher priority);
 - 14.3. ER mFRR specific product – upward activation (energy bid with lower price has higher priority)
 - 14.4. ER mFRR specific product – downward activation (bid with higher price has higher priority).
15. If a bid becomes unavailable due to technical issues, BSP shall inform its connecting TSO without undue delay. The connecting TSO without undue delay shall indicate all such bids as unavailable in the respective Baltic CMOL.

IV Baltic CMOLs' bid activation

16. Balancing energy bid activation in Baltic CoBA is executed by the Nominated TSO or the requesting TSOs with respect to:
 - 16.1. continuous Baltic ACE forecast for the ISP - the objective of activation is to minimize Baltic ACE;
 - 16.2. available cross-zonal capacity for the ISP - balancing energy bids can only be activated, if there is available cross-zonal capacity within the balancing timeframe and activation of these bids does not create congestion during the particular ISP;
 - 16.3. CMOLs and submitted bid specification for the ISP – to extent it is technically feasible, bid activation follows most advantageous price criteria.
17. Balancing energy bids from Baltic CMOLs can be activated in the three following cases:

- 17.1. Normal activation for Baltic CoBA balancing purposes – initiated by Nominated TSO, activated by the connecting TSO;
 - 17.2. Special activation for countertrade purposes – initiated by requesting TSO, activated by the connecting TSO;
 - 17.3. Special activation for other purposes (system constraints, network issues) or on the request of non-Baltic TSO – initiated by the requesting TSO, activated by the connecting TSO.
18. Normal and special activation for upward and downward activation is applied to bids from:
- 18.1. mFRR standard product CMOLs;
 - 18.2. ER mFRR specific product CMOLs only if there are no available bids on mFRR standard product CMOLs.
19. When executing normal activation, the Nominated TSO shall initiate to activate:
- 19.1. available bid with the lowest price for upward activation;
 - 19.2. available bid with the highest price for downward activation;
 - 19.3. available bid located within Baltic area prior to bid located in non-Baltic area in case these bids are with the same price;
 - 19.4. all available bids with the same price in accordance with pro-rata principle (proportionally to the volume of the bid) for cases when the most advantageous price criteria is fulfilled by multiple bids in the same CMOL if all multiple bids are within Baltic area.
20. Normal and special activation of balancing energy bids can be performed not following most advantageous price criteria listed in paragraph 19 in following cases:
- 20.1. when the most price advantageous bid cannot be activated due to CZCBT constraints;
 - 20.2. when the most price advantageous bid is an indivisible bid, which exceeds the activation needs. The indivisible bid shall be skipped, and the next available bid in the CMOL shall be activated in required volume. The indivisible bid can still be activated, if activation does not compromise system security and contributes to minimizing the balancing costs during a particular ISP;
 - 20.3. when the most price advantageous bid is linked with another bid that has a lower price advantage. The linked bids can still be activated, if activation does not compromise system security and contributes to minimizing the balancing costs during a particular ISP;
 - 20.4. when the most price advantageous bid for special activation purposes does not contribute towards the objective of the special activation;
 - 20.5. when in the abnormal power system state, the most price advantageous bid would not mitigate the severity of the current system state.
21. Balancing energy bids shall not be activated or reserved before the corresponding balancing energy GCT and the intraday cross-zonal GCT, except cases of alert system state or emergency system state to mitigate the severity of these system states.

V Cross-zonal capacity within the balancing timeframe

22. Calculation of cross-zonal capacity within the balancing timeframe is performed for Estonian, Latvian, Lithuanian, Russian and Belarusian power systems as well as high-voltage direct current (HVDC) connections with Finland, Sweden and Poland by taking into account actual power flows on AC cross-border interconnections and for HVDC cross-border interconnections, already allocated capacities on these interconnections, as well as cross border capacities (TTC and NTC) in the internal and external interconnections of Baltic power system.

23. Cross-zonal capacity within the balancing timeframe is calculated separately for upward activation and downward activation based on near real time data of the Baltic power system. Based on calculated cross-zonal capacity within the balancing timeframe, the Nominated TSO takes decision, whether upward activation or downward activation is permissible in the particular power system during the particular ISP.
24. Cross-zonal capacity within the balancing timeframe for certain control area is determined as congested if there was need for balancing energy activation, but some bid(s) according to CMOL was skipped or partially skipped in this area due to potential limitations of cross-zonal capacity within the balancing timeframe.

VI Balancing price determination

25. Balancing price for balancing energy bids activated via normal activation from mFRR standard product CMOLs is determined based on marginal pricing:
 - 25.1. balancing price for upward activation shall be the most expensive activated upward balancing energy bid in power (MW);
 - 25.2. balancing price for downward activation balancing energy bids shall be the least expensive activated downward balancing energy bid in power (MW).
26. The pricing of upward ER mFRR specific product energy bids activated via normal activation shall be based on pay-as-bid principle.
27. Balancing price directly used as a component in imbalance price calculations in Baltic CoBA is determined for each Baltic imbalance area based on marginal pricing via normal activation from Baltic CMOLs for each ISP.
28. The prices in paragraphs 25 and 26 are determined for each Baltic imbalance area separately:
 - 28.1. if during the ISP there was no congestion of cross-zonal capacity within the balancing timeframe, all BSPs which bids were activated via normal activation in the same direction during the ISP shall be entitled to the same balancing price regardless of the price set in the submitted bid.
 - 28.2. if during the ISP congestion of cross-zonal capacity within balancing timeframe occurs, Baltic CoBA shall be split into separate balancing price areas. Balancing price for each area is defined according to principles in paragraph 27.
29. Balancing price may be higher than the price of the most expensive upward activation bid or lower than cheapest downward activation bid in Baltic CMOLs in the case of balancing energy exchange with other non-Baltic TSO where balancing energy price is defined after the respective ISP.
30. Balancing price for bids activated via special activation are settled based on pay-as-bid principle. Costs and gains from bids activated via special activation do not impact imbalance price calculations.
31. If during an ISP both normal activation and special activation take place, for settlement purposes the more price advantageous bids firstly shall be assigned to normal activation based on the volume activated. The price of special activation is determined as follows:
 - 31.1. the price of the bids from the upward activation mFRR standard product CMOL shall be equal or higher than the marginal price set for normal activation;
 - 31.2. the price of the bids from the downward activation mFRR standard product CMOL shall be equal or lower than the marginal price set for normal activation.
32. According to Elering AS “Rules on Balancing”, approved by Estonian NRA with decision No 31.12.19 nr 7-10/2019-014, Kiisa emergency reserve power is allowed to

participate for Baltic system balancing purposes only after the CMOL of mFRR standard product is used (empty). The energy price of Kiisa emergency reserve power stations as power stations outside the balancing market must give a clear signal that it concerns activation of out-of-market reserves. Therefore, since of 1 July 2020, the energy price established for Kiisa emergency reserve power stations upon activation thereof for balancing purposes will be the maximum permitted price on the Baltic balancing market, i.e. 5,000 EUR/MWh.

VII Market information and transparency

33. After the end of an ISP all Baltic TSOs ensure that all information regarding activation orders is complete and publicly available on Baltic transparency dashboard and/or Baltic TSOs websites and on the central ENTSO-E information transparency platform.
34. As the result of an operational hour at least (but not limited to) following information is available at Baltic balancing market dashboard after ISP:
 - 34.1.the volumes of aggregated balancing energy bids – CMOLs;
 - 34.2.cross zonal capacities within the balancing timeframe;
 - 34.3.the volumes of aggregated activated balancing energy bids;
 - 34.4.balancing energy prices;