

Results of the public consultation on the market study of the electricity balancing reserves: TSOs responses for public consultation feedback

No	No of chapter	Comment	Answer
1	Annex	Provided graphs mostly are poor quality and does not allow to analyse any of provided information.	This is due to the large amount of data
2	General	There is lack of references to material and sources which were used for this study.	The resources used in the study are indicated in the report, many of which are confidential and can not be shared in detail.
3	General	<p><i>Market participant</i> is planning to provide reserve capacity services in all market segments by its existing generating units, as well it is considering installation of battery energy storage system (BESS) to further enhance its regulating capabilities.</p> <p>Inclusion of Latvian and Lithuanian TSO's own BESS projects in the Investment Request of the Baltic synchronization project phase II creates additional uncertainty for other possible market participants about the development of the capacity reserve market and reserve pricing mechanisms. Furthermore, the Directive (EU) 2019/944 states that TSOs may operate their reserve providing units (e.g. batteries) if balancing capacity services on the market cannot be provided by other market participants at a reasonable price. However, it is not clearly defined, what price levels the TSOs will consider reasonable.</p> <p>These uncertainties burden the incentives of market participants to develop their reserve providing units or services by adding the risks to ensure the profitability and utility of their reserve providing projects.</p> <p>Initiative of TSO to develop electricity storage batteries and to provide capacity reserves must be performed under strict Latvian and European legislation ensuring the transparent and competitive capacity reserve market for all market participants. Intervention of TSO to market operation with its own reserve capabilities shall be prohibited.</p>	The decision on the installation of reserve providing equipment by the TSO has not yet been taken and it still needs to obtain the permission of the regulatory authorities.

4	4,1	Additionally, Fast frequency response (FFR) service should be considered.	The creation and acquisition of this type of reserve has not yet been discussed by TSOs. If, after the completion of the necessary synchronization studies, the creation of such reserves is recommended, this issue will definitely be included in the TSO agenda.
5	4.5; 5.3	Not only conventional generating units but also storage technologies should be considered as frequency control reserves providers.	The first part of the study was based on the reserve resources available in the Baltics. According to the information received in the public consultations on the new projects, the availability of reserves and costs was recalculated taking into account the ability of other resources to provide the necessary reserves to the LFC.
6	5.2.	Please review CO2 price for year 2030 since it seems to be too conservative	TSOs have updated the CO2 prices according to ENTSOE modelling assumptions.
7	8	<p>“<...> 81% from 3,1TWh till 0,6TWh and must run costs by 90% from 67MEUR till 16,2MEUR.”</p> <p>It is not clear how 67 MEUR and 16,2 MEUR (presented in page 21) were calculated and how these numbers relate to values presented in table below (page 21).</p> <p>“<...> Must run generation decreases till 0,1TWh with total costs of 6,2 MEUR.”</p> <p>It is not clear how 6,2 MEUR was calculated and how this number relates to values presented in table below (page 22).</p>	This can be explained by the fact that the smaller the amount of reserve capacity that is missing, the higher the cost of ensuring the availability of the necessary reserves, which results in an increase in marginal prices.
8	5.2.	In the summary table for generation in 2030 in Lithuanian area pump storage capacity is indicated to be 856 MW. Why is it lower than the nominal capacity of Kruonis HPSPP (900 MW)? Capacity of 5th unit should be also added in this table.	Table in chapter 5.2 represents the annual generation according to 2030 year market simulation data. The proposed generator was taken into account in the recalculation following the public consultation.
9	5.2.	CO2 price of 28 €/ton for year 2030 seems to be too low as the EUA price exceeded 40 €/ton in February and March 2021.	TSOs have updated the CO2 prices according to ENTSOE modelling assumptions. A price of 40,75 EUR/ton was used for 2025.

10	8	<p>The results for 1st Scenario – “Local energy market scenario” represent average available capacity in each country. While the results for 3rd Scenario - “Baltic reserve market scenario” should be calculated by merging individual “Local energy market scenarios”. But average available FCR capacity is indicated to be 32 MW, while the sum of average available FCR capacity from 1st Scenario is 59 MW. The same is with aFRR down regulation average capacity. In 3rd Scenario it is evaluated to be 105 MW, while the sum of average available aFRR down regulation capacity from 1st Scenario is 179 MW.</p> <p>What is the reason for lower FCR and aFRR down regulation capacities evaluated in the Baltic reserve market scenario?</p>	Data has been updated after public consultation.
11	5.3.	<p>Minimum and maximum stable operation power of Kaunas hydro power plant are not indicated in the table of technical details of power plants from Lithuanian LFC area. What is the reason for this?</p> <p>Kaunas hydro power plant is not indicated as power plant capable to provide FCR. In 2020 GE Renewable Energy Hydro Services performed primary frequency control test and the results showed that the power plant with new optimized configuration parameters can fulfil FCR requirements.</p>	1st footnote of the table provides explanation: Theoretical potential of Kaunas hydro power plant to provide FRR was evaluated taking into historical data of water inflow.
12	5.3.	Blocks 7-8 of Lithuanian power plant should be taken into evaluation with remark that these blocks can potentially provide reserves after 2025 only if reserve price are high enough or any type of financial aid (CRM, strategic reserve or other) is applied to cover operational costs of these blocks.	Blocks 7-8 were removed from the scenario 3 and scenario with new projects
13	General	Cross border capacity allocation volumes for balancing capacities exchange are not provided.	In the Study assumes that there are no restrictions on cross border capacity
14	General	In Baltic LFC block concept document it was indicated that, considering existing practises in EU countries the maximum bid size might be expected to be in range from 20% till 40% of total Baltic LFC block reserve volumes. Is this limitation still relevant and included in the study?	The possible reserve amounts and restrictions used in the study are shown in the table. In addition to technical limitations of resources, no other constraints were set to limit bid sizes.

