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PAKALPOJUMU
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KOMISIJA

THE CONSULTATION DOCUMENT

on the Methodology for Calculation of Natural Gas Storage System Service Tariffs

24 August 2020
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Annex: Draft decision "Methodology for Calculation of Natural Gas Storage System Service Tariffs".

I Summary of the consultation document

The purpose of the consultation document is to inform the public and find out the opinion of stakeholders on the Public Utilities Commission's (hereinafter - the Regulator) proposed decision "Methodology for Calculation of Natural Gas Storage System Service Tariffs" (hereinafter - the proposed Methodology).

In accordance with Article 15(1^1) of the Energy Law, the storage system operator shall provide natural gas storage service for the tariffs stipulated by the Regulator or for tariffs, which have been specified by the relevant service provider in accordance with the tariff calculation method 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 determines the methodology for calculating tariffs, and Article 25(1) determines the obligation of a public service provider 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.

The proposed Methodology has been prepared taking into account the consultation announced on 18 June 2020 on the Regulations Regarding the Use of the Inčukalns Underground Gas Storage Facility (hereinafter - Storage Regulations), which envisage significant changes regarding the use of the Inčukalns Underground Gas Storage Facility, which also affects the calculation of natural gas storage service tariffs, as well as taking into account the need to harmonize the approach to the calculation of tariffs for services provided by the system operators of the energy sector and to promote efficient service provision. Considering that the amount of legal norms to be amended in the Regulator's decision No 1/7 "Methodology for Calculation of Natural Gas Storage Service Tariffs" (hereinafter - Methodology) of 16 March 2017 exceeds half of the amount of valid legal norms of the Methodology, it is appropriate to issue a new version of the Methodology.

Please submit proposals and comments on the proposed Methodology to the Regulator in writing to the e-mail address sprk@sprk.gov.lv **by 7 September 2020.**

The proposed Methodology prepared by the Regulator is attached in the Annex to this document.

II The need to develop the proposed regulatory act

1) Justification

The proposed Methodology has been prepared taking into account the gradual transition to setting tariffs in the energy sector by following the revenue cap approach, which is already applied to the methodologies for calculating tariffs in other electricity and natural gas sectors. The revenue cap approach is characterized by a predictable and stable tariff, streamlined management of energy supply companies and more options for incentive-based regulatory mechanisms. Taking into account the provisions of the current methodologies for calculating tariffs for services provided by energy supply system operators and the fact that part of the costs of the natural gas storage system operator (hereinafter - system operator) is non-controllable, i.e. independent of the system operator's activities (prices of natural gas losses, inflation changes, etc.), the most appropriate incentive-based approach for setting tariffs is the allowed revenue cap method with a possible revision of the allowed revenue. Such an approach will ensure tariff stability within the regulatory period, as one increase in non-controllable costs can be offset by a reduction in other non-controllable costs, thus eliminating the need to revise tariffs. Meanwhile, using the price cap method, tariff values would be revised annually according to the inflation rate, without taking into account possible cost reductions in cost groups. At the same time, the proposed Methodology has been prepared by taking into account the growing interest of natural gas market participants in the possibility to store

natural gas in the Inčukalns underground gas storage facility and the public consultation on Storage Regulations which provides for significant changes in the procedure for the capacity booking of the natural gas storage facility envisaging the use of an auction procedure for capacity booking.

Regulatory period and tariff period

The proposed Methodology introduces new terms - "regulatory period", "tariff period", "regulatory account", "allowed revenue", "planned revenue", as well as clarifies the terms in the Methodology currently in force.

Given that the storage system service is provided by storage capacity booking method, the proposed Methodology contains the term "capacity booking service", which is a natural gas storage system service that provides reservation of a storage capacity product for natural gas storage and natural gas injection into and withdrawal from the storage facility. The proposed Methodology introduces the regulatory period (the period for which the allowed revenue is determined), the duration of which is set from two to five years, while the duration of the tariff period is one year and it is equal to the storage cycle (1 May of the current year - 30 April of the next year). To facilitate the planning of the system operator's costs and the amount of stored natural gas, the proposed Methodology provides for the transition of the tariff period from the calendar year to the storage cycle.

Tariffs for the capacity booking service (hereinafter - tariffs) shall be set for the tariff period, providing for the possibility for the Regulator to adopt a decision on the extension of the tariff period.

The duration of the regulatory period is closely linked to the introduction of regulatory incentives. The system operator's investment in efficiency measures pays off in the long run, so there is no economic justification for introducing efficiency measures if the regulatory period is one or two years. Simultaneously with the tariff proposal, the system operator shall submit a justification for the regulatory period used in the tariff calculation and, if necessary, also for the tariff period.

The proposed Methodology stipulates that the allowed revenue shall be determined for the entire regulatory period and remain unchanged throughout the regulatory period, unless cost differences have arisen which are affected by:

1. the difference between the actual prices of natural gas that is being used to cover grid losses and in technological process and the planned natural gas price included in the tariff calculation;
2. the difference between the actual inflation and the planned inflation included in the tariff calculation;
3. justified unforeseen costs incurred due to changes in external regulatory enactments or prevention of emergency situations.

If there are several tariff periods in the regulatory period, the planned revenue may change in the following cases only:

1. if the actual revenue of the previous tariff period differs from the planned revenue due to changes in the forecast of the volume of the capacity booking service or in connection with the payments of natural gas storage system users for storage capacity booking auctions specified in the Storage Regulations or other revenue from the provision of the capacity booking service;
2. if the above-mentioned cost differences occur which affect the amount of the allowed revenue during the regulatory period.

Differences in actual and planned revenue and costs not recovered in the regulatory period are allocated to the next regulatory period.

Considering the opinion provided by the natural gas market participants on the developed proposed Storage Regulations, the proposed Methodology includes norms aimed at ensuring that the tariff values for the tariff period are known as early as possible. The System operator must submit a tariff proposal for the next regulatory period no later than 1 September of the last year of the actual regulatory period, while information on the correction of the planned revenue for the next tariff period within the actual must be submitted no later than 15 November each year. These due dates have been chosen to ensure that the tariffs for the next tariff period are known no later than 1 February of the relevant calendar year.

