Energy Regulatory Office Price Decision 4/2021 of 16 September 2021 on thermal energy prices

Under Section 2c of Act No 265/1991 on the Competences of the Czech Republic's Authorities in the Area of Prices, as amended, and under Section 17(6)(d) of Act No 458/2000 on the Conditions for Business and State Administration in the Energy Industries and Amending Certain Laws ('the Energy Act'), as amended, and under Section 6 of Act No 526/1990 on Prices, as amended, the Energy Regulatory Office ('Office' or 'ERO') hereby issues its Price Decision on thermal energy prices.

Content

PART ONE: General Provisions	. 3
PART TWO: Economically Justified Costs	. 4
PART THREE: Reasonable Profit	13
PART FOUR: Mandatory Procedure for Calculating Thermal Energy Prices	15
PART FIVE: Arranging Thermal Energy Prices	20
PART SIX: Final Provisions	21
Annex 1: Calculation of thermal energy prices	22
Annex 2: Procedure for allocating shared costs in combined heat and power generation	23

PART ONE: General Provisions

The Office lays down the following conditions for agreements on thermal energy prices for thermal energy suppliers ('supplier'):

(1) Basic conditions for thermal energy prices

(1.1) Thermal energy prices are subject to cost-plus control. In a calendar year, only economically justified costs, a reasonable profit, and the value-added tax ('VAT') under a different piece of legislation¹ can be reflected in thermal energy prices.

(1.2) The conditions for cost-plus control of thermal energy prices do not apply to thermal energy prices calculated and charged below the limit price. The Office has set the limit price at CZK 155.61/GJ, excluding VAT.

¹ Act No 235/2004 on the Value-added Tax, as amended

PART TWO: Economically Justified Costs

(2) Economically justified costs

(2.1) The economically justified costs reflected in thermal energy prices are the economically justified variable and fixed costs² necessarily incurred in thermal energy production and/or distribution in a calendar year, which are based on the supplier's books of account kept in compliance with the Czech Accounting Standards under a different piece of legislation³, except for the costs under point (2.3.2), which must be applied in compliance with the legislation on the minimum depreciation and amortisation periods for the purposes of price controls in the heat supply industry⁴.

(2.2) Clarification of certain economically justified costs

Economically justified variable costs in thermal energy prices directly depend on the amount of thermal energy supplied.

(2.2.1) Costs of fuel and costs of thermal energy bought

(2.2.1.1) The costs of fuel and the costs of thermal energy and other energy bought, which are based on the long-term customary efficiency of energy use in thermal energy production and/or distribution, averaged over a calendar year, and the customary prices⁵ of fuels with regard to the transport costs of fuel and/or thermal energy and other energy bought, and also to the technical and delivery conditions, can be passed through to the thermal energy price.

(2.2.1.2) The costs of fuel for thermal energy production include the excise duty⁶, the tax on natural gas and certain other gases⁷ and the tax on solid fuels⁸, unless the supplier is exempt from these taxes and duties under the law. The costs of fuel for thermal energy production are reduced by income from aid to heat under a different piece of legislation⁹.

(2.2.1.3) In the case of changes in the fuel and energy prices included in the economically justified costs reflected in the thermal energy price, such prices can be averaged over the calendar year, taking into account the factor of time and the amount of fuel or energy accordingly.

(2.2.2) Economically justified costs of emission allowances

(2.2.2.1) Only the supplier who has been issued with a permit for emitting greenhouse gases under a different piece of legislation¹⁰ and who meets the conditions laid down herein can reflect the costs of emission allowances in thermal energy prices.

