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CONSULTATION DOCUMENT
on the application of the Methodology for the Calculation of Natural Gas Transmission System Service Tariffs

pursuant to Article 26 and Article 28 of the Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas

15 December 2022

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Summary and legal basis of the consultation document

The consultation document on the application of the Methodology for the Calculation of Natural Gas Transmission System Service Tariffs (hereinafter - the Consultation Document) was prepared on the basis of Articles 26 and 28 of the Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (hereinafter – TAR NC). The purpose of the Consultation Document is to find out the opinion of interested parties about the application of the methodology for the calculation of natural gas transmission system service tariffs and the natural gas transmission system service tariffs in Latvia.

According to Article 15(1^1) of the Energy Law, the natural gas transmission system operator shall provide the transmission service for the tariffs specified by the Regulator or for tariffs which have been specified by the relevant service provider in accordance with the tariff calculation methodology stipulated by the Regulator if a permit has been obtained from the Regulator. Article 9(1)(2) of the law "On Regulators of Public Utilities" stipulates that the Regulator shall determine the methodology for calculating tariffs, and Article 25(1) determines the obligation of the provider of public utilities to submit to the Regulator the information requested by the Regulator within the time period and in accordance with the procedures stipulated by the Regulator.

Based on the authorization provided in the Energy Law and the Law "On Regulators of Public Utilities", as well as the results of the consultation conducted in 2019 in accordance with Articles 26 and 28 of the TAR NC, the Public Utilities Commission (hereinafter - the Regulator) approved the Methodology for the Calculation of Tariffs for Natural Gas Transmission System Service" (hereinafter - Methodology) by decision No. 1/10 of July 3, 2019.

The Regulator has prepared the Draft Methodology for the Calculation of Tariffs for Natural Gas Transmission System Service (hereinafter - Draft Methodology), which provides for changes in relation to the regulatory and tariff period, determination of the cost efficiency ratio and reconciliation of the regulatory account, that is, changes in the submission of the regulatory account, the accounting of revenue and costs differences and in the procedure of revenue adjustment.

In accordance with Articles 10, 26 and 28 of the TAR NC, in addition to the proposed reference price methodology (Methodology for the Calculation of Tariffs for Natural Gas Transmission System Service), the Consultation Document provides information on indicative natural gas transmission system service tariffs, multipliers and seasonal factors that affect the size of tariffs of the short-term capacity products, and the allowed revenue of the natural gas transmission system operator, which can be recovered by applying the afore-mentioned tariffs, for the period from October 1, 2023 to September 30, 2025, as well as on the principles of the inter-transmission system operator compensation mechanism.

It should be noted that the natural gas transmission system service tariffs referred to in the Consultation Document are indicative and are not binding on the Latvian natural gas transmission system operator and users of the natural gas transmission system.

All natural gas market participants are invited to provide their comments on the Consultation Document.

We kindly ask for proposals and comments on the Consultation Document to be submitted to the Regulator in writing by sending them to the electronic mail address sprk@sprk.gov.lv by **February 17, 2023**.

I Technical characteristics of the natural gas transmission system

1) The natural gas transmission system in Latvia

Pursuant to the provisions of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing 2003/55/EC, Article 1(13) of the Energy Law stipulates that the natural gas transmission is a type of energy supply that incorporates the transportation of natural gas through high-pressure pipelines (except for transportation through upstream pipelines) in order to supply such energy to the relevant distribution system or directly to users, except for the trade in energy, and Article 1(32) of this law stipulates that the natural gas transmission system is pipeline system with all the necessary energy supply merchant objects for the performance of the transmission function, which are used for the transportation of natural gas.

The Latvian natural gas transmission system consists of gas pipelines with shut-off fittings the working pressure of which is above 16 bars, gas regulation stations (GRS), pressure reducing stations (PRS), gas metering station (GMS), telemechanics, communication and power supply systems, electrochemical protection system and security systems (see Figure 1).

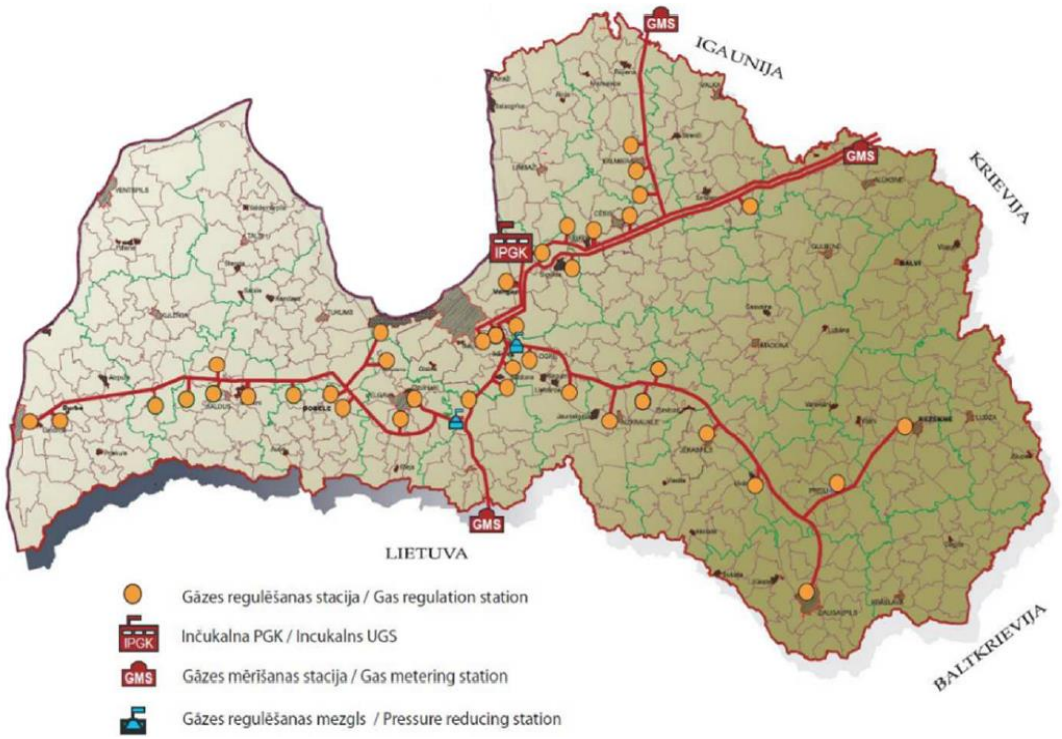


Figure 1. Latvian natural gas transmission system

The Latvian natural gas transmission system is divided into two parts - the cross-border transmission system and the national transmission system.

The cross-border transmission system is the part of the transmission system from the entry point from the transmission system of another country to the exit point to the transmission system of another country or to the entry point to the natural gas storage facility. The cross-border transmission system consists of the Riga–Panevezys, Pskov–Riga, Izborsk–Incukalns underground gas storage (hereinafter – UGS), Riga–Incukalns UGS I line, Riga–Incukalns UGS II line, Viresi–Tallinn gas pipelines. The length of the gas pipelines is 577 km, the diameter is 700 mm, and the working pressure therein is from 28 to 40 bars.

The national transmission system is part of the transmission system (branches from the cross-border transmission system not used for cross-border transmission of natural gas) for the supply of natural gas to populated areas, together with branches and gas regulation stations and nodes of the system operator. The length of the gas pipelines of the national transmission system is 613 km, the diameter is from 100 mm to 500 mm (see Table 1 for the distribution of pipelines by diameter), and the working pressure therein is up to 35 bar (the designed working pressure is up to 55 bar).

Table 1

The length of gas pipelines of the national transmission system according to the diameter of the pipelines

	Diameter of pipelines, mm						
	500	400	350	300	250	200	150 and less
Length, km	280	20	136	47	42	31	57

The gas pipelines of the national transmission system are radial - one branch of the gas pipeline of the national transmission system to Liepāja, and the other to Daugavpils with a branch to Rezekne.

The main gas pipelines of Latvia are part of the single natural gas transmission entry-exit system of Finland, Estonia and Latvia (hereinafter - the FinEstLat system). The total length of the natural gas transmission system (main gas pipelines) is 1190 km (see Table 2).

Table 2

Characteristics of the Latvian natural gas transmission system

Pipeline	**Year of commissioning**	**Length, km**	**Diameter, mm**	**Maximum pressure, bar**
Riga–Panevezys	1983	84.03	700	40
Iecava–Liepaja	1966	209.64	500/350	25
Pskov–Riga	1972	160.63	700	47
Izborsk–Incukalns UGS	1984	162.51	700	47
Riga–Incukalns UGS I	1967	41.75	700	40
Riga–Incukalns UGS II	1978	41.74	700	40
Riga–Daugavpils	1988	203.00	500	25
Viresi–Tallinn	1994	88.00	700	45
Upmala–Preili–Rezekne	2001/2005	66.71	400/350	54
Branches		131.99		
Total:		**1190.00**		

There is one gas metering station "Korneti" in Korneti, Aluksne municipality in Latvia, where commercial metering of natural gas received from Russia and transferred to Russia is carried out. Natural gas commercial metering on the Latvian-Lithuania border is carried out at the Kiemenai (Lithuania) gas metering station, while on the Latvian-Estonian border - at the Karksi (Estonia) gas metering station.

Supply of purified and odorized natural gas of a certain quantity, pressure and temperature to the natural gas distribution system, by metering its quantity, is provided by 40 gas regulation stations.

The amount of natural gas transported in the Latvian natural gas transmission system depends on the capacity of the entry and exit points of the natural gas transmission system (see Table 3).

Table 3

Technical capacity of entry and exit points attributable to the Latvian natural gas transmission system in 2022 (GWh/day)

Entry/exit point	Entry's technical capacity	Exit's technical capacity
Kiemenai (Latvia/Lithuania)	67.6	65.1
Incukalns UGS	258.8[1]	132[2]
Luhamaa (Estonia/Russia)	105	105

Incukalns UGS is the only functioning underground gas storage facility in the FinEstLat system, and its task is to ensure a constant supply of natural gas to users, regardless of seasonal changes in natural gas consumption, by injecting natural gas in the summer and withdrawing it in the winter.

Incukalns UGS started operating in 1968. The natural gas facility was created in a porous sandstone layer at a depth of approximately 600-750 meters, which is covered by layers of impermeable rocks. The central territory of Incukalns UGS and the necessary equipment for ensuring technological processes – three gas collection points and 180 gas storage wells – occupy an area of approximately 8,400 hectares. In total, Incukalns UGS covers an area of approximately 40 km^2.

The maximum amount of active natural gas provided for in the Incukalns UGS technological project is 24,219 GWh. The amount of natural gas to be stored in the storage facility and the pressure of the collector layer, that is, the pressure at which the cover layer of the storage facility remains impermeable, is influenced by several factors, in particular the actual filling of Incukalns UGS with natural gas in previous storage cycles and the injection intensity during a specific storage cycle.

The withdrawal of natural gas from the storage basically takes place using the pressure difference in the collector layer and the main pipeline, and accordingly the daily withdarwal capacity depends on the filling of the storage. As the storage capacity decreases, the natural gas withdrawal capacity decreases.

[1] From 1 November 2022, the technical capacity of the entry from Incukalns UGS is 263 GWh/day

[2] The technical capacity of the exit to Incukalns UGS is 132 GWh/day from 1 June 2022 until 4 September 2022. From 5 September 2022 until 14 October 2022 the capacity is 57 GWh/day

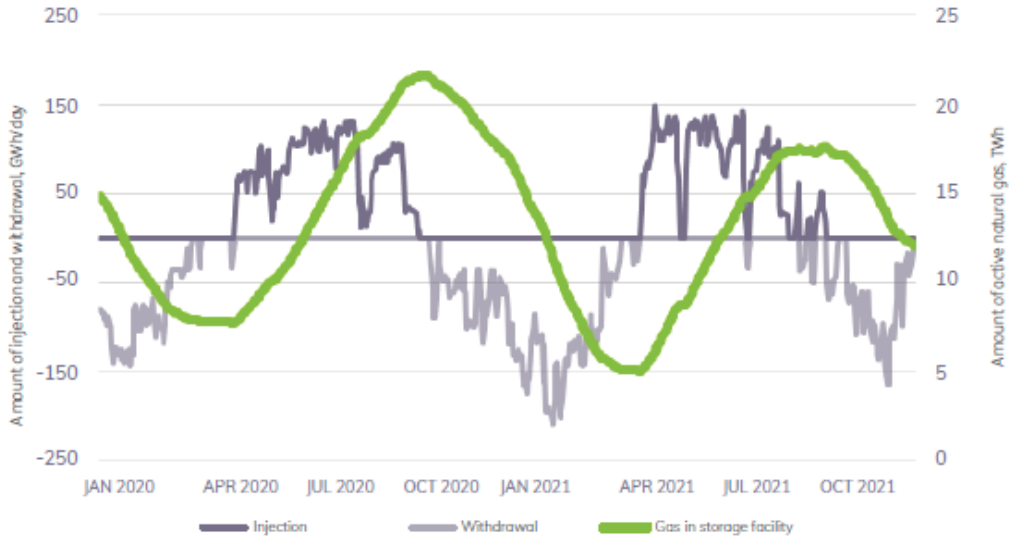


Figure 2. Amount of injected and withdrawn natural gas (GWh/day) and amount of active natural gas (TWh) in Incukalns UGS in 2020 and 2021[3]

The modernization of the natural gas pumping unit 12z330 No. 3 was carried out as part of the Incukalns UGS operation enhancement project described in the next chapter of the Consultation Document. After the completion of the modernization works of the natural gas pumping unit in November 2021, it can be used for natural gas compression withdrawal from the storage facility in the spring months, when the amount of active natural gas available in the storage facility is smaller and the storage facility's technical capabilities without compression withdrawal are limited.

The storage capacity is booked by users from the Baltic States, Finland and Norway.

For the purpose of calculating the tariff for the natural gas transmission system service, it is assumed that the supply of natural gas to the gasified facilities of Latvian users, which are connected to the natural gas distribution system, is provided by using one virtual exit point for the supply of Latvian users, which consolidates all technically possible exit points to the natural gas distribution system in the territory of Latvia.

2) Development of the regional natural gas transmission system

In accordance with Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009, the Eastern Baltic region is designated as one of the priority corridors of the European Union (hereinafter - the EU) to connect the natural gas supply system of the Eastern Baltic region with the EU natural gas transmission network. To establish a connection with the EU natural gas transmission system, improve the security of natural gas supply and diversify natural gas supply sources, several European projects of common interest have been implemented in the Baltic region (see Figure 3).

[3] 2021 annual assessment report of the natural gas transmission system operator https://www.conexus.lv/uploads/filedir/Zinojumi/PSO_zinojums_2022_LV.pdf

Figure 3. European projects of common interest implemented in the Baltic region

The Estonia-Finland interconnection ("Balticconnector") connects the Finnish natural gas transmission system with the natural gas transmission systems of the Baltic States, creating a necessary precondition for the creation of a single Baltic natural gas market. The construction of "Balticconnector" was completed at the end of 2019, and the interconnection, which consists of a bi-directional gas pipeline, started its operation on January 1, 2020.

The existence of "Balticconnector" had a positive effect on the total volumes of transmitted natural gas flows in the region, providing an opportunity to supply natural gas to Finnish users, also using the storage services of Incukalns UGS. In 2021, the amount of natural gas transported through the interconnection "Balticconnector" in the direction of Finland was 6.3 TWh, and it accounted for approximately one third of Finland's total natural gas consumption.

The Estonia-Latvia interconnection (Karksi) enhancement project will allow to organize natural gas supply from Estonia to Latvia and increase the volume of natural gas flow from Latvia to Estonia, streamlining natural gas flows in the Finnish and Baltic natural gas markets, better access of network users to Incukalns UGS, as well as complete utilization of "Balticconnector" capacity after the construction of the bi-directional compressor station in Puiata, as planned in the project.

The planned entry and exit capacity of the Estonian-Latvian interconnection is 105 GWh/day. This will be significantly affected by the implementation of the Latvia-Lithuania interconnection enhancement project, which is planned to be completed at the end of 2023. The Estonia-Latvia interconnection enhancement works were completed on the Estonian side in 2021, while on the Latvian side, taking into account the planned completion date of the Latvia-Lithuania interconnection enhancement project, they are planned to be completed no earlier than 2024.

The purpose of the construction of the gas interconnection Poland-Lithuania (hereinafter - GIPL) was to connect the natural gas transmission systems of Poland and Lithuania, thereby ensuring the integration of the natural gas transmission systems of the Baltic States and Finland into the EU natural gas transmission system, and increasing the security of natural gas supply in the region. The diameter of the GIPL pipeline is 700 millimeters, the total length is about 508 kilometers, including 343 km in Poland and 165 km in Lithuania. The planned capacity towards Lithuania is 73.9 GWh/day, while towards Poland – 58 GWh/day.

GIPL started its operation on May 1, 2022. In October 2022, GIPL successfully passed the test for operation at maximum capacity. Gas suppliers have transported almost 1 TWh of natural gas to Lithuania and 4.2 TWh of natural gas to Poland through the new interconnection. Since the launch of GIPL, the number of its users has been continuously growing; there are currently ten market participants.

The enhancement of the Latvia-Lithuania interconnection will not only allow for greater exchange of natural gas between Latvia and Lithuania, but will also guarantee sufficient capacity of the Latvian transmission system to ensure natural gas flows in the FinEstLat natural gas market. According to the research conducted in 2018, the maximum capacity of the Latvia-Lithuania interconnection should be 125 GWh/day. The aim of the project is to carry out reconstruction works of individual facilities of the natural gas transmission system, pipeline diagnostic works and repair works in order to prepare the system for increasing the pressure to 50 bars, which will simultaneously increase the power of the afore-mentioned interconnection in the direction from Latvia to Lithuania to 119.5 GWh per day, but in the direction from Lithuania to Latvia - up to 130.47 GWh per day. The project is planned to be completed in December 2023.

The Latvian natural gas transmission system operator: joint-stock company Conexus Baltic Grid (hereinafter - JSC Conexus Baltic Grid) and the Lithuanian natural gas transmission system operator AB Amber Grid have performed the necessary works to increase the Lithuania-Latvia interconnection capacity up to 90 GWh per day for the supply of natural gas in the direction from Lithuania to Latvia from November 1, 2022. Thus, the capacity of the Lithuania-Latvia interconnection was increased by a third.

As part of the Incukalns UGS enhancement project, it is planned to rebuild the third gas collection point, restore 36 wells, as well as modernize five existing natural gas pumping units and install a new pumping unit. The installation of a new pumping unit will ensure the withdrawal of natural gas from the storage with compression, providing an exit pressure of 50-55 bars in the Incukalns UGS interconnection with the natural gas transmission system even if the pressure in the storage reservoir is lower than the pressure in the transmission system. Therefore, when implementing the project, the dependence between the capacity available for withdrawal and the natural gas stocks in the storage facility will be significantly reduced, which will greatly improve the reliability of natural gas supply, as well as the operational efficiency of the storage facility, which is especially important for ensuring the optimal and maximally efficient operation of the single Baltic-Finnish natural gas market. As part of the project, environmental protection measures will also be implemented, reducing the amount of CO_2, NO_x and other emissions. The project is planned to be completed in December 2025.