Tariff calculation approach

The framework of the Methodology stipulates that the system operator shall calculate tariffs in such a way as to ensure the efficient use of the natural gas storage facility. The allowed revenue of the system operator (the revenue that the system operator is entitled to recover during the regulatory period) shall be determined in the same amount as the technologically and economically justified costs attributable to the regulatory period for the efficient provision of the capacity booking service. To determine the planned revenue to be allocated to each tariff period, the allowed revenue shall be divided by the number of tariff periods within the according regulatory period, respectively, initially the same amount of the allowed revenue shall be allocated to all tariff periods. Amount of planned revenue may change during the regulatory period in the above-mentioned cases.

When setting tariffs for a tariff period, it shall be ensured that the total planned revenue from capacity product reservation is equal to the total planned revenue attributable to the specific tariff period. Based on the planned revenue for the tariff periods, the standard product of storage capacity booking - the bundled capacity product tariff is determined.

The tariff for the bundled capacity product is determined using the following formula:

$$T_{GJP}=\frac{Ie_{pl}-Ie_{2GJP}-Ie_{2GJPy-1}-Ie_{KPP}-Ie_{VPP}-IK_{tp}}{Q_{GJP}},$$

where:

T_{GJP} – tariff for the bundled capacity product [EUR/kWh/storage cycle];

Ie_{pl} – planned revenue [EUR];

Ie_{2GJP} – planned revenue from the two-year bundled capacity product, which is determined as the multiplication of the two-year bundled capacity product tariff with the forecasted technical capacity of the storage facility, which is reserved within the two-year bundled capacity product [EUR];

$Ie_{2GJPy-1}$ – actual revenue from the two-year bundled capacity product in the previous tariff period, which is determined as the multiplication of the two-year bundled capacity product tariff of the previous tariff period with the forecasted technical capacity of the storage facility, which is reserved within the two-year bundled capacity product [EUR];

Ie_{KPP} – planned revenue from the stock transfer product, which is determined as the multiplication of the stock transfer product tariff with the forecasted technical capacity of the storage facility, which is reserved within the stock transfer product [EUR];

Ie_{VPP} – planned revenue from the virtual reverse-flow product, which is determined as the multiplication of the virtual reverse-flow product tariff with the forecasted technical capacity of the storage facility, which is reserved within the reverse-flow product [EUR];

Q_{GJP} – the forecasted capacity utilisation of the storage facility, which is reserved within the bundled capacity product [kWh].

Given that the planned revenue from the two-year bundled capacity product are determined by taking into account the tariff for the two-year bundled capacity product, which in turn is calculated on the basis of the bundled capacity product tariff, the formula can be expressed by substituting the planned revenue from the two-year bundled capacity product. Considering that the Storage Regulations stipulate that storage capacity of 2 TWh is available for the reservation of the two-year bundled capacity product, the formula for calculating the tariff for the bundled capacity product may be expressed as follows:

$$T_{GJP} = \frac{Ie_{pl} - Ie_{2GJP\ y-1} - Ie_{KPP} - Ie_{VPP} - IK_{tp}}{Q_{GJP}} \times \frac{1}{(1+\frac{2\times K_{2GJP}}{Q_{GJP}})},$$

where:

K_{2GJP} – coefficient set by the system operator for the regulatory period two-year bundled capacity product, which is determined by taking into account the forecast of the next winter and summer natural gas prices and other factors influencing the long-term value of the product.

At the same time, taking into account that the dynamics of the storage demand is significantly influenced by the dynamics of the natural gas market, as well as in order to ensure sustainable and efficient technical operation of the storage facility it is necessary to provide balanced storage operation, additional capacity booking product – the two-year bundled capacity product and the interruptible capacity product tariffs were determined by applying a coefficient.

- The system operator shall determine *the coefficient of the tariff for the two-year bundled capacity product* by taking into account the forecast of the next winter and summer natural gas price and other factors influencing the value of the long-term product. The proposed Methodology stipulates that the coefficient shall be equal or greater than 1.
- The system operator shall determine *the coefficient of the tariff for the interruptible capacity product* in such a way as to facilitate the demand for the capacity booking service and ensure the coverage of the system operator's costs. The coefficient shall be determined by taking into account the cost structure of the system operator, as well as the risks associated with insufficient filling of the storage facility with natural gas. The proposed Methodology stipulates that the coefficient shall range between 0.4 and 1.

Supplementing the range of the capacity booking products, a standardized approach is also applied to stocks that have not been removed from the storage facility after the expiry of the capacity product. In accordance with the Storage Regulations, the stock transfer product has been created. The purpose of this product is to motivate the compliance with the expiry dates for the use of capacity products, thus ensuring efficient and sustainable operation of the storage facility. Accordingly, the tariff shall be set in such a way as to ensure that, in a specific tariff period, it would be more cost-effective for natural gas storage system users to plan volume of the gas stored precisely or to purchase the two-year bundled capacity product. To ensure this, the two-year bundled capacity product of the previous season together with the applicable natural gas system user's fee for the reservation of the product and a coefficient applied thereto shall be used as the tariff's base value.

- The system operator shall determine *the coefficient for the stock transfer product* by taking into account the need to promote the efficient use of the storage facility. The proposed Methodology stipulates that the coefficient shall be greater than 1.

The coefficients used in the tariff calculation shall be determined for the regulatory period. By providing a justification, the system operator may set different tariff calculation coefficients, providing the justification not later than 18 months before the beginning of the relevant tariff period. This ensures that when reserving the storage capacity within the tariff period, natural gas system users are aware of the applicable coefficients for the next tariff period.

Regulatory account and revenue correction

The proposed Methodology provides for the introduction of the regulatory account, the purpose of which is to ensure the opportunity for the system operator to recover (return) the difference between the planned and actually generated revenue, as well as non-controllable costs.

The regulatory account records the differences between the revenue and costs. The balance of the regulatory account is reduced when the balance of the regulatory account is allocated to the revenue correction (relating to the allowed revenue) or to the correction of the planned revenue (relating to the planned revenue).