(2.2.2.2) In the case of a shortage of emission allowances allocated to a thermal energy production facility for a calendar year, the economically justified cost of the purchase of emission allowances or, if applicable, certified emission reductions (CERs) accruing from project activities, can only be passed through to the thermal energy price up to the extent of the costs of purchasing the required number of emission allowances. The required number of emission allowances bought is calculated as the difference between the number of emission allowances corresponding to the

² Section 2(7) of Act No 526/1990 on Prices, as amended

³ Act No 563/1991 on Bookkeeping, as amended

⁴ Public notice 262/2015 on regulatory reporting, as amended

⁵ Section 2(6) of Act No 526/1990 on Prices, as amended

⁶ Act No 353/2003 on Excise Duties, as amended

⁷ Part 45 of Act No 261/2007 on the Stabilisation of Public Budgets, as amended

⁸ Part 46 of Act No 261/2007 on the Stabilisation of Public Budgets, as amended

⁹ Act No 165/2012 on Supported Energy Sources, as amended

¹⁰ Act No 383/2012 on the Conditions of Trading in Emission Allowances, as amended

amount of greenhouse gases produced by the supplier in thermal energy production, reported and verified under a different piece of legislation¹⁰, and the sum of the number of emission allowances allocated free of charge for thermal energy production for that calendar year under a different piece of legislation¹⁰ and the surplus of emission allowances allocated free of charge for thermal energy production for that calendar year under a different piece of legislation¹⁰ and the surplus of emission allowances allocated free of charge for thermal energy production for each of the years preceding the year for which the thermal energy price is being calculated, beginning 2021, and not utilised at the given thermal installation to which the greenhouse gas emissions permit applies and which is specified in a different piece of legislation¹⁰. If the producer rolls over a portion of emission allowances allocated free of charge between 2013 and 2020 for utilising them in the period starting in 2021, the number of the emission allowances allocated free of charge under the second sentence above is increased by the rolled over emission allowances. The purchase of emission allowances the number of which equals the surplus of emission allowances allocated free of charge over the period from 2013 to 2020 which the thermal energy supplier did not roll over to utilise them in the period starting in 2021 is not regarded as an economically justified cost.

(2.2.2.3) For the purposes of calculating thermal energy prices, the supplier that only buys emission allowances in the event of a shortage thereof prices the emission allowances by a weighted average that is based on the prices and number of the emission allowances bought. If in the relevant calendar year the supplier sells and buys emission allowances, for the purposes of calculating the thermal energy price the price of the number of the emission allowances that have to be bought for the calendar year is capped by the average price for that calendar year, which is based on the weighted average of all emission allowance transactions executed at the spot market of the relevant exchange in the European Union in that calendar year. The Energy Regulatory Office publishes the average price under the second sentence in a manner allowing remote access.

(2.2.2.4) If the supplier has received aid or subsidy in compensation for its costs of buying emission allowances for producing thermal energy supplied into a distribution thermal installation, the economically justified cost of the emission allowances in the thermal energy price is reduced by the provided aid or subsidy.

(2.2.2.5) In the case of charging thermal energy prices in multiple price localities with installations that are subject to determining the amount of greenhouse gas emissions, the incurred costs of the required purchase of emission allowances are allocated to these price localities in proportion to the need to buy emission allowances for thermal energy production, which actually emerges in thermal energy production in those price localities.

(2.2.2.6) When allocating the costs of the required purchase of emission allowances in the case of thermal energy production combined with the production of another commodity, the emission allowances actually allocated to each of the commodities are taken into account.

(2.2.2.7) The calculation of thermal energy prices may not take into account the costs of buying the number of emission allowances, the need for which arose from the facility operator's lack of activity in the calendar year, such as failure to notify a change in the permit conditions or failure to apply for the issue and allocation of additional allowances or failure to implement measures conducive to a direct or indirect reduction in or limitation of emissions under a different piece of legislation¹⁰.

(2.2.3) Clarification of certain other economically justified variable costs

(2.2.3.1) The costs of booking the transmission and/or distribution capacity equalling the expected demand for booked transmission and/or distribution capacity in the given calendar year can be included in the price of thermal energy produced from gas. Additional costs incurred when exceeding the booked transmission and/or distribution capacity or when either exceeding or

failing to take the contract quantity of fuel or energy, including those of a penalising nature, can increase the economically justified variable costs in the thermal energy price.