II Description of the proposed reference price methodology

1) The FinEstLat single natural gas transmission entry-exit system

The FinEstLat system started operating on January 1, 2020. Its creation is based on the entry-exit system concept introduced in the Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (hereinafter - Regulation

715/2009), as well as the conclusions of the study "Quo vadis EU gas market regulatory framework - Study on a Gas Market Design for Europe"[4] (hereinafter - the Study) that the setting of intra-EU cross-border tariffs to zero is leading to increased liquidity between the zones and, therefore, to higher price convergence across EU.. Accordingly, the decrease in revenue of a particular natural gas transmission system operator should be compensated by increasing either EU entry tariffs or domestic exit tariffs (or a combination of both) and reallocating revenue using the inter-transmission system operator compensation (hereinafter - ITC) mechanism. The purpose of creating the FinEstLat system was to use the advantages mentioned in the Study, as well as the economies of scale, thus:

- promoting free movement of natural gas in the region and preventing discrimination of supply routes;
- reducing obstacles to the entry of new market participants into the FinEstLat natural gas market and thereby promoting competition in the market;
- ensuring greater market liquidity;
- improving the use of existing infrastructure and preventing excessive investments therein;
- improving security of supply through market measures;
- reducing the complexity of the tariff system and ensuring the transparency and predictability of tariffs;
- ensuring higher price convergence in the FinEstLat countries;
- reducing the market power of the largest natural gas suppliers and enhancing the independence of the FinEstLat natural gas market.

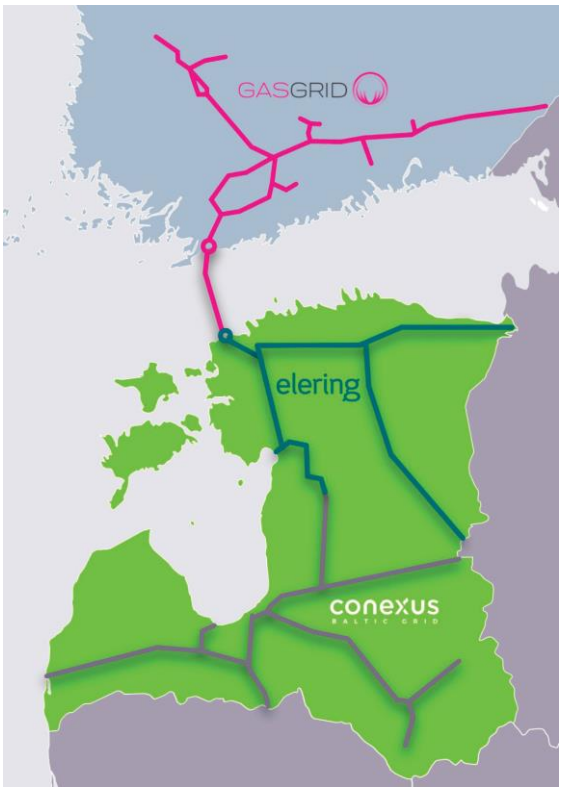
The regulatory authorities of the FinEstLat countries and Lithuania cooperated with the consulting company Baringa Partners LLP (hereinafter - Baringa) to choose the most suitable model of the natural gas transmission entry-exit system. In accordance with the findings of the Baringa's study[5] on tariff model for the natural gas entry-exit system for the common Baltic-Finnish market, the FinEstLat system has the following main features:

- there are no internal interconnection points in the system, including the exit point to Incukalns UGS and the entry point from Incukalns UGS;
- the postage stamp reference price methodology is applied separately in each country of the system;
- the same tariffs are set at the entry points of the system, using benchmarking and rescaling;
- natural gas transmission system service revenue recovered from entry point tariffs are allocated using the ITC mechanism in proportion to the amount of natural gas consumed in each country of the system;
- exit point tariffs are determined to ensure that each natural gas transmission system operator recovers the remaining transmission system service revenue that were not recovered from entry point tariffs;
- each country of the system decides separately on non-transmission service revenue.

[4] *European Commision, Directorate-General for Energy, Internal Energy Market. Quo vadis EU gas market regulatory framework – Study on a Gas Market Design for Europe*. 2018, 214-215 p. https://ec.europa.eu/energy/sites/ener/files/documents/quo_vadis_report_16feb18.pdf

[5] www.sprk.gov.lv

Taking into account the different level of maturity of the natural gas market (the Finnish natural gas market was opened only in 2020), two balancing zones have been created in the FinEstLat system - the common Estonian-Latvian balancing zone and the Finnish balancing zone. At the end of the transition period (no earlier than 2024), the merger of the two balancing zones is planned, creating one FinEstLat balancing zone.



In the common Estonian-Latvian balancing zone of Estonia and Latvia, uniform rules are applied regarding third-party access to services, capacity allocation and congestion management, as well as balancing. The Regulator, in agreement with the Estonian regulatory authority, with Decision No. 267 "On Reconcilation of the Common Regulations for the Use of the Natural Gas Transmission System" of 8 December 2022 reconciled the latest version of the Common Regulations for the Use of the Natural Gas Transmission System developed by the natural gas transmission system operators JSC Conexus Baltic Grid and JSC Elering[6].

The amendments of July 14, 2022 to Article 106(4) of the Energy Law, which will enter into force on January 1, 2023, stipulate that the supply of natural gas from the Russian Federation (hereinafter - the third country) is prohibited. In the Republic of Estonia, changes have also been made to the regulatory framework, establishing a ban on the import of natural gas from the third country. Based on the afore-mentioned regulatory amendments, theCommon Regulations for the Use of the Natural Gas Transmission System stipulate that only transit, that is, transportation of natural gas originating in the third country to the third country through the territory of common balancing zone and other adjacent balancing zones, is possible for the network users with regards to natural gas of third country origin.The Regulator, in agreement with the Estonian regulatory authority, with Decision No.186 of September 29, 2022 "On Reconcilation of the balancing rRegulations of the single natural gas transmission system entry-exit system " reconciled the latest version of the Common Regulations for the Natural Gas Balancing of Transmission System developed by the natural gas transmission system operators of the of the common balancing zone JSC "Conexus Baltic Grid" and "Elering"[7].

According to the above-mentioned Regulations, a network user shall conclude a balancing agreement with any natural gas transmission system operator of the common balancing zone and a transmission service agreement with the transmission system operator with which the balancing agreement is concluded.

The trading platform - gas exchange "GET Baltic" - is the first natural gas transmission system operators source for natural gas necessary for balancing. 94% of all balancing transactions

[6] https://www.sprk.gov.lv/sites/default/files/cmaa_files/LemumsN267D08122022.pdf

[7] https://likumi.lv/ta/id/336021-par-vienotas-dabasgazes-parvades-ieejas-izejas-sistemas-balansesanas-noteikumu-saskanosanu

were carried out on the trading platform, while offers submitted by transmission system balancing service providers were used in 6% of cases.

For balancing, on the trading platform the natural gas transmission system operators preferentially buy the title product, but they can also use the locational product. According to the neutrality charge calculation methodology, all costs and revenue of balancing activities shall be attributed to the neutrality charge. The neutrality charge shall be paid or received by the network user.

For the transportation of natural gas in the Finnish balancing zone, the network user concludes a balancing agreement and a natural gas transmission system service agreement with the Finnish natural gas transmission system operator Gasgrid Finland Oy.

In 2021, the total quantity of transmitted natural gas reached 39.3 TWh and has increased by 5% compared to the previous year. With the launch of the Balticconnector, a significant part (about one third) of the total entry flows of Finland was transmitted through the common Estonian-Latvian balancing zone of. Such high interest in the supply of natural gas to Finland through the common Estonian-Latvian balancing zone was due to lower natural gas prices in the common Estonian-Latvian balancing zone compared to Finland. In 2021, the amount of natural gas received from Lithuania, compared to 2020, decreased by 78%, reaching 1.7 TWh. On the other hand, the amount of tranported flows in the direction of Lithuania increased by 1.8 times during the reporting period and reached 3 TWh (see Figure 4).

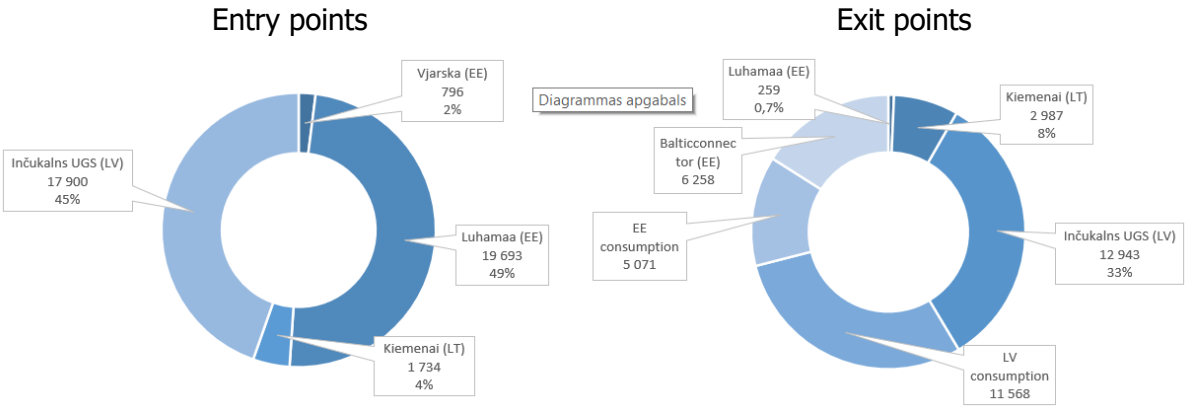


Figure 4. Natural gas inputs and offtakes in the common Estonian-Latvian balancing zone in 2021 (GWh)

Taking into account the geopolitical situation and its significant impact on natural gas prices, it is predicted that in the coming years the demand for natural gas in Latvia and the entire FinEstLat system will decrease, although in the medium term it will return to the current level.

The results of two years of the FinEstLat market activity confirm that all participants involved in natural gas supply are significant beneficiaries. Network users and natural gas end-users have a significantly wider choice of the supplier, because when the single entry tariff zone is established, there is no need to pay for crossing the borders between the countries of the zone, thus promoting competition among natural gas traders and simplifying access to alternative gas sources. Natural gas traders have the opportunity to use the available natural gas transmission and storage infrastructure much more efficiently, while the common Estonian-Latvian balancing zone reduces the bureaucratic burden and ensures a convenient and transparent balancing process.

2) Selection of the reference price methodology

Article 6(1) and Article 6(3) of the TAR NC stipulate that the reference price methodology shall be set or approved by the national regulatory authority upon adoption and publication of a reasoned decision following the final consultations on the reference price methodology pursuant to Article 26 of the TAR NC.. The TAR NC does not provide for any default rules or specific requirements for entry-exit systems covering more than one Member State where more than one transmission system operator is acrive. Therefore, in accordance with the requirements of Article 11 of the TAR NC, the same reference price methodology may be applied jointly or separately or different reference price methodologies may be applied separately where more than one transmission system operator is active in an entry-exit system covering more than one Member State..

In the previous chapter, it was already mentioned that Baringa's study concluded that the postage stamp reference price methodology should be applied separately in each country in the FinEstLat single natural gas transmission entry-exit system. The conclusion was reached in the first phase of the study by comparing the postage stamp, capacity-weighted distance and matrix reference price methodologies. In the comparison of reference prices, the impact of each methodology on the operation of the natural gas market, the competitiveness of natural gas and the welfare of network users was evaluated, as well as the simplicity of the methodology and the volume of transfers within the ITC mechanism (it should be as low as possible).

The results of Baringa's analysis and broader assessment show that the postage stamp reference price methodology has several positive features (see Table 4).

Table 4

Results of comparison of reference price methodologies

Criterion	Postage stamp reference price methodology	Capacity weighted distance reference price methodology	Matrix reference price methodology
Economic efficiency			
Facilitation of long-run consumer welfare			
Facilitation of competition			
Simplicity			
Avoidance of significant transfers between national transmission system operators			

For example, in terms of simplicity, economic efficiency and competitive criteria, the postage stamp reference price methodology has received the highest evaluation. However, using the postage stamp reference price methodology will require large transfers under the ITC mechanism, ensuring the allowed revenue for each natural gas transmission system operator. Consequently, the postage stamp reference price methodology has been subject to the lowest score as regards the fulfilment of the criterion "Avoidance of significant transfers between national transmission system operators".

The capacity weighted distance and matrix reference price methodologies ensure a higher degree of long-run user welfare compared to the postage stamp reference price methodology. However, in the case of the use of the capacity weighted distance reference price methodology, transfers between national transmission system operators will be relatively high. The matrix reference price methodology allows for the smallest transfers within the ITC mechanism.After evaluating the advantages and disadvantages of all reference price methodologies, Baringa concludes that for the determination of natural gas transmission system service tariffs in the FinEstLat single natural gas transmission entry-exit system, taking into account in particular the assessment criteria such as economic efficiency and competition in the supply of natural gas, the postage stamp reference price methodology most appropriate one.

Based on the agreement of the national regulatory authorities of the FinEstLat single natural gas transmission entry-exit system to apply the postage stamp reference price methodology in each country separately, the Regulator approved the Methodology on July 3, 2019 with decision No. 1/10[8].

3) The need for amendments to the Methodology

The Draft Methodology (see Appendix 1) was prepared in accordance with the need to ensure the financial stability of the system operators of the energy sector, which was affected by the development of global prices, especially the rapid increase in the prices of energy resources in the world, and to promote provision of safe, efficient and high-quality services. Changes have been made in the Draft Methodology regarding the regulation of the regulatory and tariff period, determination of the cost efficiency ratio, determination of the costs of the natural gas transmission system operator, reconcilation of the regulatory account, as well as the calculation of capacity product tariffs.

Regulatory and tariff period

According to the Methodology, the duration of the regulatory period and tariff period is three gas years, if the Regulator has not made a decision on the another duration of regulatory period or tariff period by January 15 of the year of the start of the regulatory period or tariff period. The regulatory period and the tariff period begin on October 1 of the respective year.

The regulatory period – the period of time for which the allowed revenue are determined – should be determined for the time that would ensure that the natural gas transmission system operator can efficiently operate, maintain and make investments in the natural gas transmission system. Taking into account the experience of other countries, observing that only the system operator itself can make a reasonable assessment of the length of the required regulatory period, as well as harmonizing the provisions of the energy system service tariff calculation methodologies regarding the regulatory period, the Draft Methodology stipulates that the length of the regulatory period is from two to five gas years. The duration of the tariff period is one gas year. When submitting the tariff proposal, the system operator shall submit justification for the regulatory period used in the tariff calculation and, if

[8] https://likumi.lv/ta/id/307981-dabasgazes-parvades-sistemas-pakalpojuma-tarifu-aprekinasanas-metodika

necessary, for the tariff period. The Regulator, after evaluating the justification submitted by the natural gas transmission system operator, determines the regulatory period by decision and may decide to extend the tariff period.

Determining the cost efficiency ratio

The Draft Methodology improves the regulatory framework related to the determination of the efficiency ratio, taking into account that the natural gas transmission system operator is obliged to provide safe public services at economically justified costs, as well as to ensure efficient service provision in the long term. The natural gas transmission system operator, fulfilling the obligations set out in the regulatory framework and planning its operation efficiently, should have an already developed plan of efficiency measures, ensuring efficient service provision. Therefore, when submitting a new tariff proposal, the transmission system operator already includes the planned efficiency ratio for the next regulatory period in the tariff proposal.

At the same time, to stimulate the natural gas transmission system operator to actively implement efficiency measures, the Draft Methodology stipulates that the natural gas transmission system operator has the right to reduce the amount of the regulatory account after the end of the regulatory period, if the transmission system operator has reduced costs within the framework of efficiency measures, which do not exceed 50% of actual cost reductions during the regulatory period.

Energy supply security reserves

According to Article 1(7^1) of the Energy Law, to ensure continuous supply of natural gas and prevent the occurrence of an energy crisis, energy supply security reserves, which are the property of the state, are maintained in Incukalns UGS.

In accordance with the provisions of the Energy Law:

- The Cabinet of Ministers shall ensure the purchase of energy supply security reserves and their injection into the Incukalns underground gas storage;
- In 2023, energy supply security reserves must be provided in the amount of 1.8–2.2 TWh, depending on the available supply of liquefied natural gas carriers;
- The Cabinet of Ministers shall review the required volume of energy supply security reserves once every two years, based on the evaluation of the Ministry of Economics regarding the energy supply security situation and available natural gas sources and capacities;
- the costs of energy supply security reserve storage shall be included in the transmission system service tariffs of the single natural gas transmission and storage system operator.

In compliance with the provisions of the Energy Law, the Draft Methodology includes regulation regarding the storage costs of energy supply security reserves, assuming that they are included in the tariff proposal according to their actual value.

Reconciliation of the regulatory account

According to Article 20(1) and 20(3) of the TAR NC, full or partial reconciliation of the regulatory account shall be carried out in accordance with the applied reference price methodology to reimburse to the natural gas transmission system operator the under-recovery and to return to the network users the over-recovery.

The Methodology stipulates that the natural gas transmission system operator shall create a regulatory account, in which, within two months after the end of the gas year, the difference between the planned revenue and the actual revenue in the gas year, as well as the

unforeseen costs arising from changes in external regulatory acts of the previous tariff period or the prevention of emergency situations, shall be recorded by separating the revenue attributable to the cross-border and national transmission systems. If the actual revenue is less than the planned revenue, the balance of the regulatory account is negative, and this increases the cost of the capacity booking service for the next tariff period. If the actual revenue is greater than the planned revenue, the balance of the regulatory account is positive, and this reduces the cost of the capacity booking service for the next tariff period. In the previous tariff period, reasonable unexpected costs incurred due to changes in external regulatory acts or prevention of emergency situations increase the cost of the capacity booking service for the next tariff period.

The Regulator has established that the regulatory account's reconciliation procedure specified in the Methodology limits the natural gas transmission system operator's ability to promptly recover the difference in costs - according to the Methodology, the system operator shall submit information on the balance of the regulatory account and its justification to the Regulator within two months after the end of the gas year, which means that the balance of the regulatory account is not taken into account in the next tariff period, but only in the one after that. In circumstances where unprecedented energy price dynamics are observed in the energy market, this may negatively affect the financial stability of the natural gas transmission system operator.