The revenue correction shall be determined before the submission of the tariff proposal and shall be applied to an equal extent to the tariff periods within one regulatory period. When determining the revenue correction, the following shall be considered:

- differences between the allowed revenue and actual revenue not recovered (outstanding) by the end of the regulatory period;
- differences between the planned and actual non-controllable costs not recovered (outstanding) by the end of the regulatory period;
- non-recovered justified unforeseen costs incurred due to changes in external regulatory enactments or prevention of emergency situations by the end of the regulatory period;
- reductions in controllable costs during the regulatory period (special, motivating conditions apply to cost reductions related to the improvement of the operator's operational efficiency).

The revenue correction shall be set so that the balance of the regulatory account at the beginning of the regulatory period is zero. An exception is a situation when the accumulation of the regulatory account surpasses 50%- in such cases it is provided that the Regulator may decide on the use of the accumulation of the regulatory account for other purposes related to the provision of the capacity booking service.

The correction of the planned revenue may be determined for each tariff period within the regulatory period. Within the regulatory period, the regulatory account shall record:

- the difference between planned and actual revenue, including payments of the natural gas system users specified in Storage Regulations for storage capacity booking auctions or other activities related to the provision of capacity booking services by the system operator;
- differences between the planned and actual non-controllable costs;
- justified unforeseen costs incurred due to changes in external regulatory enactments or prevention of emergency situations.

The fluctuations of costs that cannot be influenced by the system operator are considered the non-controllable costs of the system operator. The proposed Methodology contains two types of non-controllable cost fluctuations: the difference between the planned costs of natural gas losses and the actual costs of natural gas losses due to the difference between the actual and

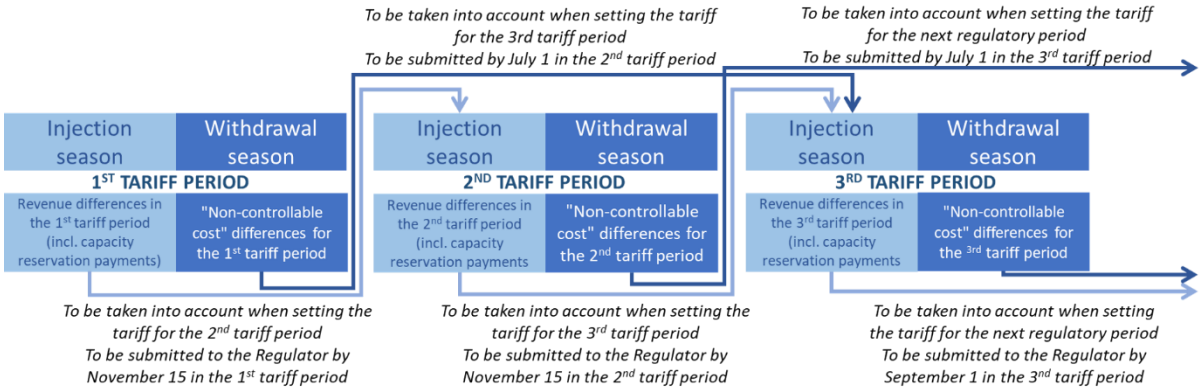
planned natural gas prices, and the difference between the planned cost increase caused by inflation in the tariff period and the actual cost increase caused by inflation in the tariff period. These cost fluctuations are considered uncontrollable for the system operator, as the inflation rate may be affected by changes in the economic situation in Latvia and the world, while the price of natural gas may be affected by outdoor temperature, demand for liquefied natural gas in the market, and various global economic and political events.

The correction of the planned revenue shall be determined by balancing the need to reduce excessive tariff fluctuations over the years of high and low demand for the capacity booking service and the need to limit the excessive accumulation of positive or negative balance of the regulatory account.

Taking into account the dynamics of the natural gas market and the opinions provided by the natural gas market participants, the proposed Methodology provides for a review cycle of the regulatory account, which ensures that the balances of the regulatory account are allocated to the tariff values as soon as possible. In the regulatory account, the differences between the revenue and costs shall be recorded within the following deadlines:

- no later than by 15 November in the current tariff period - the difference between the planned and actual revenue, including the payment of the natural gas storage system users for storage capacity booking auctions specified in the Storage Regulations or other activities related to the provision of regulated services by the system operator;
- two months after the end of the tariff period - all cost differences from the tariff period attributable to the correction of the planned revenue;
- together with the examination of a new tariff proposal - all revenue and cost differences attributable to the revenue correction for the relevant regulatory period.

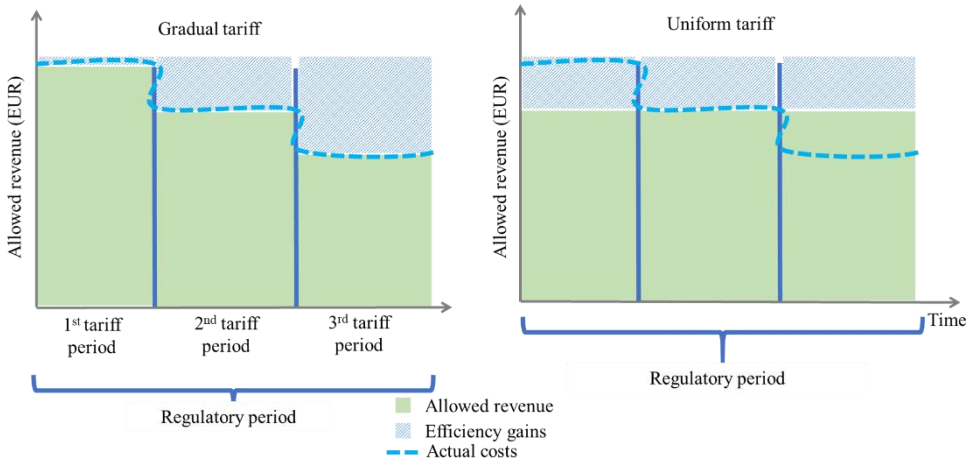
The figure below schematically shows the accounting and allocation of the regulatory account balance to the planned revenue correction, assuming a regulatory period of three years.