(2.2.3.2) Where thermal energy is produced in a facility for energy recovery of mixed municipal waste the costs of waste disposal, waste preparation before burning, and disposal of combustion residues may not be reflected in the thermal energy price.

(2.3) Clarification of certain economically justified fixed costs

Economically justified fixed costs in the thermal energy price do not depend on the amount of the thermal energy supplied.

(2.3.1) Repair and maintenance

(2.3.1.1) In the thermal energy price, the supplier can reflect the necessary costs of repairing and maintaining the assets related to thermal energy production/distribution, unless specified otherwise herein.

(2.3.1.2) The thermal energy price may not reflect the costs of repairing a thermal installation in respect of which the liability for defects or guarantee of quality still exists. If liability for defects or guarantee of quality cannot be claimed, the supplier can reflect the costs of this repair in the thermal energy price in the calendar year in which it actually spent them. Alteration of assets having the nature of technical capital improvement under a different piece of legislation¹¹ is not considered to be repair. In the 'repair' item in the calculation of thermal energy prices, the supplier can include the costs of the replacement of an asset that is carried in the books as part of a set of movable items if the sum of the valuations of the replaced items in the calendar year does not exceed 10% of the valuation of the set of movable items. Component depreciation is treated *mutatis mutandis* under the preceding sentence.

(2.3.1.3) In the case of movable or immovable assets operated on the basis of a lease, sublease or usufruct arrangement (hereinafter 'lease') and required in thermal energy production and/or distribution, the thermal installation operator can include the costs incurred in everyday maintenance of the leased assets in the calculation of the thermal energy price. The thermal energy supplier has the right to include the costs of other maintenance and necessary repair under a different piece of legislation¹² in the thermal energy price calculation only if in the contract with the lessor, it committed to carry out other maintenance and necessary repair or to pay the costs of other maintenance and necessary repair carried out or caused to be carried out by the lessor.

(2.3.2) Depreciation

(2.3.2.1) The thermal energy price can reflect straight-line depreciation and amortisation of the operated assets required for thermal energy production and/or distribution, provided that the minimum depreciation period is specified in a different piece of legislation⁴. If it is not specified, depreciation reflecting the long-standing customary useful life of such assets can be included in the thermal energy price. If the supplier includes the costs of asset replacement under point (2.3.1.2) in the repair item in the calculation of the thermal energy price, this price may not reflect the depreciation of the assets so replaced. In respect of house boiler rooms or house substations, the depreciation of installations for thermal energy production and/or distribution is treated in the same manner as in the case of installations that are not an inseparable part of civil structures, provided that solely the structural parts that are directly connected with thermal energy production and/or distribution can be included.

¹¹ Section 47(4) of public notice 500/2002 executing certain provisions of Act No 563/1991 on Accounting, as amended

¹² Section 2207(1) of Act No 89/2012, the Civil Code, as amended

(2.3.2.2) In respect of assets that the preceding owner used for a period equalling at least onethird of the depreciation period under point (2.3.2.1), the supplier has the right to use depreciation of these assets in an amount reflecting the asset depreciation period reduced by the time for which the preceding owner used the assets.

(2.3.2.3) The thermal energy price may not reflect depreciation of assets acquired by gratuitous transfer, with the exception of assets transferred under a different piece of legislation¹³, depreciation of assets not used for thermal energy production and/or distribution, with the exception of back-up and peak-shaving thermal energy sources, or depreciation and other costs incurred in refurbishing or newly acquiring installations intended for thermal energy production and/or distribution if such refurbishment or acquisition were carried out contrary to an energy audit under a different piece of legislation¹⁴ where the supplier and the installations are subject to the obligation to obtain an energy audit.

(2.3.2.4) The thermal energy price can reflect the accounting depreciation of the operated assets required for thermal energy production and/or distribution or a part thereof, for which a subsidy was granted in any form, solely from the valuation of the assets net of the subsidy.

