

European Network of Transmission System Operators for Electricity

Annex 5: Justification of configurations of the Bidding zone review region "Baltic" which are to be considered in the bidding zone review process

Bidding Zone Review Region "Baltics"

18 February 2020



1. Justification for only status quo configuration

With the entry into force of the Regulation (EU) 2019/943 of the European Parliament and Council of 5th June 2019 on the internal market for electricity (recast) (hereinafter referred to as the "IME Regulation") the relevant TSOs must deliver bidding zone configurations to be used in a next bidding zone review process. According to the Bidding zone review methodology all Bidding zone review regions by default shall provide alternative configuration. However, regions whom are able to provide argumentation why performing the bidding zone review is not necessary, can provide only the status quo configuration.

Based on information mentioned above, Baltic TSOs submit the argumentation for exemption not to perform the Bidding zone review in Baltic region. Baltic TSOs emphasize the following arguments to be considered:

• The Baltic Biding zone review region is compliant with IME Regulation art. 16, that at least 70% of capacity shall be provided to the market¹. The Baltic TSO carried out a calculation of the volume of interconnection capacity to be available to market participants using the year 2018 network data. Based on calculations, the Baltic TSOs concluded that interconnection capacity available to the market exceeds 70% of the NTC, and thus corresponds to the amounts specified in paragraph 16 (8) of the IME Regulation. In table No. 1 the summary of data with interconnection capacity present the values that are offered to the market.

Moreover, Bidding zone configuration technical report conducted by ENTSO-E reveals that the congestion between bidding zones in year 2017 did not increase and there were few crossborder overhead lines which were influencing the power exchanges between bidding zones. The capacity limitations on cross-borders were small (less than 10% for each line in 2017). These limitations have been recognized during security analysis coordination to maintain security of supply. The system reliability issue is very important as the Baltic States' power systems are operating in synchronous mode with IPS/UPS.

	LV>EE	EE>LV	LV>LT	LT>LV
Available cross-zonal capacity ²	99%	97%	99%	100%

 Table 1: Average AC cross-border capacity available for market in year 2018

The price convergence remains high between bidding zones. In table 2, the data shows 98% price convergence between Latvian-Lithuanian bidding zones in year 2018. In year 2018 a slight decrease in price convergence was observed between Lithuanian and Sweden 4th

¹⁻²These values are calculated by comparing coordinated NTCs with coordinated TTCs, where coordinated NTC is the maximum trading capacity (commercial power flow value) which is given to the market for day-ahead trading and TTC is the maximum active power (physical flow) value for respective cross-border interconnection (which is used by dispatchers in real time operations). Calculations were made by Latvian TSO Augstsprieguma tīkls.



bidding zones, that could be explained by HVDC NordBalt cable maintenance works during the year of 2018.

Regions	2018	2017
Estonia-Finland	95%	99%
Estonia-Latvia	74%	82%
Latvia-Lithuania	98%	94%
Lithuania-Sweden 4	64%	69%

Table 2: Electricity price convergence in Baltic region, year 2018, 2017.

• There is no structural congestion inside the Bidding zones. According to the Bidding zone configuration technical report by ENTSO-E in Baltic bidding zones only few congestions have been identified during period from 2015-2017. They were rather small, and each occurred less than 2% of the time in the year. For the real time congestions on cross-border EE-LV, Latvian and Estonian TSOs have applied countertrade measures. Table 3 summarizes costs of countertrade actions from year 2016 to year 2018 on EE-LV borders. It shows the decrease in year 2017 and increase in year 2018 due to maintenance work on the NordBalt HVDC cable.

Year	Costs of countertrade, EUR			
2016	764 041.1			
2017	192 211.44			
2018	1 927 041.26			
T 1 1 0				

Table 3: Countertrade on EE-LV border 2016-2018.

Redispatch or counter-trade has never been used for managing congestion inside the Baltic bidding zones. The countertrade has been applied only on cross-border of EE-LV and none on cross-border of LV-LT. To decrease structural congestion and countertrading costs, Latvian and Estonian TSOs currently are developing one new interconnection between Latvia and Estonia by planning to finish construction works until year 2020 and until year 2025 will improve existing two interconnection capacities, thus reducing costs to minimum.

Baltic bidding zones are already one of the smallest in European electricity market (average 10 TWh each). Table 4 provides the Baltic countries electricity demands for the year 2018. During symposium organized by ENTSO-E, ACER and EC stated that "Member State borders shall be considered in BZ configurations, TSOs shall strive for similar BZ sizes", therefore Baltic bidding zone splitting by creating smaller bidding zones is not an option and merging will disrupt the borders of bidding zones within state borders.

2018	Estonia	Latvia	Lithuania	Finland	SE4
Demand, TWh	8,4	7,3	12,2	85,8	24,3

Table 4: Electricity demand in Baltic bidding zones (NordPool data)



- Baltic bidding zones are (until synchronization with central-Europe) connected to other EU bidding zones by direct current connections, therefore, not impacting other bidding zones with unscheduled flows.
- The ACER's Market Monitoring Report (ACER, published in 22.10.2018) analysis concluded that in the Baltic Biding Zones region there is no need to investigate the bidding zone improvement, and remedial actions are adequate. The Agency recommends (Table 5) improvements to the existing bidding zone configuration should be investigated with priority in the Core, Hansa and SWE CCRs, because of the low cross-zonal capacities made available for trading and high costs of remedial actions. Investigations were also advisable in all other CCRs except the Nordic, Baltic and GRIT. [MMR]

Region	Improvement to be investigated	Priority level	Cross-zonal capacity	Costly remedial actions	Potential underlying issue
Core	Yes	High	Poor	Poor	Internal congestions in Germany and, to a lesser extent, in Austria and the Netherlands. Large LF volumes.
Hansa	Yes	High	Poor	Poor	Internal congestions in Germany.
SWE	Yes	High	Poor	Poor	Internal congestions in Spain.
Channel	Yes	Moderate		Poor	Internal congestions in GB.
IT North	Yes	Moderate	Poor	To be monitored	Internal congestions in Austria. Significant LF volumes between Austria and Italy.
IU	Yes	Moderate		Poor	Internal congestions in GB.
SEE	Yes	Moderate	Poor	Adequate	
Baltic	No			Adequate	
GRIT	No				
Nordic	No		To be monitored	Adequate	

Source: NRAs, ENTSO-E and ACER calculations (2018).

Table 5: Need for investigating bidding zones