Operational efficiency ratio

Taking into account the recommendations of the Organization for Economic Co-operation and Development and the State Audit Office, the proposed Methodology incorporates elements of incentive regulation to promote more efficient operation of the system operator. The Member States of the European Union do not use a common approach for determining the efficiency ratio. In many Member States, international comparative studies as well as sector productivity, inflation, wage development and other indicators are used to determine the efficiency ratio. The proposed Methodology stipulates that the Regulator may determine the efficiency ratio for the regulatory period within the framework of the evaluation of a tariff proposal, taking into account comparable efficiency indicators of the European Union and Latvian energy supply system operators and other reasonable, objective indicators. When determining the efficiency ratio, the Regulator shall take into account the opinion provided by the system operator

regarding the amount of the efficiency ratio and the possible impact on the secure operation of the natural gas storage system. In the opinion of the Regulator, the efficiency ratio should be determined by uniform inclusion of benefits in tariffs throughout the regulatory period, but there is also an alternative - to include benefits in tariffs gradually throughout the regulatory period according to tariff periods (see the figure below).



The proposed Methodology contains a provision that if, in case of cost savings in the previous regulatory period, the system operator justifies the difference in actual costs by cost groups and reduces the planned costs of capacity booking services attributable to natural gas storage system users in the next regulatory period in the amount of cost savings. Meanwhile, if the cost savings result from the improvement of operational efficiency, the proportion of the revenue correction shall equal 50% of the actual cost savings.

2) Institutions involved in the development of the proposed

The proposed Methodology has been developed in consultation with the system operator.

3) Public target groups, which are or could be affected by the regulatory framework

The regulatory framework included in the proposed Methodology will affect the users of the Inčukalns underground gas storage facility, natural gas end-users which purchase natural gas from traders using the capacity booking service, as well as the combined natural gas transmission and storage system operator.

Chair R. Irklis

Attachment to the consultation document
on the Methodology for Calculation of
Natural Gas Storage System Service Tariffs

Methodology for Calculation of Natural Gas Storage System Service Tariffs

Issued pursuant to 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 Natural Gas Storage System Service Tariffs (hereinafter - Methodology) stipulates the procedures for calculating and determining tariffs of the natural gas storage system service (natural gas injection, storage and withdrawal).
2. The following terms are used in the Methodology:
   2.1. **allowed revenue –** revenue of the natural gas storage system operator (hereinafter – the system operator) from the natural gas storage system service, which covers the technologically and economically justified costs related to the storage system service and which the system operator is entitled to receive in the specific regulatory period;
   2.2. **natural gas consumption for technological needs** – natural gas used to ensure the technological processes of the storage facility;
   2.3. **natural gas losses** – the difference between the volumes of natural gas injected into the storage facility and withdrawn from the storage facility during the storage cycle, excluding the natural gas consumption for technological needs;
   2.4. **costs** – technologically and economically justified costs of the system operator that are necessary for the efficient provision of the storage system service;
   2.5. **capacity booking service** – a natural gas storage system service which ensures the reservation of the storage capacity product for the storage of natural gas and the injection and withdrawal of natural gas into/from the storage facility;
   2.6. **forecasted capacity utilisation of the storage facility** – the average storage capacity used in the three previous storage cycles. If the technical capacity of the storage facility was fully used in any of the previous three storage cycles, when determining the forecasted capacity utilisation of the storage facility for this storage cycle, the technical capacity forecast for the storage cycle, in which it is planned to start applying rules, shall be used;
   2.7. **planned revenue** – the proportion of the allowed revenue attributed to the tariff period;
   2.8. **regulatory period** – a period of time for which the allowed revenue is determined;
   2.9. **Regulatory Asset Base (RAB)** – the assets of the system operator or a part thereof that are necessary for the efficient provision of the storage system service;

2.10. **tariff period** – a period of time for which tariffs are set.

3. The duration of the regulatory period shall be from two and five years. The duration of the tariff period shall be one year and equal to the storage cycle. 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) may decide on the extension of the regulatory period and the tariff period and on the tariff values applicable in the relevant tariff period. Regulatory period and tariff period starts at the May 1 of the according year.
4. If there are several tariff periods in the regulatory period, the allowed revenue shall not change during the regulatory period, unless the difference in costs specified in sub-paragraphs 33.2, 33.3 or 33.4 of this Methodology is recorded in the regulatory account.
5. If there are several tariff periods in the regulatory period, the planned revenue in the tariff period shall change in accordance with the correction of the planned revenue specified in paragraph 37 of this Methodology. The system operator shall report all costs in thousands of euros [thousand EUR] to one decimal place and natural gas volume in kilowatt hours [kWh] rounded to the nearest integer.

2. Determination of allowed revenue

6. The allowed revenue shall be equal to the costs attributable to the capacity booking service provided by the system operator:

$$AI_{USO}=I_{USO},$$

where:

AI_{USO} – allowed revenue [EUR];

I_{USO} – total costs of the capacity booking service [EUR].

7. The allowed revenue shall cover the total costs of the capacity booking service to be included in the tariff calculation, which shall be determined using the following formula:

$$I_{USO} = I_{kap} + I_{nod} + I_{ekspl} - I_{USO\ ef} + I_{kor},$$

where:

I_{kap} – capital costs of the storage facility [EUR];
I_{nod} – cost of taxes applicable to the storage facility [EUR];
I_{ekspl} – operation costs of the storage facility [EUR];
$I_{USO\ ef}$ – the amount 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 efficiency of economic activity [EUR];
I_{kor} – revenue correction by taking into account the balance of the regulatory account referred to in sub-paragraph 2.3 of this Methodology at the beginning of the relevant regulatory period [EUR].

8. The Regulator, taking into account comparable efficiency indicators of the European Union and Latvian energy supply system operators and other reasonable, objective indicators, may determine a cost-effectiveness ratio for the regulatory period. When determining the cost-effectiveness ratio, the Regulator shall take into account the reasoned opinion of the system operator regarding the amount of the cost-effectiveness ratio and its impact on the safe operation of the storage facility. The cost-effectiveness ratio shall be applied to a part of the

costs of the capacity booking service in order to determine the proportion of the costs which the system operator must achieve by the beginning of the next regulatory period and which will be applied when setting tariffs in the next regulatory period. The proportion of the cost of the capacity booking service that the system operator must reduce by improving the efficiency of the use of fixed assets and other resources, as well as the efficiency of economic activity, shall be determined using the following formula:

$$I_{USO\ ef} = (I_{USO} - I_{kor} - I_{nod}) \times K_{ef},$$

where:

K_{ef} – cost-effectiveness ratio.