(2.3.2.5) The thermal energy price may not reflect depreciation of the difference in the valuation of acquired assets¹⁵ and depreciation of goodwill¹⁵ where the assets were acquired otherwise than by purchase.

(2.3.3) Rent

(2.3.3.1) In the case of lease of movable or immovable assets related to thermal energy production and/or distribution, except for finance lease and lease of items falling within the supplier's administrative overheads, thermal energy prices for a calendar year can include the cost of the rent only up to the sum of:

- a) the yearly depreciation that the thermal installation owner could reflect in the thermal energy price under point (2.3.2) should it be the thermal energy supplier, and
- b) the profit from the value of the leased thermal installation, determined in accordance with point (3), which the thermal energy supplier operating this thermal installation could reflect in the thermal energy price.

(2.3.3.2) Rent may not be included in respect of assets, or a part thereof, the depreciation of which is reflected in the thermal energy price, except for usufruct lease of the enterprise.

(2.3.3.3) If in the case of usufruct lease of the enterprise or a part thereof the thermal energy supplier is allowed to depreciate a leased set of movable and immovable assets related to thermal energy production and/or distribution or a part thereof, it can include also the rent calculated in accordance herewith, net of depreciation of such assets, in the thermal energy price.

(2.3.3.4) Thermal energy prices may not include rent for the movable and immovable assets for thermal energy production and/or distribution, which

- a) are not being operated or used, except for back-up and peak-shaving sources, or
- b) were sold and then leased back to the supplier within five years from the sale, provided that this does not cause a reduction in the economically justified costs in the thermal energy price.

¹³ Act No 92/1991 on the Conditions for Transfer of the State's Property to Other Persons, as amended

¹⁴ Act No 406/2000 on Energy Management, as amended

¹⁵ Public notice 500/2002 executing certain provisions of Act No 563/1991 on Accounting, As Amended, for Accounting Entities That Are Businesses Keeping Double-entry Accounts

(2.3.3.5) In the cases of lease of items falling within the supplier's administrative overheads or lease of assets that are not subject to accounting depreciation under a different piece of legislation³, rent up to the amount customary at the place and time can be included in the supplier's overheads.

(2.3.4) Finance lease

In respect of finance leases with the option to purchase the leased asset at the end of the lease term, point (2.3.3) is used *mutatis mutandis* for determining the amount of finance lease costs and for determining the finance lease costs that cannot be included in the thermal energy price.

(2.3.5) Overheads

(2.3.5.1) Overheads include administrative overheads and production overheads related to thermal energy production and/or distribution. The thermal energy price can include only the overheads directly allocable to thermal energy production and/or distribution and the portion of the shared overheads determined under points (2.3.5.5) to (2.3.5.10), which is related to thermal energy production and/or distribution.

(2.3.5.2) Part of the administrative overheads are the costs of emoluments for no more than

- a) three members ('Directors') of the management board or board of directors of the thermal energy supplier that has the legal form of a public limited company [akciová společnost in Czech] or
- b) one member ('Director') of the management body of the thermal energy supplier that has a legal form other than public limited company.

The costs of emoluments for a Director can be included in the thermal energy price only for the calendar months for which the Director performed his/her office and up to no more than the amount equalling two times the average gross monthly wage in 'Electricity, gas, steam and air conditioning supply' published by the Czech Statistical Office for the year preceding the year in which the thermal energy supplier is calculating the thermal energy prices for the following calendar year, for the period of the Director's performance of his/her office.

(2.3.5.3) The expenses on mandatory D&O insurance paid for a Director are part of administrative overheads up to no more than the amount that would, under the law on the relevant mandatory insurance, be derived from the amount of emoluments for the Director determined under point (2.3.5.2).

(2.3.5.4) The relevant portion of the costs spent on wages and on mandatory insurance policies that are related to the operation of all of the supplier's business lines, except for production overheads, is included in administrative overheads at all times.