15	General	<p>First of all, the respective energy ministries, regulators and TSOs of the Baltic states have to clarify how the planned reserve capacity market will be implemented (including product definitions) and then launch this market as soon as possible. Launch of the market, even in limited capacity, is very important for the market participants because it would provide at least some certainty regarding how this market would be arranged. For investing into new capacities such certainty is absolutely crucial.</p>	<p>Currently, TSOs do not see opportunities to establish a capacity reserve market for products that will not be used for the actual operation of the system. This feedback is well-founded and an effort will be made in order to communicate the needs of the market as early and in detail as possible.</p>
16	General	<p>Baltic TSOs have proposed to Baltic regulators that also TSOs' resources could be used in this reserve capacity market. Moreover, in Lithuania, the parliament has even approved a 100 million euro procurement of energy batteries (Lithuania to spend €100m on batteries in push for energy independence - LRT). Therefore, the respective energy ministries and regulators of the Baltic states should as soon as possible clarify if, when and on what circumstances TSOs' resources could be exploited for providing required reserves. Unless this uncertainty is resolved, TSOs and regulators should not expect the market participants taking commitment in investing in new reserve capacities for this market.</p>	<p>The decision on the installation of reserve providing equipment by the TSO has not yet been taken and it still needs to obtain the permission of the regulatory authorities.</p>
17	General	<p>It is understanding of <i>Market Participant</i> that TSOs must procure balancing reserves from open market. Usage of TSOs resources can be tolerable only as a measure of last resort. Any other approach will be challenged.</p>	<p>The decision on the installation of reserve providing equipment by the TSO has not yet been taken and it still needs to obtain the permission of the regulatory authorities.</p>
18	General	<p><i>Market Participant</i> sees a lot of potential in BESS solutions. However, current market regulation in the Baltic states does not enable investing in market-based storage services. The respective draft regulation (amendments to Electricity Market Law) is still being discussed. Hence, a draft regulation should be adopted as soon as possible. We expect the regulation for electricity storage to be developed in Baltics after the new round of market test will be carried on.</p>	<p>No comments</p>

19	General	Elering has made a proposal to Estonian regulator regarding amendments to transmission network tariff and tariff structure. Current proposal is not supportive towards development of new generation capacities and electricity storage in Estonia. It also puts Estonian producers on less favourable footing in comparison to our Baltic neighbours. <i>Market Participant</i> will oppose this proposal and make respective submission in the framework of ongoing consultation. Eventual outcome of this process may impact <i>Market Participant's</i> decisions regarding prospective investments and in which countries such investments will be made.	Elering is moving from present energy only tariffs towards hybrid of energy and capacity tariffs. No generation component is planned for the transmission tariff. The move towards capacity tariffs is important in order to have cost-based transmission tariffs and develop the transmission system in an optimal manner.
20	General	Based on the aforementioned, currently we can make our firm propositions regarding the resources which we propose to this market on the basis of existing capacities. For investing into new capacities more certainty is required regarding certain regulations, prospective market setup and product definitions.	The TSO's plans for the establishment and operation of reserve capacity markets are described in the LFC concept document. Currently, the TSO is in the process of creating an LFC block, where all your issues related to the provision of reserves will be described.
21	General	Please explain how the average maintained capacity in the table regarding the results for 1st Scenario (page 14) is calculated.	The results are obtained by analyzing the data available to TSOs on reserve providing units
22	General	Please explain why availability of mFRR up reserves in Estonia were reduced in the 2nd scenario in comparison to the 1st scenario?	1st scenario was based on results from the energy market simulation, and as Kiisa emergency power plant was not participating in the energy market it was able to provide 100% of the mFRR up. In the second scenario FCR and aFRR reserves were prioritized over mFRR, and so aFRR up reserves needs were filled before mFRR.
23	4,6	Are the costs calculated under section 4.6. considering the N-1 criteria or not?	The costs are calculated taking into account the N-1 criterion