9. If there are multiple tariff periods withing the regulatory period is longer than one year, the same amount of capacity booking service costs shall be allocated to each tariff period, which the system operator shall reduce by improving the efficiency of use of fixed assets and other resources, as well as the efficiency of economic activity. Upon a reasoned request of the system operator, the Regulator may allow the application of another principle for allocating the amount of capacity booking service costs to each tariff period within the regulatory period.
10. The system operator shall use a cost allocation model, the basic principles and implementation of which shall be coordinated with the Regulator.
11. Tax costs consist of real estate tax and shall be calculated only for the assets included in the RAB in accordance with regulatory enactments.

2.1. Capital costs

12. Capital costs consist of the return on capital and depreciation (amortisation):

$$I_{kap} = P_{KA} + I_{nol},$$

where:

P_{KA} – return on capital [EUR];

I_{nol} – depreciation of fixed assets included in the RAB or a part thereof and amortisation of intangible investments included in the RAB or a part thereof [EUR].

13. The system operator shall keep records of the capital costs which give an accurate and unambiguous picture of the capital costs for the storage facility. The system operator shall submit an explanation of the applied capital cost allocation model simultaneously with the tariff proposal.

2.1.1. Regulatory asset base

14. The calculation of the RAB value of the storage facility shall include the residual or book value of the fixed assets and intangible assets owned by the system operator at the end of the year indicated in the financial report of the previous year, excluding financial investments, receivables, securities and equity participations, cash, inventories, the costs of creation of fixed assets and unfinished construction projects, as well as the part of the value of fixed assets funded from the financial assistance or financial aid of the state, local government, foreign country, the European Union, other international organization and institution. The RAB shall correspond to the value of the capital raised for the provision of the long-term capacity booking service (equity and long-term loans). To ensure appropriate incentives granted in accordance with Article 13 of the 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 costs of creation of fixed assets and unfinished construction projects incurred in the projects of common interest may be included in the RAB, if during the development of the project of common interest, its promoter has substantiated the need for such an incentive and included additional benefits of that incentive in the project's cost-benefit analysis and the Regulator has decided to grant such an incentive.

15. If assets or a part thereof are used for the provision of another service not related to the capacity booking service or due to other reasons they are not used for efficient provision of the capacity booking service, the value of the assets or the part thereof shall not be included in the RAB value specified in paragraph 14 of this Methodology.
16. In the course of the evaluation of the tariff proposal, the Regulator, by substantiating it, may determine the value of the assets included in the RAB or a part thereof that differs from the value of the RAB specified in paragraph 14 of this Methodology. To determine whether the assets included in the RAB are necessary for the efficient provision of the capacity booking service, the Regulator, when evaluating the tariff proposal, has the right to instruct the system operator to assess the technical condition, service life and efficiency of use of the assets included in the RAB. The Regulator shall approve the assessment task and accept the execution of this task.
17. When evaluating the tariff proposal, the Regulator may carry out a correction of capital costs if the Regulator establishes that the system operator has included in the calculations of the RAB value an asset or a part thereof that is not used for the efficient provision of the capacity booking service.

2.1.2. Return on capital

18. The RAB and the rate of return on capital shall be used to determine the capital costs. The return on capital shall be determined by using the following formula:

$$P_{KA} = \text{RAB} \times \text{wacc},$$

where:

RAB – the RAB value determined in accordance with sub-paragraph 2.1.1 of this Methodology [EUR];

wacc – the weighted average cost of capital [%].

19. The rate of return on capital is determined by the Regulator in accordance with the Methodology for the Calculation of the Rate of Return on Capital.

2.1.3. Depreciation of fixed assets and amortisation of intangible assets included in the RAB

20. Depreciation of fixed assets or a part thereof included in the RAB and amortisation of intangible investments or a part thereof included in the RAB shall be determined by using the following formula:

$$I_{nol} = I_{nol\,pam} + I_{nol\,nem},$$

where:

$I_{nol\,pam}$ – depreciation of fixed assets included in the RAB [EUR];

$I_{nol\,nem}$ – amortisation of creation costs of intangible investments included in the RAB [EUR].

21. Depreciation of fixed assets included in the RAB shall be calculated in accordance with international accounting standards and the accounting policy adopted by the system operator.
22. Amortisation of the intangible assets included in the RAB shall be calculated for the research costs and the development costs of the system operator, the costs arising from concessions, patents, licences, trade-marks and other intangible investments (except for the goodwill of the system operator), taking into account the international accounting standards and the accounting policy adopted by the system operator.

2.2. Operating costs

23. The operating costs of the storage facility shall be determined using the following formula:

$$I_{ekspl} = I_{tehn\,proc} + I_{pers} + I_{rem} + I_{saimn},$$

where:

$I_{tehn\,proc}$ – the costs caused by losses of natural gas and the costs of ensuring the technological processes [EUR];

I_{pers} – staff and social costs [EUR];

I_{rem} – the costs of current renovations that are necessary for the maintenance of property and have been carried out [EUR];

I_{saimn} – other costs of economic activity [EUR].

24. When determining the operating costs of the storage facility, the system operator may take into account the planned inflation for the years included in the relevant regulatory period. When submitting the tariff proposal, the system operator shall submit a justification for the planned inflation used in the calculation of operating costs.
25. The costs of ensuring the technological process shall not include the costs of natural gas used for providing the operation of compressors.
26. The costs of natural gas losses and provision of the technological process shall be determined using the following formula:

$$I_{tehn\,proc} = (G_{zud} + G_{tehn}) \times C_{zud},$$

where:

G_{zud} – planned natural gas losses [kWh];

G_{tehn} – planned natural gas consumption for technological needs [kWh];

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

27. Staff and social costs shall be calculated in accordance with the Labour Law and the normative acts regulating the field of social insurance.
28. The costs of the current renovations that are necessary for property maintenance and have been carried out and the costs of works, which are necessary for the maintenance in working order and preservation of the natural gas storage system assets and the fixed assets of administration (buildings, constructions, equipment, etc.), both included in the balance sheet and rented, and which are performed by other merchants, shall be written off and recorded in the accounting period during which they arose. This item includes the costs of financing the maintenance of the stocks in accordance with the planned stock life cycle, applying the effective borrowing rate of the merchant. The costs of financing the maintenance of stocks are assessed by taking into account the amount of stocks required for the provision of a continuous

and safety-compliant capacity booking service. If the effective borrowing rate applied to evaluate the costs of financing the stocks exceeds the average variable interest rate (for new transactions) of short-term credits (*euro*) issued to non-financial corporations published by the Bank of Latvia for the last six months according to the amounts of stocks, the costs of financing maintenance of the stocks shall be evaluated by applying the average variable interest rate (for new transactions) of short-term credits (*euro*) issued to non-financial corporations published by the Bank of Latvia for the last six months according to the amounts of stocks. The costs of financing stocks maintained for the needs of capitalised repairs and establishment of new fixed assets shall not be recorded in this item.