For example, the costs of ensuring the technological process of the natural gas transmission system operator and the costs of natural gas losses are directly related to the purchase price of natural gas, which is used to ensure the natural gas transmission process and to cover natural gas losses. In the second half of 2021, an increase in natural gas prices began in European natural gas trading exchanges (German *Trading Hub Europe (THE)*, Dutch *Title Transfer Facility (TTF)*, Belgian *Zeebrugge Trading Point (ZTP)* and others), and the increase continued due to the war started in Ukraine in 2022 and related concerns about the availability of natural gas supplies.

The Baltic and Finnish gas spot index (BGSI) of the GetBaltic gas exchange which is a trading platform used by the natural gas transmission system operator and the weighted average wholesale price of natural gas paid by Latvian natural gas traders for the purchase of natural gas track changes in the gas spot index of the *Dutch Title Transfer Facility*. In August 2022, the monthly average price on European natural gas trading exchanges reached a record high level: 235.22 EUR/MWh at the Dutch *Title Transfer Facility (TTF)* and 177.77 EUR/MWh at the Belgian *Zeebrugge Trading Point (ZTP)*. Accordingly, the Baltic and Finnish gas spot index (BGSI) also reached its highest level in August 2022 – 241.69 EUR/MWh. The weighted average wholesale market price paid by Latvian natural gas traders for the purchase of natural gas reached the highest level of 232.17 EUR/MWh in September 2022, which was approximately five times higher price compared to September 2021 (see Figure 5).

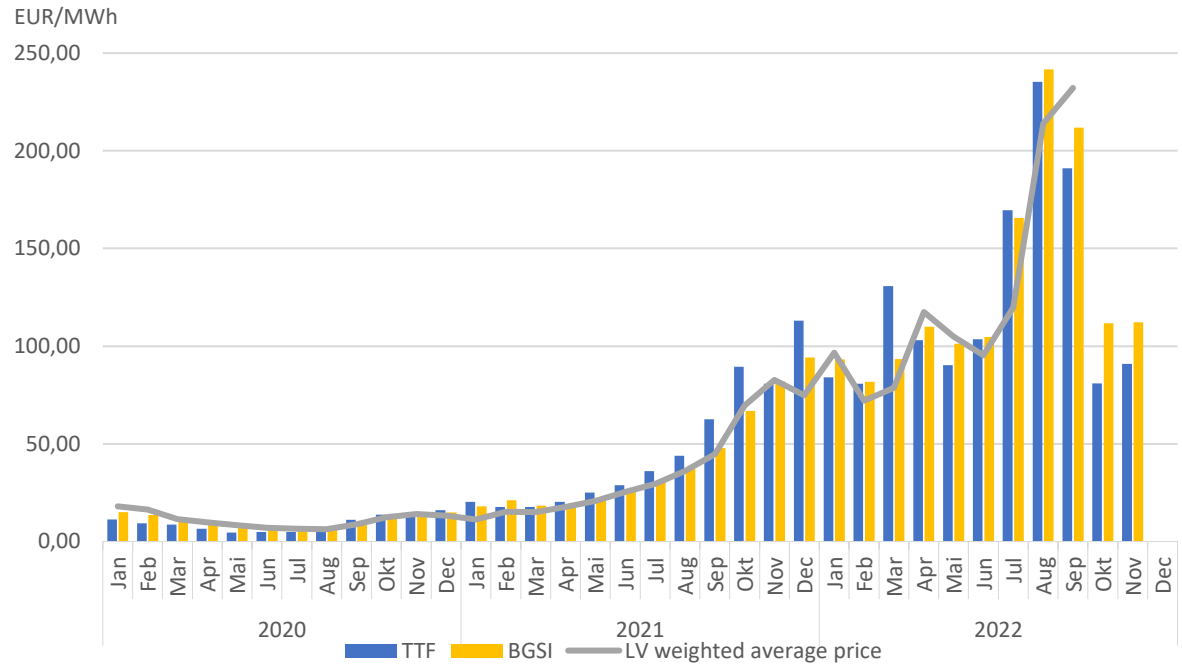


Figure 5. Changes in the gas spot indices of the Dutch *Title Transfer Facility* and the Baltic and Finnish "GetBaltic" and in Latvia's weighted average wholesale price

Since the reasons for the rapid increase in natural gas prices could not be predicted, the costs of ensuring the technological process and natural gas losses included in the tariffs of the natural gas transmission system services were calculated at several times lower natural gas prices than they were actually on the market. Therefore, the actual costs of ensuring the technological process of the natural gas transmission system operator and natural gas losses significantly exceed the planned costs. As a result, a large balance of the regulatory account is accumulated, which will be allocated to the next tariff period. Not allocating the balance of the regulatory account to the next after the next tariff period has a twofold effect. Failure to recover costs in time hinders the development of the natural gas transmission system operator, because as one of the solutions for cost reduction, the system operator may choose to significantly reduce the amount of planned investment and operating costs, which may not only affect the safe operation of the natural gas transmission system in the future, but also hinder the system operator from implementing planned operational efficiency improvement measures. In addition, in the next after the next regulatory period, there will be a rapid increase in tariffs for the natural gas transmission system service, which may make it significantly more difficult for network users to use the natural gas transmission system service and for end users to use natural gas.

The Bank of Latvia (*Latvijas Banka*), publishing the latest Latvian macroeconomic forecasts for September 2022, indicates that there are currently conditions of high uncertainty caused by the unpredictable course of the war started by Russia and the related development of global prices, especially energy prices. Significant changes in the forecasts of inflation and other macroeconomic indicators are being made in a very short time. For example, in September 2022, inflation forecasts were raised to 16.9% in 2022 (June forecast – 14.8%), 9.2% in 2023 (June forecast – 7.0%) and 3.4% in 2024 (June forecast – 2.4%)[9]. Therefore, due to the high uncertainty of external conditions, not only the costs of ensuring the technological process and natural gas losses included in the natural gas transmission system service tariffs, but the costs included in the calculation of any natural gas transmission system service tariff may differ

[9] https://www.bank.lv/darbibas-jomas/monetaras-politikas-istenosana/prognozes

significantly from the actual costs of the natural gas transmission system operator during the tariff period.

By improving the existing methodological framework, the Draft Methodology envisages changes regarding the reconcilation of the regulatory account, that is, changes regarding the procedure for submitting the regulatory account, accounting for the difference between revenue and costs, thus promoting the possibilities of the natural gas transmission system operator to recover the cost difference affected by external conditions. Similar changes have already been made in other energy system service tariff calculation methodologies.

The changes regarding the reconciliation of the regulatory account (see Figure 6) provide that the difference between revenue and costs is accounted for in the middle of the tariff period - six months before the start of the next tariff period.

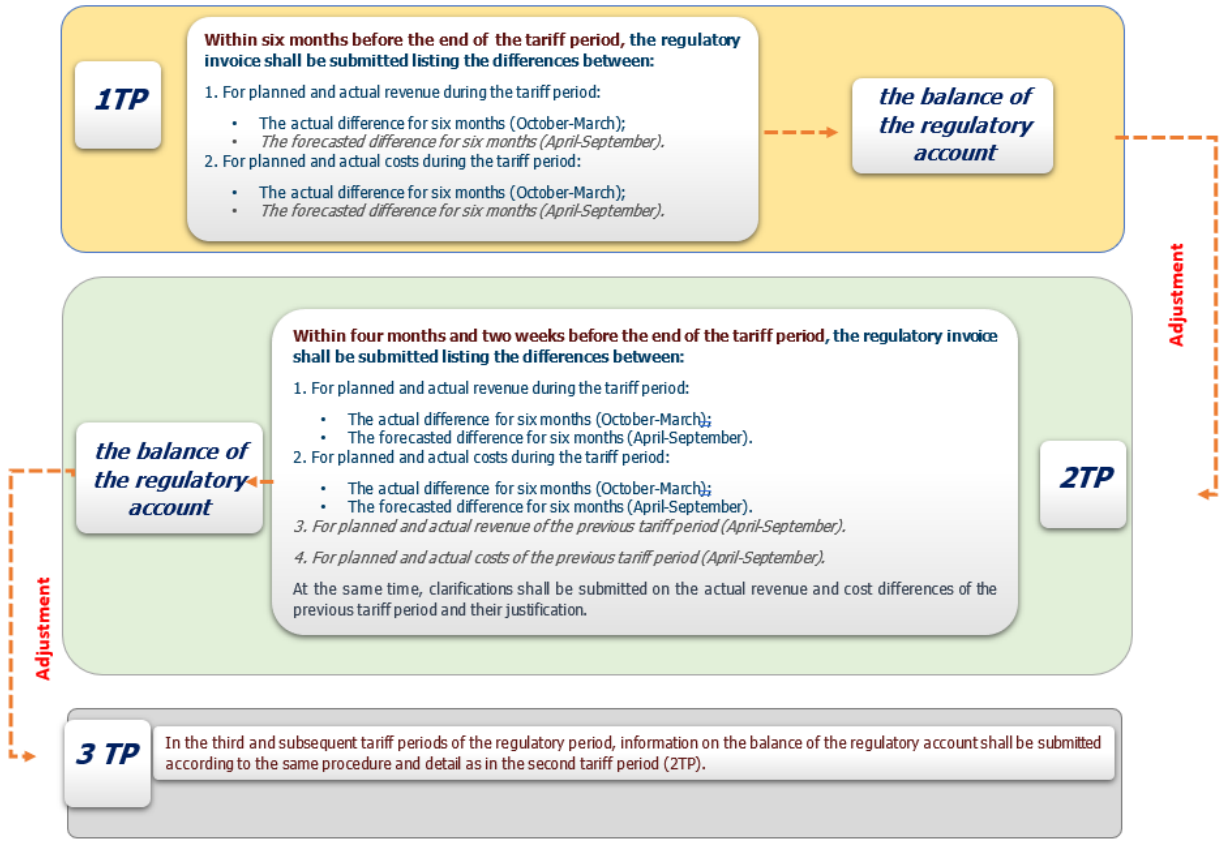


Figure 6. The procedure for the reconcilation of the regulatory account determined in the Draft Methodology

Not later than four months and two weeks before the end of the tariff period, the natural gas transmission system operator shall submit to the Regulator information on the balance of the regulatory account for the six months of the current tariff period, as well as for the last six months of the previous tariff period.

Such amendments to the Methodology will ensure that the natural gas transmission system operator will be able to recover more quickly the difference between revenue and costs caused by external, uncontrollable circumstances.

Calculation of tariffs for capacity products

In Chapter 2.1 of the Consultation Document "The FinEstLat single natural gas transmission entry-exit system" it was stated that the same tariffs shall be set at the entry points of the FinEstLat system. The entry tariffs are determined by the agreement of the FinEstLat regulatory authorities, after evaluating the natural gas transmission system operator's entry

tariffs proposal and its justification. The practice of the FinEstLat regulatory authorities regarding tariffs at the exit points of the FinEstLat system is to set the afore-mentioned tariffs at the same level as the tariffs at the entry points of the FinEstLat system.

In compliance with the above, in the Draft Methodology, the calculation of tariffs for capacity products has been supplemented with the calculation of tariffs for capacity products, if a single natural gas transmission entry-exit system has been established. In such a case, the yearly standard capacity product tariff for entry points in the single natural gas transmission entry-exit system shall be determined by the operators of the single natural gas transmission entry-exit system by mutual agreement and taking into account the opinion of the regulatory authorities of the single natural gas transmission entry-exit system.

In accordance with the agreement of the regulatory authorities of the FinEstLat system, the allowed revenue from the natural gas transmission system service, which is attributable to the national transmission system and which is used to determine the charge for the use of the exit point for supplying gas users in Latvia, is adjusted accordingly.

The yearly standard capacity product tariff for the exit points of the single natural gas transmission entry-exit system shall be determined in the same amount as the yearly standard capacity product tariff for the entry points in the single natural gas transmission entry-exit system.

4) Cost factors used in the reference price methodology

According to Article 3(18) of the TAR NC, the cost driver means a key determinant of the transmission system operator's activity which is correlated to the costs of that transmission system operator, such as distance or technical capacity.

The Draft Methodology was developed based on the agreement of the national regulatory authorities of the FinEstLat system to apply the postage stamp reference price methodology in each country separately. The Draft Methodology stipulates that the same tariffs for the natural gas transmission system service (reference price) shall be applied at all entry points and exit points, regardless of the natural gas transportation distance. Using distance as a cost factor would be inconsistent with the essence of the postage stamp reference price methodology. According to the Draft Methodology, the the natural gas transmission system service tariffs depend on the determined allowed revenue, the entry-exit split, as well as assumptions about capacity booking.

Russia's military aggression against Ukraine and manipulation of the markets, deliberately cutting off natural gas flows, caused an unprecedented rise in energy prices in the EU. In response to the rise in energy prices, the consumption of natural gas in Latvia and other countries of the region has decreased significantly (by more than 25%) in 2022, correspondingly reducing the level of use of the natural gas transmission system. Given the reduced use of the natural gas transmission system, the forecasted booked capacity of the natural gas transmission system, rather than the technical capacity, is considered the most relevant cost factor.

5) Entry-exit split

The Draft Methodology determines that the natural gas transmission system operator, when calculating the allowed revenue recoverable from the capacity booking of entry points from other transmission entry-exit systems and of exit points to other transmission entry-exit systems, shall apply the allowed revenue allocation factor of 0.50 to the revenue for the capacity booking of entry points and the allowed revenue allocation factor of 0.50 for the revenue from the capacity booking of exit points. The system operator shall submit a justification simultaneously with the tariff proposal if the allowed revenue allocation factors are adjusted.

6) Capacity-commodity split

The Draft Methodology stipulates that the natural gas transmission system operator's allowed revenue shall cover the costs of the capacity booking service in the regulatory period, taking into account the size of the costs of the capacity booking service, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources, as well as the operating efficiency, and the inter-transmission system operator compensation.

In accordance with the natural gas market model introduced in Latvia when the natural gas market was opened in 2017, a balancing regime that covers both natural gas transmission and distribution systems was created by the current regulatory framework. The "booked as metered" principle is used to book the capacity at the virtual exit point for the supplying gas users in Latvia, replacing the requirement of prior capacity booking with the obligation to submit non-binding nominations to the natural gas transmission system operator for ensuring the technical management of the natural gas transmission system, and the "allocated as metered" principle is applied to determine the allocation by taking into account that:

- more than 80% of the services provided to network users serve the needs of the Latvian natural gas retail market;
- the natural gas consumption of household users and other users of non-daily metered sites is approximately 10% of Latvia's total natural gas consumption, and they are characterized by unpredictability of consumption;
- the natural gas distribution system operator is currently unable to provide accurate allocation data per gas day and
- the natural gas transmission system is technically capable of meeting 100% of the winter peak demand.

Such a principle does not impede the cross-border flow of natural gas, ensures a fair allocation of costs between the wholesale and retail markets of natural gas, and is also compatible with the principle used in Estonia, which also does not provide for the capacity booking at the exit poin for the suppling of users in Estonia t, effectively harmonizing the conditions of use of the natural gas transmission system in both natural gas transmission systems, which forms the common Estonian-Latvian balancing zone of.

Taking into account that capacity booking at the exit point for the supplying gas users in Latvia is not carried out, the capacity-based tariff for the exit point for the supplying gas users in Latvia is converted into a charge for energy.

The Regulator has evaluated the need to change the principle of determining the tariff for the exit point for the supplying gas users in Latvia and not to convert the capacity-based tariff into a charge for energy and concluded that, when Latvia operates in the FinEstLat system, its natural gas market operating model has not changed and the "booked as metered" principle used to book the capacity for the virtual exit point for the supplying gas users in Latvia ensures transparent and non-discriminatory access to the natural gas infrastructure, as well as appropriate revenue recovery of the natural gas transmission system service.

Until the beginning of the next regulatory period, the Regulator will reassess the need to change the capacity booking procedure at the exit point the supplying gas users in Latvia and to convert the capacity-based tariff into a charge for energy.

Recovery of transmission service revenue from commodity -based transmission tariffs is not intended.

7) Inter-transmission system operator compensation mechanism (ITC)

In compliance with the provisions of Article 10(3) of the TAR NC, in order to allow for the proper application of the same reference price methodology jointly, an effective inter-transmission system operator compensation mechanism shall be established to prevent

detrimental effects on the transmission services revenue of the transmission system operators involved and to avoid cross-subsidisation between intra-system and cross-system network use..

One of the most important operating principles of the FinEstLat system is the absence of internal commercial interconnection points and the possibility of applying the same tariff at all entry points of the FinEstLat system from other natural gas transmission entry-exit systems. To cover the natural gas transmission system operators' reasonable costs incurred by providing natural gas transmission service in the FinEstLat system, without allowing an adverse effect on the revenue of the transmission services of the participating natural gas transmission system operators, on February 14, 2019, the transmission system operators of the FinEstLat system signed an agreement on the ITC terms and conditions in Finland, Estonia and Latvia, according to which the Latvian natural gas transmission system operator and the other natural gas transmission system operators working in the FinEstLat system collect or make payments to other transmission system operators of FinEstLat system for.

The basic principles of the ITC procedure of the FinEstLat system, which were consulted during the 2019 consultation and are applied from the launch of the FinEstLat system on January 1, 2020, are as follows:

- the revenue recovered from the tariffs of all entry points of the FinEstLat single natural gas transmission entry-exit system is considered a single pool;
- – the pooled revenue is shared between transmission system operators based on the share of natural gas delivered through the transmission system for domestic consumption in a particular country, including consumption for the natural gas transmission loss and technological purposed in the total quantity of natural gas delivered through the natural gas transmission system for consumption in the FinEstLat single natural gas transmission entry-exit system. The distribution of pooled revenue is carried out monthly, using previous year's corresponding national consumption shares in the total consumption of the FinEstLat single natural gas transmission entry-exit system;
- – the variable costs incurred by the transmission system operators borne due to the ensuring of the flows not dedicated for delivery to the specific market directly is based on a regional flow scenario agreed between natural gas transmission system operators and estimates of compressor fuel costs incurred to facilitate the regional flow;
- – for the purpose of compensation of eligible variable costs, the eligible variable costs shall be subtracted from the invoiced entry revenue of the natural gas transmission system operator who incurred the eligible variable costs. Eligible variable costs to be compensated has to be justified by appropriate invoices or calculations;
- – at the end of the year, there shall be a reconciliation of the revenue recovered from the tariffs at the entry points of the FinEstLat single natural gas transmission entry-exit system. The reconciliation process shall result from a recalculation of the ITC entitlement shares attributable to the natural gas transmission system operator on the basis of actual data for the annual domestic natural gas consumption in Finland, Estonia and Latvia, and a reallocation of revenues based on the identified actual ITC entitlement share for each transmission system operator. The estimated actual ITC entitlement share for each transmission system operator shall be used for allocation of the following year’s pooled revenue;
- – calculation of ITC entitlement shares and annual entry revenue reconciliation shall be performed by the elected Data Administrator, which shall be one of the TSOs and shall rotate annually; the Data Administrator shall be changed once a year on a rotating basis. The duties of the data administrator shall be performed by the operators of the natural gas transmission system in the following order: Elering AS, JSC Conexus Baltic Grid, Gasgrid Finland Oy.