(2.3.5.5) Shared administrative overheads are allocated to the thermal energy supplier's various business lines. The supplier allocates the shared administrative overheads to its various business lines depending on the ratio of

- a) the supplier's average revenue from thermal energy production and/or distribution to the supplier's revenue from all of its business lines over the preceding three complete calendar years,
- b) the average payroll costs spent on employees who perform work directly allocable to thermal energy production and/or distribution to the payroll costs spent on employees who perform work directly allocable to thermal energy production and/or distribution and on those performing work directly allocable to other business lines over the preceding three complete calendar years, or

c) the average annual depreciation of the assets related solely to thermal energy production and/or distribution to the depreciation of assets related to all of the thermal energy supplier's business lines, except for the depreciation of assets falling within shared administrative overheads, over the preceding three complete calendar years.

If the thermal energy supplier has not pursued any business line other than thermal energy production and/or distribution for at least three calendar years it allocates shared administrative overheads to business lines based on the ratios determined following a) to c) for the period in which it pursued at least one other business line besides thermal energy production and/or distribution. If the supplier allocates shared overheads following b) or c), the portion of shared overheads allocated to thermal energy production and/or distribution may not exceed by more than 30% the portion of shared overheads if shared overheads were allocated following a).

(2.3.5.6) If the supplier discontinues any of its business lines [other than thermal energy production and/or distribution], for the subsequent calendar year this business line is not taken into account for the purposes of allocating shared administrative overheads.

(2.3.5.7) The supplier allocates all shared administrative overheads using a single allocation method under (2.3.5.5).

(2.3.5.8) Production overheads and the portion of shared administrative overheads attributable to thermal energy production and/or distribution are allocated to the various transfer levels in accordance with points (4.15) to (4.19).

(2.3.5.9) If the supplier calculates thermal energy prices in multiple price localities, it allocates overheads to the various price localities

- a) proportionally to the agreed thermal outputs,
- b) depending on the amount of thermal energy supplied in each of the price localities, including own use of thermal energy,
- c) depending on the number of supply points in the price localities,
- d) depending on the acquisition value of the assets related solely to thermal energy production and/or distribution and used for supply in the various price localities, or
- e) depending on the ratios of the difference between revenues from thermal energy supply and the economically justified variable costs allocated to each of the price localities for the last complete calendar year.

If the supplier allocates overheads following c) the portion of overheads allocated to one price locality may not exceed the portion of overheads by more than 30% compared with overheads allocated under b).

(2.3.5.10) If the supplier allocates overheads to the various price localities based on the ratio of agreed thermal outputs or amounts of thermal energy, points (4.17) to (4.19) are used *mutatis mutandis* for allocating the overheads to the various price localities. The supplier also proceeds *mutatis mutandis* under points (4.17) to (4.19) when allocating overheads in calculating thermal energy prices at multiple levels of thermal energy transfer.

(2.3.5.11) The algorithm for allocating overheads selected by the supplier remains unchanged throughout a calendar year.

(2.3.6) Easements

(2.3.6.1) Where an easement allowing the use of real estate or a part thereof for the purpose of siting and operating a thermal installation has been created for a consideration, the compensation for easement creation and the costs incurred in creating the easement can be reflected in the

thermal energy price. The costs under the first sentence are reflected in thermal energy prices via amortisation.

(2.3.6.2) In cases where an easement allowing the use of third-party real estate or a part thereof for the purposes of erecting or operating a new distributing thermal installation was created by the operation of law or under a national authority's decision, the economically justified costs are the compensations, laid down in the law, for constraining the third-party real estate or a part thereof, and the costs incurred in easement creation. Any other actually spent costs incurred in using third-party real estate in connection with easement can only be reflected in thermal energy prices if spent under a different piece of legislation¹⁶.

(2.3.7) Legal reserves

(2.3.7.1) Reserves for repair of tangible assets, accumulated under a different piece of legislation¹⁷, can only be reflected in thermal energy prices if properly posted in the calendar year. If the reason for accumulating legal reserves no longer exists, or the reserves are not exhausted, or thermal energy supply in the price locality is discontinued the total unused amount of these reserves must be reversed under a different piece of legislation¹⁷ and deducted from the economically justified costs on the occasion of the billing of thermal energy prices.