29. Other costs of economic activity shall be the costs related to the economic activity of the system operator, which are necessary to ensure the provision of the capacity booking service and are not recorded under other cost items.

2.3. Regulatory account and revenue correction

30. The system operator shall create a regulatory account in which, according to paragraphs 31, 33 and 35 of this Methodology, the differences between the planned and actual (forecasted) revenue and costs shall be recorded.
31. Two weeks after the end of the injection season of the storage facility, the system operator shall record in the regulatory account the following information on the last day of the injection season of the storage facility:
    31.1. the difference between the planned revenue and actual revenue in the tariff period. The actual revenue in the tariff period shall be determined by taking into account the tariffs for storage capacity products determined in accordance with this Methodology and the actual reserved storage capacity within the relevant capacity product in the tariff period;
    31.2. the total calculated revenue in the tariff period from the payments of natural gas storage system users (hereinafter - user) in connection with the storage capacity booking auction procedure specified in the Regulations Regarding the Use of the Inčukalns Underground Gas Storage, which are determined by taking into account the reserved storage capacity within the relevant capacity product and the fee applicable thereto;
    31.3. other revenue from the provision of the capacity booking service.
32. No later than 15 November of each year, the system operator shall submit to the Regulator information regarding the balance of the regulatory account determined in accordance with paragraph 31 of this Methodology.
33. Within two months after the end of the tariff period or upon submission of a new tariff proposal, the system operator shall record in the regulatory account the following information on the last day of the tariff period:
    33.1. the difference between the planned revenue and the actual revenue in the tariff period;
    33.2. the difference between the planned costs of natural gas losses and the actual costs of natural gas losses. The cost difference shall be calculated by taking into account the actual natural gas price in the tariff period, if there are no changes in the planned amount of natural gas losses in the tariff period;
    33.3. the difference between the planned increase in costs caused by inflation in the tariff period and the actual increase in costs caused by inflation in the tariff period, which shall be determined using the following formula:

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

where:

IIP_{kg} – the difference between the planned increase in costs caused by inflation in the tariff period and the actual increase in costs caused by inflation in the tariff period [EUR];

$I_{pers\ t}$ – staff and social costs included in the tariff calculation, which are attributable to the specific tariff period [EUR];

$I_{rem\ t}$ – costs of current operational repairs necessary for the maintenance of the property included in the tariff calculation, which are attributable to the specific tariff period [EUR];

$I_{saimn\ t}$ – other costs of economic activity included in the tariff calculation, which are attributable to the specific tariff period [EUR];

$I_{ne\ t}$ – operating costs included in the tariff calculation, which are attributable to the specific tariff period and for which changes in costs caused by inflation are not planned in the regulatory period [EUR];

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

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

33.4. substantiated actual unforeseen costs incurred due to changes in the external regulatory enactments of the previous tariff period or prevention of emergency situations insofar as they cannot be recovered otherwise.

34. Not later than 1 July of each year, the system operator shall submit to the Regulator information regarding the balance of the regulatory account, which has been determined in accordance with paragraph 33 of this Methodology.

35. The revenue correction specified in paragraph 7 of this Methodology for the next regulatory period shall be determined as follows:

35.1. if at the end of the regulatory period, the balance of the regulatory account is negative, the part of the revenue correction shall be equal to the balance of the regulatory account and increase the costs specified in paragraph 7 of this Methodology for the next regulatory period;

35.2. if at the end of the regulatory period, the balance of the regulatory account is positive, the part of the revenue correction shall be equal to the balance of the regulatory account and reduce the costs specified in paragraph 7 of this Methodology for the next regulatory period;

35.3. if the actual (forecasted) revenue of the regulatory period differs from the allowed revenue or the actual costs referred to in paragraph 33 of this Methodology differ from the costs approved in the tariff calculation, the differences not attributed to the planned revenue correction in the relevant regulatory period shall be credited to the regulatory account with a corresponding increase or reduction in the revenue correction specified in paragraph 7 of this Methodology for the next regulatory period;

35.4. if the actual (forecasted) capacity booking service costs of the regulatory period, except for the cost differences referred to in sub-paragraph 35.3 of this Methodology, by cost groups are lower than the costs by cost groups approved in the tariff calculation (hereinafter - cost savings), the system operator shall justify the actual cost difference by cost groups, crediting the cost savings to the regulatory account. If the cost savings result from improved operational efficiency, the part of the revenue correction attributed

to the next regulatory period shall be equal to 50% of the actual cost savings (the difference between the cost savings and the cost increase resulting from the relevant efficiency improvements specified in sub-paragraph 35.5 of this Methodology) and it shall be credited to the regulatory account and accordingly reducing the costs specified in paragraph 7 of this Methodology for the next regulatory period;

35.5. if the actual (forecasted) capacity booking service costs of the regulatory period, except for the cost differences specified in sub-paragraph 35.3 of this Methodology, by cost groups are higher than the costs by cost groups approved in the tariff calculation (hereinafter - cost increase), the system operator shall not credit the relevant costs to the regulatory account, unless the cost increase by cost groups is due to the improvement of operational efficiency. If the cost increase by cost groups is a result of improvement of operational efficiency, the system operator shall submit to the Regulator a justification for the cost increase by cost groups, and the full cost increase shall be credited to the regulatory account with a corresponding increase in the costs specified in paragraph 7 of this Methodology for the next regulatory period;

35.6. if the unforeseen costs incurred during the regulatory period due to changes in external regulatory enactments or prevention of emergency situations are justified, and insofar as they have not been recovered or cannot be recovered otherwise, the unforeseen costs shall be credited to the regulatory account in the actual amount with a corresponding increase in the costs specified in paragraph 7 of this Methodology for the next regulatory period.