At the beginning of 2022, when Russia invaded Ukraine, the geopolitical situation in Europe and around the world changed significantly, and this has caused major changes in the operation of the FinEstLat and the natural gas market of the entire region. The new situation in the region's natural gas market is characterized by the fact that:

- natural gas supplies from Russia will not be carried out at least in the medium term, therefore the basis of natural gas supply is no longer commercial goals, but the security of natural gas supply;
- the Klaipeda liquefied natural gas (hereinafter - LNG) terminal has become the main source of natural gas supply in the region until the start of operation of new LNG terminals;
- a discount is no longer applied to the tariff of the entry point from the Klaipeda LNG terminal, as the terminal is expected to be at maximum capacity;
- the Inkoo LNG terminal will start work at the end of 2022, replacing Finland's historical natural gas supply source;
- In May 2022, the use of GIPL was started, which is aimed at covering the natural gas demand of both Central Europe and the Baltic States.

The FinEstLat and the Lithuanian natural gas transmission system operators have concluded that changes in the operation of the region's natural gas market will not cause problems related to natural gas flows within the region (see Table 5).

Table 5

Natural gas flows in the FinEstLat and Lithuanian natural gas transmission systems from 2023 (TWh/year)*

Country	Entry/ exit point	Clarified flow scenario		High-flow scenario for Kiemenai EP		LNG max capacity scenario	
		Entry	Exit	Entry	Exit	Entry	Exit
Finland	Imatra	**0.00**		**0.00**		**0.00**	
	FI domestic consumption		**18.00**		18.00		18.00
	LNG	**29.75**		23.75		**37.83**	
	Biomethane	0.00		0.00		0.00	
	Baticconnector	2.00	13.75	2.00	7.75	2.00	21.83
	Balance		0.00		0.00		0.00
Estonia	Baticconnector	13.75	2.00	7.75	2.00	21.83	2.00
	Narva	**0.00**		**0.00**		**0.00**	
	Varska	**0.00**		**0.00**		**0.00**	
	EE domestic consumption		4.20		4.20		4.20
	Luhamaa	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Korneti		0.00		0.00		0.00
	Karksi	5.00	12.55	2.00	3.55	**2.00**	**17.63**
	Balance		0.00		0.00		0.00
Latvia	Karksi	12.55	5.00	3.55	2.00	**17.63**	**2.00**
	Korneti	0.00	0.00	0.00	0.00	0.00	0.00
	IUGS	18.40	18.40	18.40	18.40	18.40	18.40
	LV domestic		**11.00**		11.00		11.00

	consumption						
	Kiemenai	8.45	5.00	**14.45**	**5.00**	**5.00**	**9.63**
	Balance		0.00		0.00		0.00
Lithuania	Kiemenai	5.00	8.45	**5.00**	**14.45**	**9.63**	**5.00**
	Kotlovka	**0.00**		**0.00**		**0.00**	
	LT domestic consumption		**20.50**		20.50		20.50
	GIPL	4.73	**12.78**	4.73	12.78	0.00	**21.20**
	Šakiai						
	Klaipeda	32.00		**38.00**		37.08	
	Balance		0.00		0.00		0.00

* The main changes are highlighted in red

Taking into account the unforeseeable change of natural gas supply sources, it can be concluded that there is no natural gas transit in the FinEstLat system, and in the near future there will not actually be any natural gas transit, and the entire system works to meet domestic natural gas demand. In addition, natural gas transmission system operators of the FinEstLat single natural gas transmission entry-exit system do not perform physical point-to-point deliveries, but use mutual netting of flows. Therefore, it is considered that the ITC procedure, which is based on the allocation of revenue between the natural gas transmission system operators, based on the domestic natural gas consumption of the given country, does not allow cross-subsidization between the intra-system and cross-system use of the network.

One of the features of the FinEstLat system is the same tariffs set at all entry points of the single natural gas transmission entry-exit system, preventing discrimination of delivery routes and reducing obstacles to the entry of new market participants into the FinEstLat natural gas market. In view of the above, it is difficult to predict the changes in the natural gas transmission system entry capacity booking practice of natural gas traders. Taking into account the topology of natural gas transmission systems in the FinEstLat system, which actually does not allow circular transportation of natural gas, changes in natural gas entry flows in the FinEstLat system will burden the currently less used part of the transmission system, relieving the currently more used part of the transmission system.

If significant internal (technical) cross-border natural gas flows are formed in the FinEstLat system, their provision creates clearly identifiable variable costs for natural gas transmission system operators, basically related to the operation of compressors. Accordingly, the agreement on the ITC terms and conditions in Finland, Estonia and Latvia defines specific variable costs that are considered eligible, as well as the principles of their allocation and compensation. Such variable cost compensation arrangement ensures that no adverse impact is allowed on the transmission service revenue of the participating transmission system operators.

To monitor the compliance of the ITC procedure of FinEstLat system with the priovisions of Article 10(3) of the TAR NC, the natural gas transmission system operators are required to evaluate the results of the application of the previous year's ITC mechanism by March 1 of each year and to inform the national regulatory authorities. Until now, neither the FinEstLat natural gas transmission system operators nor the regulatory authorities have recognized the need to make changes in the application of the ITC mechanism.

The Draft Methodology stipulates that when calculating the natural gas transmission system service tariffs, the revenue and expenses incurred by the natural gas transmission system operator in accordance with the ITC procedure of the single natural gas transmission entry-exit system must be taken into account. The Draft Methodology stipulates that the natural gas

transmission system operator's allowed revenue shall be determined using the following formula:

$$AIe_{PSO} = I_{PSO} - I_{PSOef} - ITC,$$

where:

AIe_{PSO} – allowed revenue of the regulatory period [EUR];
I_{PSO} – total capacity booking service costs to be included in the tariff calculation [EUR];
$I_{PSO\ ef}$ – the amount of capacity booking service costs, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources and the operating efficiency [EUR];
ITC – the balance of revenue and expenses for the inter-transmission system operator compensation of the single natural gas transmission entry-exit system, which are attributed to the system operator in accordance with the procedure for the inter-transmission system operator compensation of the single natural gas transmission entry-exit system) [EUR].

Considering that the natural gas transmission system operator's allowed revenue are divided into the revenue of the cross-border transmission system and the national transmission system, the ITC is applied to the costs of the cross-border transmission system and the national transmission system according to the cost allocation method. This ensures that regardless of whether the ITC is applied or not, the natural gas transmission system operator's allowed revenue structure does not change.

8) Costs of securing natural gas supply

May 8, 2018 amendments to Cabinet of Ministers Regulations No. 312 "Procedures for the Supply of Energy Users and Sale of Heating Fuel During Declared Energy Crisis and in Case of Endangerment to the State" of April 19, 2011 (hereinafter - Regulations No. 312) determine the obligation of the single natural gas transmission and storage system operator to ensure that every year on March 1 the amount of active natural gas is stored in the Incukalns UGS, which is necessary to ensure the daily withdrawal capacity of the Incukalns UGS, in order to supply Latvian energy users with natural gas, including during the energy crisis. The single natural gas transmission and storage system operator includes the necessary technologically and economically justified costs related to the fulfillment of the above-mentioned obligation in the eligible costs of the natural gas transmission system service, and the single natural gas transmission and storage system operator annually coordinates the model of ensuring the said amount with the Ministry of Economy and the Regulator.

According to Article 3(11) of the TAR NC, allowed revenue means the sum of transmission services revenue and non-transmission services revenue for the provision of services by the transmission system operator for a specific time period within a given regulatory period..

The following arguments were used when assessing the inclusion of the costs of securing natural gas supply, which are related to the obligation of the natural gas transmission system operator set out in Regulations No. 312 to ensure the necessary natural gas withdrawal capacity from Incukalns UGS during the energy crisis, in the costs of transmission or non-transmission services:

- Article 6(1) of Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013 determines the obligation of the natural gas transmission system operator to make available to the network users the maximum technical capacity, taking into account system integrity, security and efficient network operation;
- in accordance with Article 15(6) and Article 112(1) of the Energy Law, the natural gas transmission system operator is liable for the effective and economically efficient

operation, service, and safety of the energy transmission system, system management and development in the licence operation area, connection to other systems, and also for the long-term capability of the system to ensure energy transmission according to the demand;

- to transport natural gas through the natural gas transmission system, it is necessary to compress the natural gas to a certain pressure level. When the pressure drops to a certain value, the higher hydrocarbons in natural gas become liquid and hinder the transportation of natural gas, as a result of which natural gas users do not receive natural gas in the appropriate quantity and quality. Compressor stations are used to ensure the necessary pressure in natural gas transmission systems. The specific feature of Latvia's natural gas transmission system – the pressure required for natural gas transportation is provided by Incukalns UGS;
- in the risk assessment of the gas system of Estonia, Finland, Latvia and Lithuania developed in 2016 by the Joint Research Center of the European Commission, it was concluded that the flexibility of the Incukalns UGS as an active pressure control facility depends on its inventory level, which turns out to be a key component of the regional security of gas supply [10];
- the natural gas transmission system operator, storing the amount of active natural gas of Incukalns UGS on March 1 of the following year, fulfills the obligation set forth in Regulations No. 312 and at the same time ensures the necessary level of natural gas stocks in Incukalns UGS, so that the pressure control device of the natural gas transmission system - Incukalns UGS - is able to maintain the required pressure level in the natural gas transmission system, ensuring the continuous provision of the transmission service to the network users in the requested volume, as well as the integrity of the system.

Taking into account the above, it is considered that the costs related to the obligation of the natural gas transmission system operator stipulated in Regulations No. 312 to ensure the necessary natural gas withdrawal capacity from the Incukalns underground gas storage facility during the energy crisis are related to the provision of the capacity booking service and must be included in the costs of the transmission service, as it is also stipulated in Regulations No. 312.

According to the Draft Methodology, the costs of securing natural gas supply are included in the operating costs of the national transmission system and are taken into account only when determining the charge for use of the exit point for supplying gas users in Latvia. Such cost allocation principle is determined by evaluating the results caused by costs of securing natural gas supply – ensured Latvian natural gas supply during the energy crisis and ensured necessary pressure level in the natural gas transmission system. Considering that the necessary pressure level in the natural gas transmission system is ensured not only by the amount of natural gas stored in Incukalns UGS in accordance with the Regulations No. 312, but also by the amount of natural gas stored by natural gas traders at Incukalns UGS, it can be concluded that the allocation of costs should be based on the main objective for the formation of the costs of securing natural gas supply – to ensure Latvia's natural gas supply during the energy crisis.

To prevent possible rapid fluctuations in the tariff values of the natural gas transmission system services, the Draft Methodology stipulates that the costs of securing natural gas supply shall be included in the tariff proposal according to their actual value, anticipating their recovery over two gas years from the moment of the occurrence of obligations to cover the costs of securing natural gas supply.

[10] *Joint Research Centre of European Commission. Joint Risk Assessment of the gas system of Estonia, Finland, Latvia and Lithuania*, 2016.

Promoting the opportunities of the natural gas transmission system operator to promptly recover the costs, the Draft Methodology stipulates that the cost differences of the auction for the storage of active natural gas quantity and ensuring its availability in Incukalns UGS (determined as the most appropriate model for the fulfillment of the obligation stipulated in Regulations No. 312) shall be included in the regulatory account.

The single natural gas transmission and storage system operator JSC "Conexus Baltic Grid", in coordination with the Ministry of Economics and the Regulator, has decided on the auction for storing and accessing the quantity of active natural gas in Incukalns UGS as the most appropriate model for fulfilling the obligation laid down in Regulation No 312. The single natural gas transmission and storage system operator JSC "Conexus Baltic Grid" holds auctions once a year during or before the injection season.

In compliance with the provisions of the Energy Law, that energy supply security reserves shall be maintained in the Incukalns underground gas storage facility and the amount of these reserves shall be up to 2.2 TWh in 2023, the Regulator and the Ministry of Economy agreed on the amount of active natural gas to be stored in the storage facility required for the fulfillment of the obligation specified in Article 12^1 of Regulations No. 312 , which must be provided by the single natural gas transmission and storage system operator JSC "Conexus Baltic Grid" on March 1, 2023, in the amount of 0 MWh. Therefore, the Draft Methodology stipulates that the natural gas transmission system operator, when developing the tariff proposal, which is planned to enter into force on October 1, 2023, in the calculation of the charge for the use of the exit point for supplying gas users in Latvia, shall include the adjustment of the costs of securing natural gas supply, the obligation to cover which was fulfilled in 2021 and 2022. The adjustment shall be determined by taking into account the recoverable costs of ensuring the natural gas supply and the costs actually recovered.

III Discounts, multipliers and seasonal factors

In accordance with Article 28(1) of the TAR NC, at the same time as the final consultation carried out in accordance with Article 26(1) of TAR NC, the national regulatory authority shall conduct a consultation on the level of multipliers; the level of seasonal factors and the levels of discounts applied at entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems as well as to the interruptible capacity product tariffs..

The natural gas supply system of Latvia does not include LNG facilities and their infrastructure ending isolation.

1) The discount applicable to the tariffs of the entry point from the storage facility and the exit point to the storage facility

According to Article 9(1) of the TAR NC, a discount of at least 50 % shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point..

The Draft Methodology stipulates that the discount (D_{kr}) applicable to the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility shall be determined by the system operator. The system operator shall submit the justification for the determined discount amount at the same time as the tariff proposal.

A 100% discount is expected to be applied to the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility. Such a discount is also applied to the current tariffs, and its size was determined based on the conclusions of the Baringa's study that one of the main principles that must be followed when creating the

FinEstLat system is the absence of internal interconnection points, including the exit point to Incukalns UGS and the entry point from Incukalns UGS. Thus, the risk of pancaking of natural gas transmission system service tariffs is eliminated, the free circulation of natural gas in the region is promoted and the use of existing infrastructure is improved. The following factors were taken into account in determining the discount:

- the special role of Incukalns UGS in the region, ensuring the reliability of natural gas supply, the continuity of natural gas flows and the integrity of the system;
- promotion of natural gas trade in the region, while simultaneously balancing the interests of natural gas producers, traders and end users, giving the former the opportunity to optimize natural gas purchase programs and the others to avoid unjustified price increases;
- increasing the competition and independence of the natural gas reserves accumulated in the region, since the natural gas in the storage facility will have already crossed the outer border of the FinEstLat single natural gas transmission entry-exit system, thus reducing the market power of natural gas suppliers which rely on direct deliveries during peak demand;
- the natural gas transmission system operator does not have special costs related to the organization of natural gas flows and the transportation of natural gas, ensuring its injection or withdrawal from the storage facility;
- the application of the discount will give network users the opportunity to more efficiently use the natural gas stored at Incukalns UGS in daily balancing.

Thus, it is reasonable to assume that the use of a particular point of the natural gas transmission system without charging for it - a 100% discount on the tariff, as a result of which the point of the natural gas transmission system is only a technical point and is not commercially visible to the market - is comparable to the cancellation of commercial interconnection points between countries, which form the single natural gas transmission entry-exit system - strengthens the sustainability of the integrated Baltic gas market, increases the ability of market participants operating in the integrated market to conduct negotiations with their suppliers, increasing the positive impact of the regional natural gas market integration process.

According to the Draft Methodology, the natural gas transmission system operator shall recover the foregone revenue as a result of the application of the tariff discount at the entry point from the natural gas storage facility and the exit point to the natural gas storage facility, by applying a charge for the use of the exit point for supplying gas users in Latvia.

In Chapter 8 of Section II of the Consultation Document, it is explained that there is no natural gas transit in the FinEstLat system and in the near future there will not actually be natural gas transit and the entire system works to meet the domestic natural gas demand. As a result of the operation of the FinEstLat system, the diversity of storage facility's users has increased - Incukalns UGS is used not only by Latvian users, but also by users from other countries. However, the amount of capacity of Incukalns UGS booked by Latvian users and the stored amount of natural gas significantly exceed the storage capacity booked by users of other countries for the stored amount of natural gas. Therefore, it is not reasonable to determine that the natural gas transmission system operator shall recover part of the foregone revenue as a result of the application of the 100% tariff discount from the entry point from the natural gas storage facility and the exit point to the natural gas storage facility from the tariffs of the capacity products at the entry or exit points to another natural gas transmission entry-exit system.

Moreover, in the agreement on the on ITC terms and conditions in Finland, Estonia and Latvia, the natural gas transmission system operators of the FinEstLat system have not provided for a compensation procedure of the foregone revenue as a result of the application of the 100%

discount on the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility. The national regulatory authorities of the countries of the FinEstLat system have also not reached an agreement on the procedure for compensating the aforementioned foregone revenue, considering that without a reasonable forecast of the utilization of the transmission system capacities related to Incukalns UGS, compensating the lost revenue may result in unjustified socialization of costs.

To prevent an adverse effect on the the transmission system operator's revenue from transmission system services and to ensure the coverage of the costs of the natural gas transmission system operator, and taking into account the above and the fact that Latvia's natural gas demand is basically covered by natural gas deliveries from Incukalns UGS, it is reasonable to recover the foregone revenue as a result of the application of the 100% discount at the entry point from the natural gas storage facility and the exit point to the natural gas storage facility, by applying a charge for the use of the exit point for supplying gas users in Latvia.

2) Multipliers

The Draft Methodology stipulates that the system operator shall submit the economic justification for the size of the multipliers and the seasonal factor used in the tariff proposal, taking into account the system operator's obligation to ensure the efficient use of the transmission system for the provision of capacity booking service and covering the total costs of the capacity booking service, together with the tariff proposal.

The natural gas transmission system is designed with the ability to transport large quantities of natural gas during peak demand conditions, but is only partially utilized during average demand conditions. Therefore, the costs of providing short-term transmission capacity do not differ significantly from the costs of providing annual capacity. By applying multipliers to short-term capacity product tariffs greater than 1, network users who contribute to peak demand may be charged more for the use of natural gas transmission system service than network users with a distributed natural gas transmission system service usage profile. Thus, the interest of network users in booking long-term capacity products is promoted. By applying smaller multipliers, the capacity booking profile of network users more accurately matches their needs, thus natural gas trade is promoted.

In accordance with Article 13 of TAR NC, the level of multipliers for quarterly standard capacity products and for monthly standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 1,5; for daily standard capacity products and for within-day standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 3. In duly justified cases, the level of the respective multipliers may be less than 1, but higher than 0, or higher than 3.. According to Article 28(3) of the TAR NC, when determining the level of multipliers, the following aspects should be taken into account:

- the balance between facilitating short-term gas trade and providing long-term signals for efficient investment in the transmission system;
- impact on the transmission services revenue and its recovery;
- the need to avoid cross-subsidisation between network users and to enhance cost-reflectivity of reserve prices;
- situations of physical and contractual congestion;
- the impact on cross-border flows.