(2.3.7.2) For reflecting provisions for the clean-up and reclamation of dumps, set aside under a different piece of legislation¹⁸, and provisions for nuclear installation decommissioning under a different piece of legislation¹⁹ in the thermal energy price point is used *mutatis mutandis*.

(2.4) Specification of certain other economically justified costs

(2.4.1) Shared costs in combined heat and power generation

(2.4.1.1) In combined heat and power generation (cogeneration), the supplier separates the directly allocable economically justified costs of thermal energy. The supplier separates the costs of thermal energy from the shared economically justified costs of cogeneration following the procedure in Annex 2. Only directly allocable costs and the portion of shared costs that relates to thermal energy production can be included in thermal energy prices.

(2.4.1.2) The shared costs are not allocated when all electricity generated in cogeneration is utilised as own use in thermal energy production and/or distribution.

(2.4.1.3) The thermal energy price may not include the cost of electricity purchase in excess of the cost of the entity's own cogenerated electricity or in separate electricity generation in the thermal energy source if the generated electricity is not preferentially used for the needs of the thermal energy source or for the other producing and/or distributing thermal installations that have been electrically interconnected by the supplier.

(2.4.1.4) If the supplier uses cogenerated electricity for the requirements of the thermal energy source or for other producing and/or distributing thermal installations that the supplier has interconnected electrically, it passes through the cost of its own electricity generation, net of revenues from aid for electricity from high-efficiency combined heat and power generation under a different piece of legislation⁹, to the thermal energy price in an amount corresponding to the electricity quantity consumed for the requirements of the supplier's thermal energy source or other producing and/or distributing thermal installations.

 $^{^{\}rm 16}$ Section 1263 of Act No 89/2012, the Civil Code, as amended

¹⁷ Act No 593/1992 on Provisions and Reserves for Determining the Amount Liable to Income Tax as amended

¹⁸ Section 42 of Act No 541/2020 on Wastes

¹⁹ Act No 263/2016, the Atomic Act, as amended

(2.4.1.5) The method that the supplier has elected for allocating shared costs in combined heat and power generation and the value of the allocation coefficient β_{ti} determined under Annex 2 may not change during a calendar year. Following the end of the calendar year, the supplier recalculates the value of the allocation coefficient β_{ti} in the calculation of the resulting price of thermal energy based on the actual values.

(2.4.2) Shared costs when using secondary energy source and renewable energy sources

The algorithm under point (2.4.1) is used *mutatis mutandis* for allocating the shared costs of thermal energy produced from a secondary energy source or a renewable energy source.

(2.4.3) Specification and definition of other costs

(2.4.3.1) The costs of products, services, and goods that are billed within the accounting entity and passed through to the thermal energy price may not contain any additional margin. The thermal energy production and/or distribution costs spent on outsourced activities must not increase the economically justified costs at which the supplier would carry out such activities on an in-house basis in a comparable extent and comparable time.

(2.4.3.2) In particular the following, without limitation, may not be reflected in thermal energy prices:

- a) Culpable deficits and damages related to capital construction or to repair of damage to property that was not caused by a natural disaster;
- b) Costs of disposal of tangible and intangible fixed assets and inventories and the net book value of such assets, except for costs (net of the proceeds from the disposal) of the disposal of assets no longer fit for operation;
- c) Any charges and late interest, fines, and sanctions, except for the case in point (4.25), penalties or surcharges related to charges arising from contracts or legislation, including that on environmental protection;
- d) Expenses on advertising, promotion, and representation if in the thermal energy price they exceed a value of CZK 2.60/GJ, excl. VAT;
- e) Travel expenses reimbursed in excess of the obligations laid down in a different piece of legislation²⁰;
- Financial settlement (such as redundancy pay) in excess of the obligations laid down in a different piece of legislation²¹;
- g) Contributions to meals in excess of the tax allowable amount under a different piece of legislation²²;
- h) Payments of premiums under D&O insurance paid by juristic persons;
- i) Interest payable under loans and other financial borrowings;
- j) Payments to the national budget due to failure to have the mandatory proportion of disabled people in the total number of employees under a different piece of legislation²³;
- k) Provisions for receivables and write-off of receivables;
- Payments for economic, legal, advisory or organisational services if the supplier is unable to conclusively prove the provision of such services.