36. In accordance with the procedures specified in paragraph 49 of this Methodology, the system operator shall provide information regarding the balance of the regulatory account determined according to sub-paragraphs 35.3, 35.4, 35.5 and 35.6 of this Methodology.

37. If there are several tariff periods in the regulatory period, the correction of the planned revenue for the next tariff period in the regulatory period shall be determined as follows:

37.1. if the balance of the regulatory account submitted in accordance with paragraph 32 of this Methodology is negative and on 15 November of the current tariff period it is larger than 1% of the planned revenue of the current tariff period and does not exceed 10% thereof, the part of the correction of the planned revenue shall be equal to the balance of the regulatory account and it shall increase the costs of the capacity booking service for the next tariff period;

37.2. if the balance of the regulatory account submitted in accordance with paragraph 32 of this Methodology is negative and it is larger than 10% of the planned revenue on 15 November of the current tariff period, the part of the balance of the regulatory account equal to 10% of the planned revenue shall be allocated to the correction of the planned revenue to which half of the remaining balance of the regulatory account shall be added and it shall increase the costs of the capacity booking service for the next tariff period;

37.3. if the balance of the regulatory account submitted in accordance with paragraph 32 of this Methodology is positive and on 15 November of the current tariff period it is larger than 1% of the allowed revenue of the tariff period and does not exceed 10% thereof,

the part of the correction of the planned revenue shall be equal to the balance of the regulatory account and it shall reduce the costs of the capacity booking service for the next tariff period;

37.4. if the balance of the regulatory account submitted in accordance with paragraph 32 of this Methodology is positive and it is larger than 10% of the planned revenue on 15 November of the current tariff period, the part of the balance of the regulatory account equal to 10% of the planned revenue shall be applied to the planned revenue adjustment to which half of the remaining balance of the regulatory account shall be added and it shall reduce the costs of the capacity booking service for the next tariff period.

38. If the balance of the regulatory account at the beginning of the tariff period exceeds 50% of the planned revenue, the Regulator shall decide on the use of the balance of the regulatory account. The balance of the regulatory account may be allocated to the correction of the planned revenue, the revenue correction of the next regulatory period or investments related to the development of the capacity booking service.

3. Tariff calculation

39. The planned revenue is determined using the following formula:

$$Ie_{pl} = \frac{AI_{USO}}{TP_{reg}},$$

where:

Ie_{pl} – planned revenue [EUR];

TP_{reg} – number of tariff periods in the regulatory period [number].

40. The tariff for the bundled capacity product shall be determined using the following formula:

$$T_{GJP} = \frac{Ie_{pl} - Ie_{2GJP} - Ie_{2GJPy-1} - Ie_{KPP} - Ie_{VPP} - IK_{tp}}{Q_{GJP}},$$

where:

T_{GJP} – the bundled capacity product tariff [EUR/kWh/storage cycle];

Ie_{2GJP} – planned revenue from the two-year bundled capacity product, which is determined as the multiplication of the two-year bundled capacity product tariff with forecasted capacity utilisation of the storage facility reserved within the two-year bundled capacity product [EUR];

$Ie_{2GJPy-1}$ – actual revenue from the two-year bundled capacity product in the previous tariff period, which is determined as the multiplication of the two-year bundled capacity product tariff of the previous tariff period and the forecasted technical capacity of the storage facility reserved within the two-year bundled capacity product [EUR];

Ie_{KPP} – planned revenue from the stock transfer product, which is determined as the multiplication of the stock transfer product tariff with the forecasted capacity utilisation of the storage facility reserved within the stock transfer product [EUR];

Ie_{VPP} – planned revenue from the virtual reverse-flow product, which is determined as the multiplication of the virtual reverse-flow product tariff with the forecasted technical capacity of the storage facility, which is reserved within the reverse-flow product [EUR];

Q_{GJP} – the forecasted capacity utilisation of the storage facility reserved within the bundled capacity product [kWh];

IK_{tp} – revenue correction attributable to the tariff period [EUR].

41. The tariff for the two-year bundled capacity product shall be determined using the following formula:

$$T_{2GJP}=T_{GJP} \times K_{2GJP},$$

where:

T_{2GJP} – the two-year bundled capacity product tariff [EUR/kWh/storage cycle];

K_{2GJP} – a coefficient set by the system operator for the regulatory period fortwo-year bundled capacity product, which is determined by taking into account the forecast of the next winter and summer natural gas price and other factors affecting the long-term value of the product. $K_{2GJP} \geq 1$.

42. The tariff for the interruptible capacity product shall be determined using the following formula:

$$T_{AJP}=T_{GJP} \times K_{AJP},$$

where:

T_{AJP} – the interruptible capacity product tariff [EUR/kWh/storage cycle];

K_{AJP} – the coefficient set by the system operator for the regulatory period for interruptible capacity product, which is determined to stimulate the demand for the capacity booking service, taking into account the cost structure of the system operator, as well as the risks related to insufficient filling of the storage facility with natural gas. K_{AJP} shall range from 0.4 to 1.

43. The tariff for the stock transfer product shall be determined using the following formula:

$$T_{KPP}=\frac{Ie_{2GJPP\ y-1p}}{2} \times K_{KPP},$$

where:

T_{KPP} – the stock transfer product tariff [EUR/kWh/storage cycle];

$Ie_{2GJPP\ y-1p}$ – actual revenue from the two-year bundled capacity product in the previous tariff period, which is determined as the multiplication of the two-year bundled capacity product tariff of the previous tariff period with the forecasted capacity utilisation of the storage facility reserved within the two-year bundled capacity product, adding user payments in connection with the auction procedure for the reservation of the storage capacity of the two-year bundled capacity product referred to in the Regulations Regarding the Use of the Inčukalns Underground Gas Storage in the previous tariff period. [EUR/kWh/storage cycle];

K_{KPP} – the coefficient set by the system operator for the regulatory period for stock transfer product, which is determined by taking into account the need to promote the efficient use of the storage facility. $K_{KPP} > 1$.