One of the goals of creating the FinEstLat system is to avoid unreasonable competition between the entry points of the FinEstLat system by improving natural gas trading in the FinEstLat natural gas market and optimizing natural gas flows between Finland, Estonia and Latvia. Based on this objective, the following flat multipliers shall be applied when determining short-term capacity product tariffs for entry points of the FinEstLat system:

- for yearly standard capacity product – 1;
- for quarterly standard capacity product – 1.1;
- for monthly standard capacity product – 1.25;
- for daily standard capacity product – 1.5;
- for within-day standard capacity product – 1.7.

All network users are subject to the same standard capacity product tariffs. Multipliers are not differentiated depending on the network user's natural gas consumption profile, consumption size or other factors characterizing network users, therefore cross-subsidization between network users has been prevented.

The multipliers were consulted on during the 2019 consultation, and when determining their level, the capacity booking practice of the Latvian transmission system was taken into account, which showed that users mostly use daily and within-day standard capacity products, without using the yearly standard capacity product at all. The multipliers, compared to those used in Latvia, were increased to promote the booking of long-term capacity products and to prevent natural gas transmission system operators from receiving effective signals for investments.

According to the information provided by the natural gas transmission system operator, the interest of network users in booking capacity for a longer period of time - monthly, quarterly and yearly - is increasing year by year thanks to the multipliers (see Table 6).

Table 6

Capacity booking in 2020 and 2021 by product type[11]

Capacity product	Proportion of booked capacity in 2020, %	Proportion of booked capacity in 2021, %
Yearly	0	27
Quarterly	4	55
Monthly	70	7
Daily	24	2
Within-day	2	9

As can be seen, the application of the specified multipliers from January 1, 2020 has promoted the interest of network users (traders) in more accurate planning of deliveries, thus providing natural gas transmission system operators with a more appropriate information base for optimizing the operation of the natural gas transmission system, which is especially important considering the increased interoperability in the FinEstLat system and the need to implement security of supply measures. Therefore, there is no reason to revise the multipliers set for tariffs for short-term capacity products at the entry points of the FinEstLat system, and they will be applied for the regulatory period from October 1, 2023 to September 30, 2025.

3) Seasonal factor

The seasonal factor shall be applied when setting short-term capacity product tariffs to take into account the seasonality of natural gas flows during the year. The purpose of applying the seasonal factor is to stimulate the newtwork users to use the natural gas transmission system

[11] https://www.conexus.lv/uploads/filedir/Zinojumi/PSO_zinojums_2022_LV.pdf and https://www.conexus.lv/uploads/filedir/Aktualitates/Parskati/Dabasg__parv_sist_operatora-zinojums_par_2020_JUN_ready2.pdf

in the low congestion season (during the summer), diverting the demand from the winter peak, thus ensuring the efficient use of the natural gas transmission system.

Taking into account the different level of maturity of the natural gas market in the FinEstLat system and the low risk of congestion in the transmission system in conditions of high natural gas demand, when determining short-term capacity product tariffs, the entry points of the FinEstLat system have a seasonal factor of 1.0, which does not cause seasonal differentiation of tariffs. The seasonal factor was consulted upon during the 2019 consultation. The assessment of transmission system's congestion risks has not been changed, therefore the value of the seasonal factor has not been changed.

IV Indicative natural gas transmission system service tariffs

Indicative natural gas transmission system service tariffs for the regulatory period from October 1, 2023 to September 30, 2025 have been determined based on the provisions of the Draft Methodology, using the provisions on the entry-exit split determined in Section II, Chapter 6 of this Consultation Document, the the capacity-commodity splitdetermined in Chapter 7, the discount applicable to the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility determined in Section III, Chapter 1, the multipliers determined in Chapter 2 and the seasonal factor determined in Chapter 3.

1) Forecasted capacity of entry and exit points and transmitted volumes of natural gas

According to the Draft Methodology, the forecasted average daily capacity of an entry point or exit point is equal to the daily average used capacity of the three previous calendar years. The natural gas transmission system operator shall submit a justification at the same time as the tariff proposal, if the forecasted daily average entry or exit capacity is adjusted.

Based on the new situation in the region's natural gas market in connection with changes in the geopolitical situation mentioned in Chapter 8 of Section II of this Consultation Document, the use of capacities at entry and exit points has significantly changed compared to the previous three calendar years. Therefore, the total entry capacity and total exit capacity of the transmission system for the regulatory period from October 1, 2023 to September 30, 2025 is determined based on the forecasts provided by the natural gas system operator, evaluating the principles of using the natural gas transmission system in 2022. The total entry capacity of the transmission system for the regulatory period from October 1, 2023 to September 30, 2025 is set at 32,392,866 MWh/year and the total exit capacity at 50,816,393 MWh/year (see Table 7). From October 1, 2024, the capacity of the entry point Kiemenai is set at 0 MWh/year, taking into account that on October 1, 2024, the merger of the FinEstLat system and the Lithuanian natural gas transmission system is planned.

Table 7

Total booked entry and exit capacity of the transmission system in 2022 and 2023 and for the regulatory period from October 1, 2023 to September 30, 2025, MWh/year

Capacity of entry/exit points	Actual	Forecast			
	01.10.2021.–30.09.2022.	**01.10.2023.–30.09.2024.**	**01.10.2023.–30.09.2024.**	**01.10.2024.–30.09.2025.**	**Regulatory period from 01.01.2023. to 30.09.2025.**
Total entry capacity of the transmission system, including:	**13 494 633**	**15 919 017**	**18 992 86**	**13 400 000**	**32 392 866**
capacity of entry point Korneti	0	0	0	0	0
capacity of entry point Kiemenai	2 743 472	13 735 432	5 592 866	0	5 592 866
capacity of entry point Karksi	0	0	0	0	0
capacity of entry point from the storage facility	10 751 161	2 183 585	13 400 000	13 400 000	26 800 000
Total exit capacity of the transmission system, including:	**25 55 882**	**18 262 242**	**26 481 293**	**24 332 100**	**50 816 393**
capacity of exit point Korneti	0	0	0	0	0
capacity of exit point Kiemenai	0	0	2 999 517	0	2 999 517
capacity of exit point Karksi			0	0	0
capacity of exit point to the storage facility	10 820 395	7 490545	12 665 416	13 400 000	26 065 416
capacity of exit point for supplying gas users in Latvia	14 820 395	10 771 697	10 819 360	10 932 100	21 751 460

2) Calculation of indicative tariffs of yearly capacity products

According to Article 3(1) of the TAR NC, reference price means the price for a capacity product for firm capacity with a duration of one year, which is applicable at entry and exit points and which is used to set capacity-based transmission tariffs.

The TAR NC does not provide for specific rules or specific requirements for natural gas transmission entry-exit systems covering more than one Member States where more than one transmission system operator ir active. Therefore, transmission system operators operating in the said natural gas transmission entry-exit system may apply the same reference price methodology jointly or separately or may apply different reference price methodologies separately., in accordance with Article 11 of the TAR NC.

Article 6(4)(a) of the TAR NC stipulates that adjustments to the application of the reference price methodology to all entry and exit points may only be made by benchmarking, whereby reference prices at a given entry or exit point are adjusted so **that the resulting values meet the competitive level of reference prices.**

The entry points of the FinEstLat system in Finland, Estonia and Latvia are similar and compete with each other in a situation where there are no internal interconnection points between the natural gas transmission systems of these countries. At the entry points of the FinEstLat system, congestion is not expected or could be minor, and most of the natural gas supplied through the entry points is from the same supply source. Therefore, all entry points of the FinEstLat system actually compete with each other to satisfy the region's natural gas demand. Any differences in the level of entry point tariffs would mean that network users would allocate all entry flows to the entry point with the lowest entry tariff, thus placing the entire system under extreme strain.

Taking this into account, the natural gas transmission system operators and regulatory authorities of Finland, Estonia and Latvia mutually agreed that from January 1, 2020, the tariffs for the entry points of the FinEstLat shall be set the same - the tariff shall be 142.77 EUR/MWh/day/year, applying the multipliers and seasonal factor specified in Chapters 2 and 3 of Section III of this Consultation Document.

In the regulatory period from October 1, 2023 to September 30, 2025, the 142.77 EUR/MWh/day/year tariff (reference price) for entry points of the FinEstLat t system is not revised, nor are the applicable multipliers and the seasonal multiplier (reasoning is available in Chapters 2 and 3 of Section III of this Consultation Document).

The calculation of indicative yearly capacity product tariffs (see Table 8) was made in accordance with the explanation given in Chapter 3 of Section II of this Consultation Document on the calculation of capacity product tariffs determined in the Draft Methodology, if a single natural gas transmission entry-exit system has been established.

The indicative charge for the use of the exit point for supplying gas users in Latviahas increased almost twice - by 74.7% (see Table 9).

Table 8

Indicative yearly standard capacity product tariffs in the regulatory period from October 1, 2023 to September 30, 2025 and the elements used for their calculation

Indicator	Designation	Unit of measure	Current tariffs	Indicative tariffs
Total capacity booking service costs, including:	I_{PSO}	EUR	33 204 341	44 069 239
The cost of securing natural gas supply		*EUR*		
Adjustment of securing natural gas supplycosts		*EUR*		
Inter-transmission system operator compensation	ITC	EUR	5 608 188	4 248 230
Allowed revenue	**Ie_{PSO}**	**EUR**	**27 596 153**	**39 821 009**
Cross-border transmission system costs	$I_{PSO\ ST}$	EUR	0	2 787 471
National transmission system costs	$I_{PSO\ nac}$	EUR	27 596 153	37 033 539
Entry capacity of transmission system	P_{ie}	kWh/day/year	21 191 659	16 174 276
Exit capacity of transmission system	P_{iz}	kWh/day	37 606 295	25 373 438
The forecasted daily average capacity of the entry point from the natural gas storage facility	$P_{ie\ kr}$	kWh/day	19 728 316	13 381 669
The forecasted daily average capacity of the exit point to the natural gas storage facility	$P_{iz\ kr}$	kWh/day	23 325 751	13 014 880
The forecasted maximum daily capacity of the exit point for supplying gas users in Latvia	$P_{iz\ v}$	kWh/day	14 280 544	10 860 852
Forecast of the volume of natural gas supplied to the gasified facilities connected to the natural gas transmission and distribution system during the year	$Q_{nod\ liet}$	kWh	14 337 666 475	10 860 851 885
Cost reallocation coefficient between the entry point from the natural gas storage facility and the exit point to the natural gas storage facility between the transmission system and the exit point for for supplying gas users in Latvia	K_{reg}		100%	83%
The discount applied to the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility	D_{kr}		100%	100%
Yearly standard capacity product tariff for entry points from another transmission entry-exit system	**T_{ie}**	**EUR/kWh/day/year**	**0.14277**	**0.14277**
Yearly standard capacity product tariff for entry point from natural gas storage facility	**$T_{ie\ kr}$**	**EUR/kWh/day/year**	**0.0000000**	**0.0000000**
Yearly standard capacity product tariff for exit points to another transmission entry-exit system	**T_{iz}**	**EUR/kWh/day/year**	**0.14277**	**0.14277**
Yearly standard capacity product tariff for the exit point to the natural gas storage facility	**$T_{iz\ kr}$**	**EUR/kWh/day/year**	**0.0000000**	**0.0000000**
Charge for the use of the exit point for supplying gas users in Latvia	**$K_{pārv}$**	**EUR/kWh**	**0.0020669**	**0.0036101**
Entry/exit split			**2/98**	**2/98**

Table 9

Comparison of current and indicative tariffs of yearly capacity products

Type of tariff	Current tariffs, EUR/kWh/ per day/year	Indicative tariffs, EUR/kWh/ per day/year	Comparison of indicative tariffs with current tariffs	
			Abs.	%
Tariff for entry points from another country's transmission system	0.14277	0.14277	0	0
Tariff for exit points to another country's transmission system	0.14277	0.14277	0	0
Interruptible capacity tariff for entry points from another country's transmission system	0.1356315	0.1356315	0	0
Interruptible capacity tariff for exit points to another country's transmission system	0.1356315	0.1356315	0	0
Charge for the use of the exit point for supplying gas users in Latvia (EUR/kWh)	0.0020669	0.0036101	0.0015431	174.7

The charge for the use of the exit point for supplying gas users in Latviawill increase, because the yearly capacity product tariff for entry points and exit points in the regulatory period from October 1, 2023 to September 30, 2025 will not change compared to the current tariff. Therefore, taking into account the provisions of Chapter 1 of Section II of this Consultation Document that in the FinEstLat system, exit point tariffs are determined to ensure that each natural gas transmission system operator recovers the rest of the transmission system service revenue that have not been recovered from entry point tariffs, and in accordance with the Draft Methodology, the costs of securing natural gas supply, as well as the foregone revenue as a result of the application of a 100% discount on the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility, are also allocated to the charge for the use of the exit point for supplying gas users in Latvia.

The size of the indicative charge for the use of the exit point for supplying gas users in Latvia in the regulatory period from October 1, 2023 to September 30, 2025 is determined by the fact that the total costs of the natural gas transmission system on average per gas year compared to the costs approved by the Regulator for the 2021/2022 gas year have increased by 39%. This increase is mainly due to the adjustment of the previous tariff review cycles, as a result of inflation and the increase in the prices of energy resources, operating costs have increased by 26%, depreciation of infrastructure's fixed assets has increased by 10%, while the return on capital has decreased by 15% despite the fact that the regulatory asset base has increased by 32%. In addition, the use of the capacity of the exit point for for supplying

gas users in Latvia, which provides approximately 90% of the revenue of the transmission segment, has decreased by 26%.

In the calculation of the allowed revenue in the regulatory period from October 1, 2023 to September 30, 2025 the entry-exit split – 0.02/0.98 is used.

3) Calculation of indicative short-term capacity product tariffs

Available in the Appendix "Short-term capacity product tariffs" (see Appendix 2-4)

4) Cost allocation assessment

Article 5 of the TAR NC stipulates that cost allocation assessment be made to ensure that there is no cross subsidisation between intra-system and cross-system network use. The cost allocation assessment is made determining the cost allocation comparison index. The size of the cost allocation comparison index depends on the intra-system capacity ratio and the cross-system capacity ratio. If the of the cost allocation comparison index exceeds 10 %, the justification for that result must be provided.

The intra-system capacity ratio is calculated as the revenue, which is obtained from capacity tariffs and charged for intra-system network use at both all entry points and all exit points divided by the value of capacity-related cost driver for intra-system network use.

The cross-system capacity ratio is calculated as the revenues which is obtained from capacity tariffs and charged for cross-system network use at both all entry points and all exit points divided by the value of capacity-related cost driver for cross-system network use.According to Article 3(8) and Article 3(9) of the TAR NC, intra-system network use means transporting gas within an entry-exit system to customers connected to that same entry-exit system and cross-system network use means transporting gas within an entry-exit system to customers connected to another entry-exit system.Natural gas which at the cross-border entry point is injected into the relevant natural gas transmission entry-exit system (cross-system network use), as can be withdrawn from the system at national exit point, at exit point to storage facility (intra-system network use) or at cross-border exit point (cross-system network use). Therefore, the cross-system network use is determined on the basis of Article 5(5) of the TAR NC - the amount of allocated capacity attributed to the provision of transmission services for cross-system network use at all entry points shall be deemed equal to the amount of capacity attributed to the provision of transmission services for cross-system network use at all exit points. Other transmission services revenue is the revenue to be obtained from intra-system network use at entry points.The cost allocation assessment was carried out on the basis of the cost driver used in the reference price methodology - the forecasted entry and exit capacity booked by the natural gas transmission system (see table 7), indicative tariffs (see table 8) and corresponding indicative revenue for the booked natural gas transmission system capacity for the regulatory from October 1, 2023 to September 30, 2025.

To determine the degree of cross-subsidisation between the intra-system and cross-system network use, based on the proposed reference price methodology, the intra-system and cross-system capacity ratio, as well as the capacity cost allocation comparison index was calculated (see Table 10).

Table 10

Cost allocation assessment

Indicator		Cost driver - the forecasted booked capacity of the natural gas transmission system	Revenue
Entry	Intra-system network use	10 860 852	4 248 230
	Cross-system network use	2 792 607	398 701
Exit	Intra-system network use	10 860 852	39 208 481
	Cross-system network use	1 497 707	213 828
Intra-system capacity ratio		2.0006	
Cross-system capacity ratio		0.14277	
Cost allocation comparison index		173.36	

Taking into account that the transmission system service revenue, which is not recovered from the entry point tariffs, the costs of securing natural gas supply, as well as the foregone revenue as a result of the application of the 100% discount on the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility, shall be attributed to the charge for the use of the exit point for supplying gas users in Latviaaccording to the Draft Methodology, the degree of cross-subsidisation is significant - the cost allocation comparison index is 173.36.

The reasons why, in the Draft Methodology, the costs of securing natural gas supply, as well as the foregone revenue as a result of the application of the 100% discount on the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility, are expected to be attributed to the charge for the use of the exit point for supplying gas users in Latvia, are explained in Chapters 1, 7 and 8 of Section II of the Consultation Document.

V Assessment of the proposed reference price methodology

According to Article 7 of the TAR NC, the reference price methodology shall comply with Article 13 of Regulation 715/2009 and the following requirements:

- enabling network users to reproduce the calculation of reference prices and their accurate forecast;
- taking into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network;
- ensuring non-discrimination and prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5 of the TAR NC;
- – ensuring that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system;
- ensuring that the resulting reference prices do not distort cross-border trade.

The Draft Methodology complies with the postage stamp reference price methodology, which is transparent, takes into account the need for system integrity and its improvement and reflects actual costs, insofar as these costs correspond to the costs of an efficient and structurally comparable network operator and are transparent, while including an appropriate

return on investment and where appropriate taking into account the benchmarking of tariffs developed by regulatory authorities.

The Draft Methodology, i.e. the draft postage stamp reference price methodology, ensures that the costs are properly reflected and predictable, as according to the methodology, all revenue from the capacity booking service was allocated to all entry and exit points of the natural gas entry-exit system based on the allocation ratio of the revenue for the capacity booking of entry and exit points, which reflects the degree of utilization of entry and exit points. Since the degree of utilization of the entry and exit points under normal operating conditions of the natural gas transmission system is characterized by the daily average used capacity of the three previous calendar years, the attribution of the allowed revenue is easy to predict. In exceptional cases, a reasonable forecast of the natural gas system operator may be used instead of the daily average used capacity of the three previous calendar years. Information on the used capacities of the natural gas transmission system is publicly available both on the website of the natural gas transmission system operator and on the transparency platform of the European network of natural gas transmission system operators.