(2.4.3.3) Economically justified costs can also include some other costs spent on benefits provided to employees or in favour of employees in connection with their performance of work for the

²⁰ Act No 262/2006, the Labour Code, as amended

²¹ Section 67 *et seq.* of Act No 262/2006, the Labour Code, as amended

²² Section 24 of Act No 586/1992, the Income Tax Act, as amended

²³ Section 81 of Act No 435/2004 on Employment, as amended

thermal energy supplier, which are, under a different piece of legislation²⁴, exempt from income tax, however, up to no more than 5% of the payroll costs spent by the supplier.

²⁴ Section 6(9) of Act No 586/1992 on Income Tax, as amended

PART THREE: Reasonable Profit

(3) Reasonable profit

(3.1) The maximum reasonable profit, zisk_{sum} in CZK, for a price locality before taxation and interest and related in aggregate to thermal energy production and/or thermal energy distribution is calculated as

$$zisk_{sum} = \sum_{k=0}^{n} CAPEX (1+i)^{t} \times ROA$$

where

CAPEX [CZK] is the acquisition cost of the asset item required for thermal energy production and/or distribution operated by the supplier in the price locality; **CAPEX** does not include leased assets the rent for which, paid by the supplier, falls within the supplier's administrative overheads;

i [-] a factor expressing the time value of money; for assets required for thermal energy production and/or distribution, factor i is 0.02 for the period from the year of inclusion in use to 31 December 2021, and beginning on 1 January 2022 factor i is 0.01 for all assets required for thermal energy production and/or distribution;

t [-] the number of complete years from the capitalisation [item posting to assets] of capex items required for thermal energy production and/or distribution until, inclusive, the year for which the thermal energy prices are being calculated, by asset item; factor **t** takes values from 1 up, provided that where an asset was included in use before 1 January 1992, 1992 is regarded as the year of such inclusion;

n [-] number of the items of the assets required for thermal energy production and/or distribution operated by the supplier in the price locality;

ROA [-] return on assets at 0.065.

(3.2) In the case of a cogeneration facility, the part of CAPEX under point (3.1) which relates to thermal energy production is calculated using the percentage of the total acquisition cost of the cogeneration facility at which the supplier allocates fixed costs of electricity and heat generation and, following the procedure under Annex 2, includes the portion of fixed costs, which is related to thermal energy production, in the calculation of the thermal energy price.

(3.3) The supplier can also include in CAPEX under point (3.1), a portion of the acquisition cost of the item of the assets attributable to electricity generation, which [i.e. the item] the supplier uses for its own process use of electricity in thermal energy production in the same cogeneration facility or for the consumption of the equipment required for supplying produced thermal energy into the connected distributing thermal installation. The first sentence does not apply when the supplier also uses cogenerated electricity for its own use and does not meter its own use by a mandatorily verified metering instrument under a different piece of legislation²⁵. The portion of the acquisition cost of the item of assets attributable to electricity generation, which [i.e. the portion] is included in CAPEX under point (3.1), reflects no more than the ratio of the amount of electricity consumed for the supplier's own process use for thermal energy production and supply

²⁵ Act No 505/1990 on Metrology, as amended

into the connected distributing thermal installation to the total amount of electricity measured on the generator terminals in the cogeneration facility. An ROA of 0.03 is used for this part of assets.

(3.4) If the capex items required for thermal energy production and/or distribution are capitalised during a calendar year, for the purpose of determining the CAPEX value these capex items are regarded as capitalised as of 1 January of that calendar year.