44. The tariff for the virtual reverse-flow product shall be determined using the following formula:

$$T_{VPP}=\frac{T_{GJP\ y-1}}{2},$$

where:

T_{VPP} – the virtual reverse-flow product tariff [EUR/kWh/storage cycle];

$T_{GJP\ y-1}$ – the tariff for the bundled capacity product of the previous tariff period [EUR/kWh/storage cycle].

45. If the virtual reverse-flow product tariff calculated in accordance with the formula specified in paragraph 44 of this Methodology is higher than the interruptible capacity product tariff for the specific storage cycle, the virtual reverse-flow product tariff shall be determined using the following formula:

$$T_{VPP} = T_{AJP}$$

46. The planned revenue shall be calculated so as to ensure the following relationship:

$$Ie_{pl} - IK_{tp} = Ie_{GJP} + Ie_{AJP} + Ie_{2GJP} + Ie_{2GJPy-1} + Ie_{KPP} + Ie_{VPP},$$

where:

Ie_{GJP} – the planned revenue from the bundled capacity product, which is determined as the multiplication of the bundled capacity product tariff with the forecasted capacity utilisation of the storage facility reserved within the bundled capacity product [EUR];

Ie_{AJP} – the planned revenue from the interruptible capacity product, which is determined as the multiplication of the interruptible capacity product tariff with the forecasted capacity utilisation of the storage facility reserved within the interruptible capacity product [EUR].

4. Tariff setting procedure

4.1. Development and submission of the tariff proposal

47. The system operator shall develop the tariff proposal in accordance with this Methodology, determining the revenue that is necessary to cover the costs of the provision of the capacity booking service.
48. The system operator shall calculate the tariffs so that the allowed revenue from the capacity booking service do not exceed the justified costs of the system operator that have been allocated to the capacity booking service. If necessary, the system operator shall include in the calculation of tariffs information regarding the procedure for the application of the calculated tariffs.
49. By 1 September of the last year of the regulatory period, the system operator shall submit in writing and in electronic form (calculations of tariffs and the costs thereof in Excel format) to the Regulator for evaluation:
    49.1. the tariff proposal and the corresponding costs for the next regulatory period, starting from the day when it is planned to start applying the calculated tariffs. Together with the tariff proposal, the system operator shall submit the justification of the costs forming the tariffs referred to in the proposed calculation of the tariffs and the documents substantiating the above-mentioned costs in accordance with the Regulator's regulations regarding the justification of the costs forming the tariffs;
    49.2. the forecasted capacity utilisation of the storage facility, which is allocated to each of the capacity products, and the justification thereof;

49.3. information regarding the balance of the regulatory account in accordance with paragraph 35 of this Methodology;

49.4. justification for the coefficient of the two-year bundled capacity product specified in paragraph 41 of this Methodology, the interruptible capacity product coefficient specified in paragraph 42 of this Methodology, the stock transfer product coefficient specified in paragraph 43 of this Methodology for the next regulatory period.

50. The system operator, by substantiating it, may submit the coefficients referred to in sub-paragraph 49.4 of this Methodology to the Regulator for evaluation and coordination during the regulatory period, but not later than 18 months before the beginning of the tariff period in which it is planned to apply the updated coefficients.

51. The system operator shall submit the tariff calculation for the next tariff period of the regulatory period until 15 November of the current tariff period to the Regulator for evaluation in writing and in electronic form (calculations of tariffs and costs thereof in Excel format).

52. The system operator may submit a reasoned request to the Regulator to allow itself to set tariffs in accordance with this Methodology.

53. Simultaneously with the tariff calculation, the system operator shall submit to the Regulator the justification of costs and information regarding the planned revenue by tariff types. If the forecasted capacity utilisation of the storage facility included in the tariff calculation differs from the forecasted capacity utilisation of the storage facility referred to in sub-paragraph 2.6 of this Methodology, the system operator shall simultaneously with the tariff calculation submit to the Regulator a justification for changes in the forecasted capacity utilisation of the storage facility.

4.2. Evaluation of the tariff proposal

54. The Regulator shall evaluate the tariff proposal within the deadlines and procedures specified in the Law On Regulators of Public Utilities.

55. When assessing the justification of the costs of the tariff proposal, the Regulator shall approve or reject the tariffs, or instruct the system operator to recalculate the tariffs, or amend the tariff proposal if the system operator does not provide the Regulator with additional information on the justification of the costs constituting the tariffs or if any of the costs constituting the tariffs is economically unreasonable and the Regulator may verify it in another legal way during the evaluation of the tariff proposal.

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

57. If the Regulator has granted a permit in accordance with Article 15(1^1) of the Energy Law, the system operator shall set the tariffs itself in accordance with this Methodology, complying with the following procedures:

57.1. if the system operator adopts a decision on new tariffs during the regulatory period, then not later than 30 days before the entry into force of the new tariffs it shall publish the tariffs in the official publication “Latvijas Vēstnesis” and inform the Regulator about the tariffs. At the same time, the system operator shall submit to the Regulator a justification for tariffs and information on the actual costs of the previous regulatory period, forecasted data for new tariffs, as well as comparison tables indicating changes in user structure and other documents justifying the need for new tariffs;

57.2. the Regulator shall, within 21 days after receipt of the tariffs, evaluate the compliance of the submitted tariffs with this Methodology and the economic justification of the submitted tariffs;

57.3. Within 21 days after receipt of the tariffs, if the Regulator has not adopted a decision regarding 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 within the time specified by the system operator;

57.4. Within 21 days after receipt of the tariffs, if the Regulator adopts a decision regarding 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 within the time specified by the system operator. Within seven days after the decision has been adopted, the Regulator shall send the decision to the system operator and publish it in the official publication "Latvijas Vēstnesis" a notice regarding the adopted decision, which revokes the entry into force of the tariffs.

58. The Regulator may, on its own initiative or at the request of the system operator, determine the procedure for the application of tariffs and the procedure by which the system operator shall inform users and the Regulator regarding the applicable tariffs.

5. Closing remarks

59. By 1 October 2020, the system operator shall submit to the Regulator a tariff proposal developed in accordance with this Methodology.

60. The Public Utilities Commission's Decision No 1/7 "Methodology for Calculation of Natural Gas Storage Service Tariffs" of 16 March 2017 (Latvijas Vēstnesis 2013, No 193) is repealed.

61. The Methodology shall enter into force on the day following its official publication in "Latvijas Vēstnesis".