The Draft Methodology stipulates that in determining the total entry and exit capacity of the transmission system and also, accordingly, the tariffs, the entry point capacity from other transmission systems that are part of the single natural gas transmission entry-exit system and the exit point capacity to other transmission systems that are part of the single natural gas transmission entry-exit system shall not be taken into account, thereby eliminating the possibility of unjustified cross-subsidisation.

The Draft Methodology gives network users the opportunity to reproduce the calculation of reference prices and their accurate forecast, using the formulas for calculating the tariffs for the yearly standard capacity products (see Appendix 1, Chapters 5 and 6), tariffs for short-term standard capacity products (see Appendix 1, Chapter 8), tariffs for interruptible capacity products (see Appendix 1, Chapter 9) and tariffs for interruptible virtual counter flow capacity products (see Appendix 1, Chapter 10).

Network users can use the simplified tariff model published on the Regulator's website as one of the attachments to this Consultation Document to reproduce reference price calculations.

The application of the same reference price (tariff) of 142.77 EUR/MWh/day/year at the entry points of the FinEstLat system and the respective national exit price (tariff) ensure equal treatment of the network users in the country. The reference price of entry points calculated and applied in this way ensures transparency and predictability of tariffs not only in Latvia, but also in other FinEstLat countries, as well as price convergence in the region.

VI Comparison of the proposed reference price methodology and the capacity weighted distance reference price methodology

Recital 3 of the TAR NC stipulates that where the proposed reference price methodology is other than the capacity weighted distance reference price methodology (hereinafter - CWD methodology), the latter should serve as a counterfactual for comparison with the proposed reference price methodology.

The postage stamp method means that regardless of the distance over which natural gas must be transported, the same tariff is applied to the entry points or exit points of the natural gas transmission system. Therefore, the forecast booked capacity is the only cost driver to be used.

According to the CWD methodology, the length (distance) of the pipeline, weighted by the technical capacity of the pipeline, acts as a cost factor. As a result of the application of the

CWD methodology, different tariffs are obtained for each entry and exit point of the natural gas transmission system.

A comparison of the tariffs for the entry and exit points of the natural gas transmission system determined using the postage stamp and CWD method is made in Table 11.

Table 11

Comparison of entry and exit point tariffs of the natural gas transmission system determined by using the postage stamp and CWD method

Entry/exit point	Indicative tariffs		
	Postage stamp methodology	CWD methodology	Comparison (postage stamp-CWD)
Entry point Korneti	-	-	-
Entry point Karksi	-	-	-
Entry point Kiemenai	0.14277	0.1131706	0.0295994
Entry point from the storage facility	-	-	-
Exit point Korneti	-	-	-
Exit point Kiemenai	0.14277	1.4481347	-1.3053647
Exit point Karksi	-	-	-
Exit point for the for supplying gas users in Latvia	0.0036101	0.469171	-0.4655609
Exit point to the storage facility	-	-	-

In Baringa's study, a comparison of the postage stamp and CWD methodology was made, evaluating the entire FinEstLat system as a whole. According to the results of Baringa's study, as a result of the application of the CWD methodology, significantly different entry point tariffs of the FinEstLat single natural gas transmission entry-exit system are obtained, the lowest of which is 0.246 EUR/MWh and the highest is 0.481 EUR/MWh. Exit point tariffs are also different - from 0.809 EUR/MWh to 1.238 EUR/MWh.

VII Allowed revenue of the transmission system operator

Allowed revenue are revenue that cover the economically justified costs related to the natural gas transmission system service and which the transmission system operator is entitled to receive during a specific regulatory period.

The Draft Methodology specifies that the duration of the regulatory period is between two and five gas years. The duration of the tariff period is one gas year. When submitting a tariff proposal, the system operator submits justification for the regulatory period used in the tariff calculation and, if necessary, for the tariff period. The Regulator determines the regulatory period by decision and may decide to extend the tariff period.

If there are several tariff periods in the regulatory period, the same share of the allowed revenue is applied to each of the tariff periods. If there are several tariff periods in the regulatory period and one of the tariff periods is longer than the gas year, then the amount of allowed revenue (planned revenue) attributable to each tariff period is determined in proportion to the duration of the tariff period. The planned revenue do not change, except if the revenue attributable to the tariff period change.

Allowed revenue are determined by deducting the costs of the capacity booking service from the total costs of the capacity booking service, which the system operator must reduce by

improving the efficiency of the use of fixed assets and other resources and operating efficiency and ITC.

1) Capacity booking service costs

The natural gas transmission system operator must include in the tariff calculation and accurately and unambiguously indicate only those costs related to the provision of the capacity booking service.

The cost of the capacity booking service consists of the capital costs of the cross-border transmission system and the national transmission system, operating costs, taxes and revenue adjustment applicable to the cross-border and national transmission system, and the costs shall be determined using the following formulas:

$$I_{PSO} = I_{PSOst} + I_{PSOnac},$$

where:
$I_{PSO\ st}$ – the cross-border transmission system costs [EUR];
$I_{PSO\ nac}$ – the national transmission system costs [EUR];

$$I_{PSOst} = I_{kapst} + I_{eksplst} + I_{nodst} - Ie_{korst},$$

where:
$I_{kap\ st}$ – capital costs of the cross-border transmission system [EUR];
$I_{ekspl\ st}$ – operating costs of the cross-border transmission system [EUR];
$I_{nod\ st}$ – taxes attributable to the cross-border transmission system [EUR];
$Ie_{kor\ st}$ – revenue adjustment attributable to the cross-border transmission system [EUR];

$$I_{PSOnac} = I_{kapnac} + I_{eksplnac} + I_{nodnac} - Ie_{kornac},$$

where:
$I_{kap\ nac}$ – capital costs of the national transmission system [EUR];
$I_{ekspl\ nac}$ – operating costs of the national transmission system [EUR];
$I_{nod\ nac}$ – taxes attributable to the national transmission system [EUR];
$I_{kor\ nac}$ – revenue adjustment attributable to the national transmission system [EUR].

2) Capital costs

The Draft Methodology stipulates that the accounting and calculation of capital costs and their components shall be carried out in accordance with the capital cost accounting and calculation methodology determined by the Regulator[12].

3) Rate of return on capital

In accordance with the capital cost accounting and calculation methodology[13] determined by the Regulator, the Regulator prepares a calculation of the rate of return on capital once a year by September 1 and determines the rate of return on capital by decision. A merchant shall apply the rate of return on capital determined by the Regulator when developing a tariff proposal, the effective date of which is planned for the next calendar year after the date of adoption of the Regulator's decision on determining the rate of return on capital.

In accordance with the Regulator's decision No. 177 "On the rate of return on capital for the calculation of a tariff proposal for the natural gas transmission system, natural gas distribution system and natural gas storage services" of September 22, 2022, the natural gas transmission system operator should use the rate of return on capital in the amount of 2.72%[14] when

[12] https://likumi.lv/ta/id/335113-kapitala-izmaku-uzskaites-un-aprekinasanas-metodika
[13] https://likumi.lv/ta/id/335113-kapitala-izmaksu-uzskaites-un-aprekinasanas-metodika
[14] https://www.vestnesis.lv/op/2022/190.14

calculating the capacity booking service tariffs. This rate of return on capital was used when determining the indicative tariffs mentioned in Table 8 in the regulatory period from October 1, 2023 to September 30, 2025.

4) Indicative allowed revenue

Based on the procedure for determining the allowed revenue contained in this section, it has been determined that the indicative allowed yearly revenue of the natural gas transmission system operator for the regulatory period from October 1, 2023 to September 30, 2025 are 38,821 thousand euro (see Table 12).

Table 12

Indicative total natural gas transmission system costs and natural gas transmission system operator's allowed annual revenue for the regulatory period from October 1, 2023 to September 30, 2025

Cost items	Designation	Costs per year, thousand EUR
Cost of capital $I_{kap} = P_{KA} + I_{nol}$	I_{kap}	16 522
Taxes $I_{nod} = I_{ip.nod}$	I_{nod}	447
Operating costs (excluding the costs of securing natural gas supply) $I_{ekspl} = I_{tehn\ proc} + I_{pers} + I_{rem} + I_{saimn}$	I_{ekspl}	16 048
Cost adjustment, including	I_{sist}	9 040
Costs of storing energy supply security reserves		2 012
Total cost of capacity booking service	I_{PSO}	44 069
Inter-transmission system operator compensation	ITC	4 248
Allowed revenue	**IePSO**	**39 821**

The size of ITC is determined based on the basic principle of the ITC procedure of the FinEstLat system – the revenue recovered from the tariffs of all entry points of the FinEstLat single natural gas transmission entry-exit system is pooled and allocated among the transmission system operators in proportion to the annual domestic consumption. The planned natural gas consumption of Latvia is 10,860,851,885 kWh. Multiplying the planned consumption of natural gas by the single entry point tariff of the FinEstLat single natural gas transmission entry-exit system of 0.14277 EUR/kWh/d/y determines the annual ITC amount of 4,248 thousand euro.

5) Simplified tariff model

A simplified tariff model has been published on the Regulator's website www.sprk.gov.lv.

Chair A. Ozola

Appendices

Appendix 1

Methodology for the Calculation of Natural Gas Transmission System Service Tariffs

Issued in accordance with Article 15(1[1]) of the Energy Law and Article 9(1)(2) and Article 25(1) of the law On Regulators of Public Utilities

1. General provisions

1. The Methodology for Calculation of Tariffs for the Natural Gas Transmission System Service (hereinafter - the Methodology) specifies the procedure for calculating and determining the tariffs for the natural gas transmission system service (hereinafter - the transmission system).

2. The following terms are used in the methodology:

2.1. **allowed revenue** – revenue that covers the economically justified costs related to the transmission system service and which the transmission system operator is entitled to receive in a specific regulatory period;

2.2. **natural gas consumption for technological needs** – natural gas used to ensure the operation of the transmission system;

2.3. **natural gas losses** – the difference between the amount of natural gas injected into the transmission system and the amount of natural gas withdrawn from the transmission system during the relevant time period, excluding the natural gas consumption for technological needs;

2.4. **costs** – technologically and economically justified costs of the transmission system operator (hereinafter - the system operator), which are necessary for the efficient provision of the transmission system service;

2.5. **capacity booking service** – a transmission system service that ensures the booking of the capacity product of entry or exit points;

2.6. **national transmission system** – a part of the transmission system (branches from the cross-border transmission system that are not used for cross-border transmission of natural gas) for the supply of natural gas to populated areas, together with branches and gas regulation stations of the system operator;

2.7. **cross-border transmission system** – part of the transmission system from the entry point from the transmission system of another country to the exit point to the transmission system of another country or to the entry point into the natural gas storage facility;

2.8. **planned revenue** – part of the allowed revenue allocated to the tariff period;

2.9. **forecasted daily average capacity** – daily average used capacity of the entry point or exit point for three previous calendar years [kWh/day];

2.10. **regulatory period** – time period for which the allowed revenue shall be determined;

2.11. **regulatory account** – the account which contains under- and over-recovery of the capacity booking service revenue and the differences between planned and actual costs determined in this methodology;

2.12. **tariff** – the charge that the transmission system user must pay for the capacity booking service provided thereto and which is determined according to the planned revenue;

2.13. **tariff period** – the time period in which the tariffs are applicable;

2.14. **virtual counter flow capacity product** – the transmission system capacity for the actual flow in the opposite direction in a specific time period – gas year, gas quarter, gas month or gas day – at the entry or exit point where it is not possible to physically provide natural gas in the opposite direction, and for the natural gas storage facility's actual technological regime flow in the opposite direction, which can be booked by the system user.

3. The terms included in this methodology are used within the meaning of the Commission Regulation 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas.

4. The duration of the regulatory period is from two to five gas years. The duration of the tariff period is one gas year. When submitting a tariff proposal, the system operator shall submit a justification for the regulatory period used in the tariff calculation and, if necessary, for the tariff period. The Public Utilities Commission (hereinafter - the Regulator) shall determine the regulatory period by decision and may decide to extend the tariff period.

5. If there are several tariff periods in the regulatory period, the same share of the allowed revenue shall be allocated to each of the tariff periods. If there are several tariff periods in the regulatory period and one of the tariff periods is longer than a gas year, then the amount of the allowed revenue (planned revenue) attributable to each tariff period shall be determined in proportion to the duration of the tariff period. The planned revenue shall not change, except if the revenue attributable to the tariff period changes in the cases referred to in Chapter 3.2 of this methodology.

6. The system operator shall accurately and transparently reflect the costs of the capacity booking service in thousands of *euro* [thousand EUR] to the nearest one decimal place and the capacity of the entry or exit points in kilowatt-hours per day [kWh/day], rounded to a whole number.

2. The total entry and exit capacity of the transmission system

7. When determining the total entry capacity of the transmission system, the capacity of the entry points from other transmission systems, which are part of the single natural gas transmission entry-exit system, shall not be taken into account. The total entry capacity of the transmission system shall be determined according to the following formula:

$$P_{ie} = \sum_{i=1}^{n_{ie}} P_{iec}(i) + \sum_{i=1}^{n_{ieb}} P_{ieb}(i) + \sum_{i=1}^{n_{ielng}} P_{ielng}(i) + \sum_{i=1}^{n_{iekr}} P_{iekr}(i) \quad ,$$

where:

P_{ie} – total entry capacity of the transmission system [kWh/day];

n_{ie} – the number of entry points from another transmission entry-exit system;
$P_{ie\ c}(i)$ – the forecasted average daily capacity [kWh/day] of the entry point i of the transmission system from another transmission entry-exit system;
$n_{ie\ b}$ – the number of entry points from the biomethane production facility;
$P_{ie\ b}(i)$ – the forecasted average daily capacity [kWh/day] of the entry point i of the transmission system from the biomethane production facility;
$n_{ie\ lng}$ – the number of entry points from the liquefied natural gas facility;
$P_{ie\ lng}$ (i) – the forecasted average daily capacity of the entry point i from the liquefied natural gas facility [kWh/day];
$n_{ie\ kr}$ – the number of entry points from the natural gas storage facility;
$P_{ie\ kr.}$ (i) – the forecasted average daily capacity of the entry point i from the natural gas storage facility [kWh/day].

8. When determining the total exit capacity of the transmission system, the capacity of the exit points to other transmission systems, which are part of the single natural gas transmission entry-exit system, shall not be taken into account. The total exit capacity of the transmission system shall be determined according to the following formula:

$$P_{iz} = \sum_{i=1}^{n_{iz}} P_{izc}(i) + \sum_{i=1}^{n_{izkr}} P_{izkr}(i) + P_{izv},$$

where:
P_{iz} – total exit capacity of the transmission system [kWh/day];
n_{iz} – the number of exit points to another transmission entry-exit system;
$P_{iz\ c}(i)$ – forecasted average daily capacity of the exit point i of the transmission system to another transmission entry-exit system [kWh/day];
$n_{iz\ kr}$ – the number of exit points from the natural gas storage facility;
$P_{iz\ kr}$ (i) – forecasted average daily capacity of the exit point i to the natural gas storage facility [kWh/day];
$P_{iz\ v}$ – the forecasted maximum daily capacity of the exit point for supplying gas users in Latvia [kWh/day].

9. The system operator shall submit a justification simultaneously with the tariff proposal, if the forecasted average daily entry or exit capacity is adjusted.

3. Determination of allowed revenue

10. Allowed revenue shall be determined according to the following formula:

$$AIe_{PSO} = I_{PSO} - I_{PSOef} - ITC,$$

where:
AIe_{PSO} – allowed revenue of the regulatory period [EUR];

I_{PSO} – total capacity booking service costs to be included in the tariff calculation [EUR];

$I_{PSO\ ef}$ – the amount of capacity booking service costs, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources and the operating efficiency [EUR];
ITC – the balance of revenue and expenses for inter-transmission system operator compensation of the single natural gas transmission entry-exit system, which are attributed to the system operator in accordance with the procedure for inter-transmission system operator compensation of the single natural gas transmission

entry-exit system (hereinafter - inter-transmission system operator compensation) [EUR].

11. The system operator shall calculate and submit the cost efficiency ratio to the Regulator. The cost efficiency ratio shall be applied to the cost of the capacity booking service to determine the amount of these costs, which the system operator must achieve by the beginning of the next regulatory period and which will be applied in the determination of tariffs in the next regulatory period. The amount of capacity booking service costs, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources and the operating efficiency, shall be determined according to the following formula:

$$I_{PSOef} = \left(I_{PSO} - Ie_{kor} - ITC - I_{sist} - I_{nod(st,nac)}\right) \times K_{ef},$$

where:
Ie_{kor} – revenue adjustment attributable to the cross-border and national transmission system;
I_{sist} – cost of securing natural gas supply [EUR];
$I_{nod(st,\ nac)}$ – taxes attributable to the cross-border and national transmission system [EUR];
K_{ef} – cost efficiency ratio.

12. If the regulatory period is longer than a year, the same amount of capacity booking service costs shall be applied to each tariff period within the regulatory period, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources and the operating efficiency. Upon a justified request of the system operator, the Regulator may allow the application of a different amount of capacity booking service costs, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources and the operating efficiency, for attribution to each tariff period within the regulatory period.

13. In the formulas specified in paragraphs 10 and 11 of this methodology, the inter-transmission system operator compensation shall be taken into account, if the single natural gas transmission entry-exit system has been established.

14. The size of the inter-transmission system operator compensation shall be determined in accordance with the procedure for inter-transmission system operator compensation of the single natural gas transmission entry-exit system.

15. The system operator shall include in the tariff calculation and accurately and unambiguously state only the costs related to the provision of the capacity booking service.

16. The system operator shall use the cost allocation method, the basic principles and implementation of which shall be coordinated with the Regulator.

17. The cost of the capacity booking service shall consist of the capital costs of the cross-border transmission system and the national transmission system, operating costs, taxes and revenue adjustment attributable to the cross-border and national transmission system, and the costs shall be determined according to the following formula:

$$I_{PSO} = I_{PSOst} + I_{PSOnac},$$

where:
$I_{PSO\ st}$ – cross-border transmission system costs [EUR];
$I_{PSO\ nac}$ – national transmission system costs [EUR];

$$I_{PSOst} = I_{kapst} + I_{eksplst} + I_{nodst} - Ie_{korst},$$

where

$I_{kap\ st}$ – capital costs of the cross-border transmission system [EUR];

$I_{ekspl\ st}$ – operating costs of the cross-border transmission system [EUR];

$I_{nod\ st}$ – taxes attributable to the cross-border transmission system [EUR];

$Ie_{kor\ st}$ – revenue adjustment attributable to the cross-border transmission system [EUR];

$$I_{PSOnac} = I_{kapnac} + I_{eksplnac} + I_{nodnac} - Ie_{kornac},$$

where:

$I_{kap\ nac}$ – capital costs of the national transmission system [EUR];

$I_{ekspl\ nac}$ – operating costs of the national transmission system [EUR];

$I_{nod\ nac}$ – taxes attributable to the national transmission system [EUR];

$I_{kor\ nac}$ – revenue adjustment attributable to the national transmission system [EUR].

18. The system operator shall submit a justification simultaneously with the tariff proposal, if the costs of the capacity booking service to be included in the tariff calculation are not attributed in accordance with the provisions of paragraph 17 of this methodology.
19. Real estate tax shall be calculated in accordance with regulatory enactments only from the assets included in the regulatory asset base and assets installed with the funds of third parties.
20. Accounting and calculation of capital costs and their components shall be carried out in accordance with the capital cost accounting and calculation methodology determined by the Regulator.

3.1. Operating costs

21. The operating costs of the cross-border transmission system shall be determined according to the following formula:

$$I_{eksplst} = I_{tehnprocst} + I_{persst} + I_{remst} + I_{saimst},$$

where:

$I_{tehn\ proc\ st}$ – the cost of natural gas losses and technological process provision of the cross-border transmission system [EUR];

$I_{pers\ st}$ – personnel and social costs of the cross-border transmission system [EUR];

$I_{rem\ st}$ – costs of operational repairs necessary and carried out for the routine property maintenance of the cross-border transmission system [EUR];

$I_{saim\ st}$ – other operating costs of the cross-border transmission system [EUR].

22. The operating costs of the national transmission system shall be determined according to the following formula:

$$I_{eksplnac} = I_{tehnprocnac} + I_{persnac} + I_{remnac} + I_{saimnac} + I_{sist},$$

where:

$I_{tehn\ proc\ nac}$ – natural gas losses of the national transmission system and the cost of ensuring the technological process [EUR];

$I_{pers\ nac}$ – personnel and social costs of the national transmission system [EUR];

$I_{rem\ nac}$ – costs of routine operational repairs necessary and carried out for the property maintenance of the national transmission system [EUR];

$I_{saim\ nac}$ – other operating costs of the national transmission system [EUR].

23. The costs of natural gas transmission losses of the cross-border and national transmission system and of ensuring the technological process shall be related to the difference between the amount of natural gas injected into the transmission system and withdrawn from the transmission system during the relevant period of time, which consists of natural gas losses and natural gas consumption for technological needs. The costs of natural gas losses and technological process provision shall be determined according to the following formula:

$$I_{tehnproc(st,nac)} = I_{zud(st,nac)} + I_{teh(st,nac)} = \left(E_{zud(st,nac)} + E_{teh(st,nac)}\right) \times C_{zud},$$

where:

$I_{tehn\ proc\ (st,nac)}$ – the costs of natural gas losses and technological process provision of the cross-border and national transmission system [EUR];

$I_{zud\ (st,nac)}$ – the charge for natural gas losses in the cross-border and national transmission system [EUR];

$I_{teh\ (st,nac)}$ – the charge for the consumption of natural gas for technological needs in the cross-border and national transmission system [EUR];

$E_{zud\ (st,nac)}$ – the forecasted natural gas losses in the cross-border and national transmission system [kWh];

$E_{teh\ (st,nac)}$ – the forecasted consumption of natural gas for technological needs in the cross-border and national transmission system [kWh];

C_{zud} – the forecasted average price of natural gas losses [EUR/kWh].

24. The personnel and social costs of the cross-border and national transmission system shall be calculated in accordance with the Labor Law and the regulatory enactments in the field of the social security.

25. The costs of routine operational repairs necessary and carried out for the maintenance of the property of the cross-border and national transmission system and the costs of the works required for the maintenance and preservation of fixed assets (buildings, structures, facilities, etc.) in the system operator's accounting balance and leased transmission assets and administrative assets in working order and which are carried out by other companies shall be written off and classified in the accounting period in which they occurred. The costs of financing inventory maintenance in accordance with the planned inventory cycle, applying the company's actual borrowing rate, shall be included in this item. The cost of financing inventory maintenance shall be assessed by taking into account the amount of inventory required to provide a continuous and safety-compliant capacity booking service. If the actual borrowing rate applied to the assessment of inventory financing costs exceeds the last six months' average variable interest rate of short-term loans (euro) issued to non-financial corporations by the Bank of Latvia (for new transactions) in accordance with inventory volumes, the inventory maintenance financing costs shall be assessed by applying the last six months' average variable interest rate (for new transactions) of short-term loans (euro) issued to non-financial corporations published by the Bank of Latvia, according to stock volumes. This item shall not include the costs related to capitalized repairs and the creation of new fixed assets and the costs of financing the stocks maintained for their performance.

26. The other operating costs of the cross-border and national transmission system are the costs related to the operation of the system operator, which are not included in other cost items.

27. The costs of securing natural gas supply, which are related to the system operator's obligation to ensure the necessary natural gas extraction capacity from the Incukalns underground gas storage facility during the energy crisis, as stipulated in the regulations of the Cabinet of Ministers, shall be included in the tariff proposal in accordance with the actual, justified value, providing for their recovery in two gas years from the moment of the occurrence of the costs of obligation fulfilment regarding the provision of natural gas supply.
28. The economically justified costs of storing energy supply security reserves, which are related to the obligation of the Cabinet of Ministers (set out in the Energy Law) to ensure the purchase of energy supply security reserves and their injection into the Incukalns underground gas storage facility, shall be included in the tariff proposal according to their actual value.

3.2. Adjustment of revenue and the amount of transmitted natural gas

29. The system operator shall create a regulatory account in which, in accordance with paragraphs 30, 31, 36, 37 and 38 of this methodology, the difference between the allowed (planned) and actual revenue and the difference between the planned and actual costs shall be recorded, separating the revenue attributable to the cross-border and national transmission system. The balance of the regulatory account shall be applied to the next tariff and regulatory periods in accordance with paragraphs 33 and 39 of this methodology. At the start of a new regulatory period, the balance of the regulatory account shall be set equal to zero *euro*.
30. Six months before the end of the tariff period, the system operator shall record the following in the regulatory account:
    30.1. the difference between the actual (forecasted) and planned revenue in the tariff period, which is determined by summing the actual difference for the ended months in the relevant tariff period and the forecasted difference at the time of calculation, for the remaining months of the relevant tariff period;
    30.2. the difference between the actual (forecasted) and planned costs of ensuring the technological process and natural gas losses, which is determined by taking into account the actual price of natural gas in the ended months of the tariff period and the forecasted price of natural gas for the remaining months of the tariff period at the time of calculation. When determining the difference between the costs of ensuring the technological process and natural gas losses, the amount of natural gas losses, which does not exceed the approved amount of natural gas losses attributable to the relevant tariff period, shall be used in the calculations;
    30.3. the difference between the planned inflation-induced cost increase in the regulatory period and the forecasted inflation-induced cost increase in the tariff period, which shall be determined according to the following formula:

$$IIP_{tpr} = \left(\left(I_{pers,t} + I_{rem,t} + I_{saimn,t}\right) - I_{ne,t}\right) \times \left(PCI_{pl} - PCI_{pr}\right),$$

where:

$IIP_{t\,pr}$ – the forecasted difference between the planned inflation-induced cost increase in the regulatory period and the forecasted inflation-induced cost increase in the tariff period [EUR];

$I_{pers,t}$ – personnel and social costs included in the tariff calculation, calculated by using the inflation forecast, and attributable to the specific tariff period [EUR];

$I_{rem,t}$ – the costs of the necessary maintenance of the property and routine maintenance repairs carried out by other companies included in the tariff calculation, which are attributable to the relevant tariff period [EUR];

$I_{saimn,t}$ – other operating costs included in the tariff calculation, which are attributable to the relevant tariff period [EUR];

$I_{ne,t}$ – operating costs included in the tariff calculation, which are attributable to the relevant tariff period and for which inflation-induced cost changes are not planned in the regulatory period [EUR];

PCI_{pl} – planned cumulative consumer price inflation used in tariff calculation for the relevant tariff period [%];

PCI_{pr} – forecasted cumulative consumer price inflation for the relevant tariff period [%];

30.4. the difference between the planned increase in costs caused by changes in nominal gross wages during the tariff period and the forecasted increase in the costs caused by changes in nominal gross wages in the tariff period, which shall be determined according to the following formula:

$$PIP_{tpr} = I_{persBAI,t} \times (BAI_{pl} - BAI_{pr}),$$

where:

$PIP_{t\ pr}$ – the forecasted difference between the planned cost increase caused by changes in nominal gross wages in the regulatory period and the actual cost increase caused by changes in nominal gross wages in the tariff period [EUR];

$I_{pers\ BAI,t}$ – personnel costs included in the tariff calculation, calculated using the forecast of changes in nominal gross wages and attributable to the relevant tariff period [EUR];

BAI_{pl} – the planned cumulative indicator of changes in nominal gross wages used in the tariff calculation for the relevant tariff period [%];

BAI_{pr} – forecasted cumulative indicator of changes in nominal gross wages for the relevant tariff period [%];

30.5. the difference between the actual (forecasted) and planned amount of the inter-transmission system operator compensation in the tariff period, which shall be determined by summing the actual difference for the ended months in the relevant tariff period and the forecasted difference at the time of calculation, for the remaining months of the relevant tariff period;

30.6. the difference between the actual (forecasted) and planned costs of securing natural gas supply and the economically justified costs of storing energy supply security reserves, which shall be determined by summing the actual difference for the ended months in the relevant tariff period and the forecasted difference at the time of calculation, for the remaining months of the relevant tariff period;

30.7. justified actual unexpected costs due to changes in external regulatory acts or prevention of emergency situations, which occurred in the previous or current tariff period of the relevant regulatory period and cannot be recovered otherwise;

30.8. differences between the actual and forecasted costs and revenue for the months of the previous tariff period referred to in subparagraphs 30.1, 30.2, 30.3, 30.4, 30.5 and 30.6 of this methodology, including the months of the last tariff period of the previous regulatory period, for which cost forecasts were used when calculating the regulatory account for the previous tariff period, including the last tariff period of the previous regulatory period.

31. The differences referred to in paragraph 30 of this methodology shall be determined for the following period:

31.1. the differences referred to in subparagraph 30.1, 30.2, 30.3, 30.4 and 30.5 of this methodology shall be determined on the last day of the tariff period;

31.2. the costs referred to in subparagraph 30.6 of this methodology shall be determined at the time of submission of the calculations;

31.3. the costs referred to in subparagraph 30.7 of this methodology shall be determined on the last day of the last tariff period of the previous tariff period, including the previous regulatory period.

32. No later than four months and two weeks before the end of the tariff period, the system operator shall submit to the Regulator information on the balance of the regulatory account, determined in accordance with paragraphs 30 and 31 of this methodology, and its justification.

33. If there are several tariff periods in the regulatory period, the part of the revenue adjustment attributable to the next tariff period shall be determined as follows:

33.1. if the balance of the regulatory account is negative, the system operator has the right to attribute the balance of the regulatory account to the next tariff period and increase the planned revenue of the next tariff period, subject to the following conditions:

33.1.1. the balance of the regulatory account exceeds one percent of the planned operating costs of the tariff period;

33.1.2. the portion of the revenue adjustment attributable to the tariff period shall not exceed six percent of the planned operating costs of the tariff period. The six percent limit does not apply to the difference in costs, which is formed as a result of deviations in the costs of ensuring the technological process and natural gas losses, if the average actual price of natural gas in the relevant tariff period was six or more euros per MWh higher than the planned price of natural gas;

33.2. if the balance of the regulatory account is positive, the system operator is obliged to allocate the balance of the regulatory account to the next tariff period and reduce the planned revenue of the next tariff period, if the balance of the regulatory account exceeds one percent of the planned operating costs of the tariff period;

33.3. the balance of the regulatory account, which is not attributed to the next tariff period according to subparagraph 33.1 or 33.2 of this methodology, shall be taken into account by the system operator when determining the part of the revenue adjustment attributable to the tariff period for the next tariff period or the next regulatory period.

34. The balance of the regulatory account determined in paragraph 30 of this methodology shall be equal to the revenue adjustment part, and it increases or decreases the cost of the capacity booking service specified in paragraph 17 of this methodology for the next tariff period.

35. When determining the adjustment of revenue specified in paragraphs 30-33 of this methodology, the difference between the planned and actual inter-transmission system operator compensation shall be taken into account.
36. The system operator, together with a new tariff proposal, shall submit to the Regulator information about the balance of the regulatory account and its justification. When determining the current balance of the regulatory account, the system operator shall record:
    36.1. until the submission of a new tariff proposal, the balance of the regulatory account not allocated to the planned revenue, listed in accordance with paragraphs 30 and 31 of this methodology;
    36.2. cost savings by cost groups, determined as the difference between actual costs and planned costs in the corresponding regulatory period, for those cost groups whose actual costs during the regulatory period were lower than planned and which were not included in the regulatory account in accordance with paragraph 30 and 31 of this methodology;
    36.3. in the cases determined by the capital cost accounting and calculation methodology, the increase in capital costs by cost group, defined as the difference between the actual costs and the planned costs in the corresponding regulatory period, whose actual costs during the regulatory period were higher than the planned ones.
37. If the system operator has implemented efficiency improvement measures during the regulatory period and, in accordance with them, has taken into account the cost efficiency factor mentioned in paragraph 11 of this methodology in the calculation of the tariff proposal of the previous regulatory period, the system operator has the right to reduce the balance of the regulatory account determined in accordance with the procedure referred to in paragraph 36 of this methodology for an amount not exceeding 50% of the actual cost savings determined by taking into account the additional costs associated with efficiency improvement measures and the cost savings achieved.
38. The amounts referred to in paragraphs 36 and 37 of this methodology shall be determined on the last day of the last tariff period of the relevant regulatory period.
39. The adjustment of revenue specified in paragraph 11 of this methodology for the next regulatory period shall be determined as follows:
    39.1. if the balance of the regulatory account is negative, the system operator has the right to allocate the balance of the regulatory account in full or in part to the next regulatory period, accordingly increasing the allowed revenue for the next regulatory period specified in paragraph 11 of this methodology;
    39.2. if the balance of the regulatory account is positive, the system operator is obliged to allocate the balance of the regulatory account to the next regulatory period and reduce the planned revenue of the regulatory period specified in paragraph 11 of this methodology.

4. Principles of allocation of allowed revenue

49. The allowed revenue of the system operator shall be divided into the revenue of the cross-border transmission system and the national transmission system according to the following formula:

$$AIe_{PSO} = AIe_{PSOnac} + AIe_{PSOst},$$

where:

$AIe_{PSO\ nac}$ – allowed revenue from the capacity booking service attributable to the national transmission system [EUR];

$AIe_{PSO\ st}$ – allowed revenue from the capacity booking service attributable to the cross-border transmission system [EUR].

50. The allowed revenue of the cross-border and national transmission systems shall be used respectively to cover the costs of the cross-border transmission system and the national transmission system, which shall be calculated in accordance with the formulas specified in paragraph 17 of this methodology, taking into account the size of the costs of the capacity booking service, which the system operator must reduce by improving the efficiency of the use the fixed assets and other resources, as well as the operating efficiency, and the inter-transmission system operator compensation. The size of the costs of the capacity booking service, which the system operator must reduce by improving the efficiency of the use of fixed assets and other resources, as well as the operating efficiency, and the inter-transmission system operator compensation shall be attributed to the costs of the cross-border transmission system and the national transmission system according to the cost allocation method. Allowed revenue shall be recovered by the system operator through capacity product tariffs by providing the capacity booking service.

51. The system operator, when calculating the allowed revenue recoverable from the capacity booking of entry points from other transmission entry-exit systems and of exit points to other transmission entry-exit systems, shall apply the allowed revenue allocation factor of 0.50 to the revenue for the capacity booking of entry points and the allowed revenue allocation factor of 0.50 for the revenue from the capacity booking of exit points. The system operator shall submit a justification simultaneously with the tariff proposal if the allowed revenue allocation factors are adjusted.

52. The revenue reallocation factor (K_{reg}) of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility between the transmission system and the exit point for supplying gas users in Latvia, as well as the discount (D_{kr}) applicable to the tariffs of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility shall be determined by the system operator. The system operator may determine a discount applicable to the tariffs of the entry point from the LNG facility. The system operator shall submit the justification of the determined reallocation factor and the size of the discount simultaneously with the tariff proposal.

5. Calculation of yearly standard capacity product tariffs, if the single natural gas transmission entry-exit system has been established

53. Yearly standard capacity product tariffs for entry points into the single natural gas transmission entry-exit system from another transmission entry-exit system shall be determined by the single natural gas transmission entry-exit system operators by mutual agreement and taking into account the opinion of the regulatory authorities of the single natural gas transmission entry-exit system.

54. The yearly standard capacity product tariff for the exit points to another transmission entry-exit system shall be determined in the same amount as the yearly standard capacity product tariff for the entry points into the single natural gas transmission entry-exit system according to the following formula:

$$T_{iz(g)} = T_{ie(g)}$$

where:

$T_{ie\ (g)}$ – the yearly standard capacity product tariff of the transmission system for entry points from another transmission entry-exit system [EUR/kWh/day/year];

$T_{iz\ (g)}$ – the yearly standard capacity product tariff of the transmission system for exit points to another transmission entry-exit system [EUR/kWh/day/year].

55. The yearly standard capacity product tariff for the entry point from the natural gas storage facility shall be determined according to the following formula:

$$T_{iekr(g)} T_{ie(g)} \times (1 - D|kr)$$

where:
$T_{ie\ kr\ (g)}$ – the yearly standard capacity product tariff for the entry point from the natural gas storage facility [EUR/kWh/day/year].

56. The yearly standard capacity product tariff for the exit point to the natural gas storage facility shall be determined according to the following formula:

$$T_{izkr(g)} = T_{iz(g)} \times (1 - D_{kr})$$

where:
$T_{iz\ kr\ (g)}$ – the yearly standard capacity product tariff for the exit point to the natural gas storage facility [EUR/kWh/day/year].

57. The charge for the use of the exit point for supplying gas users in Latvia shall be determined according to the following formula:

$$K_{pārv} = \frac{AIe_{PSOnac}}{Q_{nodliet(g)}}$$

where:
$K_{pārv}$ – the charge for the use of the exit point for supplying gas users in Latvia [EUR/kWh];
$Q_{nod\ liet\ (g)}$ – forecast of the amount of natural gas delivered to gasified facilities connected to the natural gas transmission and distribution system in a gas year [kWh].

6. Calculation of yearly standard capacity product tariffs, if the single natural gas transmission entry-exit system has not been established

58. The yearly standard capacity product tariff for entry points from another transmission entry-exit system shall be determined according to the following formula:

$$T_{ie(g)} = \frac{Ie_{PSOst} \times V_{ie} \times \left(1 - \frac{P_{iekr}}{P_{ie}} \times D_{kr} \times K_{reg}\right)}{P_{ie} - P_{iekr} \times D_{kr}}$$

where:
$Ie_{PSO\ st}$ – the planned revenue attributable to the cross-border transmission system [EUR];
V_{ie} – the planned revenue allocation factor for revenue from booking the capacity of entry points from another transmission entry-exit system;
$P_{ie\ kr}$ – the forecasted average daily capacity of the entry point from the natural gas storage facility during the tariff period [kWh/day];

P_{ie} – entry capacity of the transmission system during the tariff period [kWh/day];

K_{reg} – the revenue reallocation factor of the entry point from the natural gas storage facility and the exit point to the natural gas storage facility between the transmission system and the exit point for supplying gas users in Latvia.

59. The yearly standard capacity product tariff for the entry point from the natural gas storage facility shall be determined by using the formula specified in paragraph 56 of this methodology.

60. The yearly standard capacity product tariff for exit points to another transmission entry-exit system shall be determined according to the following formula:

$$T_{iz(g)} = \frac{Ie_{PSOst} \times V_{iz} \times \left(1 - \frac{P_{izkr}}{P_{iz}} \times D_{kr} \times K_{reg}\right)}{P_{iz} - P_{izkr} \times D_{kr}}$$

where:
V_{iz} – the planned revenue allocation factor for revenue from the capacity booking of exit points to another transmission entry-exit system;
P_{iz} – the exit capacity of the transmission system during the tariff period [kWh/day];
$P_{iz\ kr}$ – the forecasted daily average capacity of the exit point to the natural gas storage facility during the tariff period [kWh/day].

61. The yearly standard capacity product tariff for the exit point to the natural gas storage facility shall be determined by using the formula specified in paragraph 57 of this methodology.

62. The charge for the use of the exit point for supplying gas users in Latviashall be proportional to the forecasted amount of natural gas supplied to the gasified facilities connected to the natural gas transmission and distribution system, and it shall be determined according to the following formula:

$$K_{pārv} = \frac{Ie_{PSOnac} + Ie_{PSOst} \times D_{kr} \times K_{reg} \times \left(\frac{P_{iekr} \times V_{ie}}{P_{ie}} + \frac{P_{izkr} \times V_{iz}}{P_{iz}}\right) + T_{iz(g)} \times P_{izv}}{Q_{nodliet(g)}}$$

where:
$Ie_{PSO\ nac}$ – allowed revenue of the national transmission system [EUR].

7. Size of multipliers and the seasonal factor

63. The system operator shall submit the economic justification of the size of the multipliers and seasonal factor used in the tariff proposal, taking into account the system operator's obligation to ensure an efficient use of the transmission system for the provision of the capacity booking service and covering the total costs of the capacity booking service, together with the tariff proposal.

64. The congestion multiplier of the entry and exit points of the transmission system (hereinafter referred to as the congestion multiplier) shall be determined according to the following formula:

$$K_{pārsl} = P \times 100\%$$

where:
$K_{pārsl}$ – the congestion multiplier of the entry and exit points of the transmission system;
P – the congestion probability of the entry and exit points of the transmission system.

$$P = \frac{n \times L_a}{L} \times \frac{N_a}{N}$$

where:
n – the forecasted number of replacements of the standard capacity product with the interruptible capacity product;
L_a – the forecasted average duration of one replacement of the standard capacity product [hours];
L – the total duration of replacement of the relevant standard capacity product with the interruptible capacity product [hours];
N_a – the forecasted average value of the capacity replaced in one replacement of the standard capacity product [kWh/day];
N – the total capacity of replacing the relevant standard capacity product with the interruptible capacity product.

65. If the calculated congestion multiplier is equal to 0, then the congestion multiplier equal to 0.05 shall be used in tariff calculations.

8. Calculation of tariffs for short-term standard capacity products

66. The quarterly, monthly, daily and within-day standard capacity product tariff for entry points from another transmission entry-exit system shall be determined according to the following formula:

$$T_{ie(c,m,d,dl)} = \frac{T_{ie(g)} \times K_{(c,m,d,dl)} \times S_{(c,m,d,dl)}}{G} \times d$$

where:
$T_{ie(c,m,d,dl)}$ – the quarterly (EUR/kWh/day/quarter), monthly (EUR/kWh/day/month), daily or within-day (EUR/kWh/day) standard capacity product tariff for entry points from another transmission entry-exit system;
$K_{(c,m,d,dl)}$ – the multiplier for quarterly, monthly, daily or within-day standard capacity products;
$S_{(c,m,d,dl)}$ – the seasonal factor for quarterly, monthly, daily or within-day standard capacity products;
d – the number of days in the period when the short-term standard capacity product is used;
G – the number of days in the year of the application of the tariff.

67. The quarterly, monthly, daily and within-day standard capacity product tariff for exit points to another transmission entry-exit system shall be determined according to the following formula:

$$T_{iz(c,m,d,dl)} = \frac{T_{iz(g)} \times K_{(c,m,d,dl)} \times S_{(c,m,d,dl)}}{G} \times d$$

where:
$T_{iz\ (c,m,d,dl)}$ – the quarterly (EUR/kWh/day/quarter), monthly (EUR/kWh/day/month), daily and within-day (EUR/kWh/day) standard capacity product tariff for exit points to another transmission entry-exit system.

68. The quarterly, monthly, daily and within-day standard capacity product tariff for the entry point from the natural gas storage facility shall be determined according to the following formula:

$$T_{iekr(c,m,d,dl)} = \frac{T_{iekr(g)} \times K_{(c,m,d,dl)} \times S_{(c,m,d,dl)}}{G} \times d$$

where:

$T_{ie\ kr\ (c,m,d,dl)}$ – the quarterly (EUR/kWh/day/quarter), monthly (EUR/kWh/day/month), daily and within-day (EUR/kWh/day) standard capacity product tariff for the entry point from the natural gas storage facility.

69. The quarterly, monthly, daily and within-day standard capacity product tariff for the exit point from the natural gas storage facility shall be determined according to the following formula:

$$T_{izkr(c,m,d,dl)} = \frac{T_{izkr(g)} \times K_{(c,m,d,dl)} \times S_{(c,m,d,dl)}}{G} \times d$$

where:

$T_{iz\ kr(c,m,d,dl)}$ – the quarterly (EUR/kWh/day/quarter), monthly (EUR/kWh/day/month), daily and within-day (EUR/kWh/day) standard capacity product tariff for the exit point from the natural gas storage facility.

70. Tariffs for short-term standard capacity products for the entry point from the natural gas storage facility during natural gas injection and for the exit point to the natural gas storage facility during natural gas withdrawal shall be calculated in accordance with the formula specified in paragraph 67 of this methodology.

9. Calculation of interruptible capacity product tariffs for entry and exit points

71. The yearly interruptible capacity product tariff for entry points from another transmission entry-exit system shall be determined according to the following formula:

$$T_{atie(g)} = T_{ie(g)} \times \left(1 - K_{pārsl}\right)$$

where:

$T_{at\ ie,(g)}$ – the yearly [EUR/kWh/day/year] interruptible capacity product tariff for entry points from another transmission entry-exit system.

72. The quarterly, monthly, daily and within-day interruptible capacity product tariff for entry points from another transmission entry-exit system shall be determined according to the following formula:

$$T_{atie(c,m,d,dl)} = T_{ie(c,m,d,dl)} \times \left(1 - K_{pārsl}\right) \times S_{(c,m,d,dl)}$$

where:

$T_{at\ ie\ (c,m,d,dl)}$ – the quarterly [EUR/kWh/day/quarter], monthly [EUR/kWh/day/month], daily and within-day [EUR/kWh/day] interruptible capacity product tariff for entry points from another transmission entry-exit system.

73. The yearly interruptible capacity product tariff for exit points to another transmission entry-exit system shall be determined according to the following formula:

$$T_{atiz(g)} = T_{iz(g)} \times \left(1 - K_{pārsl}\right)$$

where:

$T_{at\ iz(g)}$ – the yearly [EUR/kWh/day/year] interruptible capacity product tariff for exit points to another transmission entry-exit system.

74. The quarterly, monthly, daily and within-day interruptible capacity product tariff for exit points to another transmission entry-exit system shall be determined according to the following formula:

$$T_{atiz(c,m,d,dl)} = T_{iz(c,m,d,dl)} \times \left(1 - K_{pārsl}\right) \times S_{(c,m,d,dl)}$$

where:

$T_{at\ iz\ (c,m,d,dl)}$ – the quarterly [EUR/kWh/day/quarter], monthly [EUR/kWh/day/month], daily and within-day [EUR/kWh/day] interruptible capacity product tariff for exit points to another transmission entry-exit system.

10. Calculation of tariffs for interruptible virtual counter flow capacity products

75. The yearly interruptible virtual counter flow capacity product tariff for entry and exit points shall be determined according to the following formula:

$$T_{pvirt(ie,iz)(g)} = T_{(ie,iz)(g)} \times K_{virt}$$

where:

$T_{p\ virt\ (ie,iz)\ (g)}$ – the yearly [EUR/kWh/day/year] interruptible virtual counter flow capacity product tariff at the entry or exit point;

K_{virt} – the multiplier for the short-term interruptible virtual counter flow capacity products.

76. The quarterly, monthly, daily and within-day interruptible virtual counter flow capacity product tariff for entry and exit points shall be determined according to the following formula:

$$T_{pvirt(ie,iz)(c,m,d,dl)} = T_{(ie,iz)(c,m,d,dl)} \times K_{virt}$$

where:

$T_{p\ virt\ (ie,iz)\ (c,m,d,dl)}$ – the quarterly [EUR/kWh/day/quarter], monthly [EUR/kWh/day/month], daily and within-day [EUR/kWh/day] interruptible virtual counter flow capacity product tariff at the entry or exit point.

11. Tariff determination procedure
11.1. Development and submission of the tariff proposal

77. The system operator shall develop the tariff proposal in accordance with this methodology by calculating the allowed revenue, which is necessary to cover the costs of providing the capacity booking service.
78. The system operator shall calculate the tariffs in such a way that the allowed revenue does not exceed the justified costs of the system operator attributed to the capacity booking service.
79. By February 1 of the year of the beginning of the regulatory period, the system operator shall submit to the Regulator for evaluation in written and electronic form (calculations of the tariffs and the constituent costs thereof in Excel format):

79.1. the calculation of the tariffs, the allowed revenue and their corresponding costs for the regulatory period determined in paragraph 79 of this methodology, together with the justification of the afore-mentioned costs, including the explanation of the change in costs compared to the previous regulatory period, and documents supporting the costs in accordance with the regulator's regulations on the justification of the tariff-forming costs, as well as the planned revenue and the corresponding costs for the tariff period;

79.2. information about the inter-transmission system operator compensation forecasted in the regulatory period and the tariff periods included therein and its justification;

79.3. information on the revenue of the previous regulatory period from the capacity booking service and the total actual costs of the transmission system's capacity booking service.

80. The system operator may submit a justified request to the Regulator to be allowed to set tariffs by itself according to this methodology.

11.2. Evaluation of the tariff proposal

81. The Regulator shall approve or reject tariffs by evaluating the justification of the tariff-forming costs.

82. During the evaluation of the tariff proposal, the system operator may submit corrections and additions to the tariff proposal.

83. The system operator may set tariffs for tariff periods within the existing regulatory period, if the Regulator has given permission, in accordance with Article 15(1^1) of the Energy Law. In such a case, the system operator shall determine the tariffs in accordance with this methodology, following the procedure indicated below:

83.1. if the system operator determines new tariffs, then no later than two months before the beginning of the gas year, when the new tariffs are expected to come into force, the system operator shall publish the tariffs in the official publication "Latvijas Vēstnesis". At the same time, the system operator shall submit to the Regulator the tariffs, the justification for the tariffs and information about the actual revenue of the previous tariff period, the forecasted data of the new tariffs, as well as the comparison tables, which indicate the changes in the planned revenue during the tariff period and the corresponding costs, and other documents that justify the need for the new tariffs;

83.2. within 21 days after receiving the tariffs, the Regulator shall evaluate the compliance of the submitted tariffs with this methodology and the economic justification of the submitted tariffs;

83.3. if within 21 days after receiving the tariffs, the Regulator has not adopted a decision on the non-compliance of the submitted tariffs with this methodology or has not rejected the economic justification of the tariffs, then the tariffs shall enter into force on the first day of the relevant gas year;

83.4. if the Regulator adopts a decision within 21 days after receiving the tariffs on the non-compliance of the submitted tariffs with this methodology or rejects the economic justification of the tariffs, then the tariffs shall not enter into force on the first day of the relevant gas year. Within seven days after the adoption of the decision, the Regulator shall send the adopted decision to the system operator and shall publish a notice of the adopted decision, in which the entry into force of the tariffs is revoked, in the official publication "Latvijas Vēstnesis".

84. When approving the tariffs, the Regulator may determine a procedure for applying tariffs in the regulatory and tariff period.

12. Closing provisions

85. The system operator, when developing the tariff proposal, which is planned to enter into force from October 1, 2023, shall observe that:

85.1. the adjustment of the costs of securing natural gas supply, the obligations to cover which were fulfilled in 2021 and 2022, shall be included in the calculation of the

charge for the use of the exit point for supplying gas users in Latvia. The adjustment shall be determined by taking into account the recoverable costs of securing natural gas supply and the costs actually recovered;

85.2. the allowed revenue for the time period from October 1, 2022 to September 30, 2023 shall correspond to the actual economically justified costs of this period, taking into account the actual inflation level in the relevant period and the rate of return on capital for the calculation of the tariff proposal for the natural gas transmission system service for the specified period;

85.3. information according to paragraph 80 of this methodology shall be submitted to the Regulator for evaluation no later than May 1, 2023.

86. The Public Utilities Commission's decision No. 1/10 "Methodology for the calculation of tariffs for the natural gas transmission service" of July 3, 2019 (Latvijas Vēstnesis 2019, no. 136; 2022. no. 168) shall be repealed.

87. The methodology shall enter into force the day after its publication in the official publication “Latvijas Vēstnesis”.

Chair A. Ozola

Appendix 2

INDICATIVE SHORT-TERM FIRM CAPACITY PRODUCT TARIFFS for regulatory period 01.10.2023.–30.09.2025.

2023-2025 draft	Unit	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage facility Tie kr	To other entry-exit system Tiz	To storage facility Tiz kr
Long-term capacity tariff	kWh / day / year	0,1427700	0,0000000	0,1427700	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day / quarter	0,0388317	0,0000000	0,0388317	0,0000000
Quarter 2		0,0391185	0,0000000	0,0391185	0,0000000
Quarter 3		0,0395484	0,0000000	0,0395484	0,0000000
Quarter 4		0,0388317	0,0000000	0,0388317	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	**Daily Tie d**	**Within day Tie dl**	**Monthly Tie m**	**Daily Tie d**	**Within day Tie dl**	**Monthly Tiz m**	**Daily Tiz d**	**Within day Tiz dl**	**Monthly Tiz m**	**Daily Tiz d**	**Within day Tiz dl**
January	Monthly - kWh / day / month Daily, within day - kWh / day	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
February		0,0138403	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0138403	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
March		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
April		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
May		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
June		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
July		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
August		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
September		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
October		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
November		0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0146548	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000
December		0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000	0,0151433	0,0005862	0,0006644	0,0000000	0,0000000	0,0000000

Multipliers

Kc=1,1	**Km=1,25**	**Kd=1,5**	**Kdl=1,7**

Seasonal factor

Sc=1	**Sm=1**	**Sd=1**	**Sdl=1**
Q1,Q4	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**

Appendix 3

INDICATIVE SHORT-TERM INTERRUPTABLE CAPACITY PRODUCT TARIFFS for regulatory period 01.10.2023.–30.09.2025.

2023-2025 draft	Unit	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tie	From storage facility Tie kr	To other entry-exit system Tiz	To storage facility Tiz kr
Long-term capacity tariff	kWh / day / year	0,1356315	0,0000000	0,1356315	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day / quarter	0,0368901	0,0000000	0,0368901	0,0000000
Quarter 2		0,0371626	0,0000000	0,0371626	0,0000000
Quarter 3		0,0375710	0,0000000	0,0375710	0,0000000
Quarter 4		0,0368901	0,0000000	0,0368901	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tie m	Daily Tie d	Within day Tie dl	Monthly Tiz m	Daily Tiz d	Within day Tiz dl	Monthly Tiz m	Daily Tiz d	Within day Tiz dl
January	Monthly - kWh / day / month Daily, within day - kWh / day	0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
February		0,0266036	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0061477	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
March		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
April		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
May		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
June		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
July		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
August		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
September		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
October		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
November		0,0281691	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
December		0,0291080	0,0011268	0,0012770	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000

Kpārsl=0.05

Seasonal factor

Sc=1	Sm=1	Sd=1	Sdl=1
Q1,Q4	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**	**Jan,Feb, Mar,Apr, Nov,Dec**

Appendix 4

INDICATIVE SHORT-TERM INTERRUPTABLE VIRTUAL COUNTER FLOW CAPACITY PRODUCT TARIFFS for regulatory period 01.10.2023.–30.09.2025.

2023-2025 draft	Units	Tariffs for the unit of booked capacity , EUR, without VAT			
		Entry points		Exit points	
		From other entry-exit system Tp virt ie	From storage facility Tp virt ie kr	To other entry-exit system T p virt iz	From storage facility Tp virt iz kr
Long-term virtual capacity tariff	kWh / day / year	0,1356315	0,0000000	0,1356315	0,0000000
Quarterly capacity tariffs					
Quarter 1	kWh / day / quarter	0,0368901	0,0000000	0,0368901	0,0000000
Quarter 2		0,0371626	0,0000000	0,0371626	0,0000000
Quarter 3		0,0375710	0,0000000	0,0375710	0,0000000
Quarter 4		0,0368901	0,0000000	0,0368901	0,0000000

Monthly, daily and within-day capacity tariffs

		Monthly Tp virt ie m	**Daily Tp virt ie d**	**Within day Tp virt ie dl**	**Monthly Tp virt ie kr m**	**Daily Tp virt ie kr d**	**Within day Tp virt ie kr dl**	**Monthly Tp virt iz m**	**Daily Tp virt iz d**	**Within day Tp virt iz dl**	**Monthly Tp virt iz kr m**	**Daily Tp virt iz kr d**	**Within day Tp virt iz kr dl**
January	Monthly - kWh / day / month Daily, within day - kWh / day	0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
February		0,0131483	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0061477	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
March		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
April		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
May		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
June		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
July		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
August		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
September		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
October		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
November		0,0139221	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0065095	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000
December		0,0143861	0,0005569	0,0006311	0,0000000	0,0000000	0,0000000	0,0067265	0,0002604	0,0002951	0,0000000	0,0000000	0,0000000

Interruptable capacity product multiplier for counrter flow service

Kvirt=0.95