(3.5) If the rent in the thermal energy price exceeds the actual rent payment equalling the amount of annual accounting depreciation that the thermal installation owner could reflect in the thermal energy price if it were the thermal energy supplier, the supplier must reduce the value of the profit at the price locality, **zisk**_{sum} determined under point (3.1), by the surplus portion of the rent in the thermal energy price.

PART FOUR: Mandatory Procedure for Calculating Thermal Energy Prices

(4) Mandatory procedure for calculating thermal energy prices

(4.1) The supplier determines price localities for thermal energy pricing. A price locality is understood to be an area delineated by the supplier for the thermal installation(s) that it operates, which include:

- a) an autonomous thermal energy source or a distributing thermal installation;
- b) thermal energy sources and/or distributing thermal installations in a single municipality, connected or unconnected by piping;
- c) thermal energy sources and distributing thermal installations in multiple municipalities connected by piping;
- d) unconnected thermal energy sources and distributing thermal installations in multiple municipalities within the same administrative limits of a municipality with extended competences²⁶; or
- e) thermal installations within a single Region, except for thermal energy sources that produce cooling and thermal energy sources with an installed thermal output of more than 100 MW, provided that more than one half of thermal energy produced by each of the thermal energy sources meeting one of the conditions under a) to d) is produced from the following fuels or energy:
 - 1 coal or biomass,
 - 2 other renewable or secondary energy sources,
 - 3 gas,
 - 4 fuel oils, or
 - 5 other fuels or energy.

(4.2) During a calendar year, the determination of a price locality can only be changed upon the emergence, change or extinction of the legal title or other user rights to thermal installations or upon refurbishment of thermal installations having a direct impact on the current extent of the price locality.

(4.3) The calculation of the thermal energy price is understood to be such determination of the thermal energy price under Annex 1, which makes possible a comparison with the conditions for cost-plus control.

(4.4) Each calculation of a thermal energy price can include only the relevant economically justified costs, a reasonable profit, and the relevant amount of thermal energy. The supplier must include all of the applied economically justified costs in the calculation of thermal energy prices.

(4.5) The thermal energy supplier calculates the preliminary price of thermal energy for the relevant calendar year. The calculation of the preliminary thermal energy price can include only the expected economically justified costs, a reasonable profit, and the expected amount of thermal energy in that calendar year. The supplier determines the expected amount of thermal energy for the relevant calendar year on the basis of the average of the amounts of thermal energy actually supplied over at least the last three but not more than five last complete calendar years, or over a shorter period where the supplier has been supplying thermal energy for a period shorter than three years, taking into account any justifiably expected change in the amount of thermal energy in the calendar year.

²⁶ Act No 314/2002 on the Determination of Municipalities Having a Municipal Authority with Devolved Competences, as amended

(4.6) Following the end of the calendar year, the thermal energy supplier calculates the resulting thermal energy price. The calculation of the resulting thermal energy price can only include the actually spent economically justified costs, a reasonable profit, and the actual amount of thermal energy supplied for the complete calendar year. If the billing period is shorter than a calendar year the supplier proceeds under this provision *mutatis mutandis*.

(4.7) For a given calendar year, the calculation of the preliminary and resulting thermal energy prices must have the same breakdown of economically justified costs and must meet the conditions laid down herein. The method for allocating administrative overheads and shared costs in cogeneration, which is employed in calculating the resulting thermal energy price, must be the same as the method for allocating these costs employed in calculating the preliminary thermal energy price. For determining the maximum level of the costs of emoluments for Directors, the same value of the average gross monthly wage under point (2.3.5.2) is used in the calculation of the resulting thermal energy price.

(4.8) The calculation of the thermal energy price can include a reasonable profit², **zisk**_{kalkul} [CZK/GJ], up to the following amount:

$$zisk_{kalkul} = 1.5 \times \frac{zisk_{sum}}{Q_{CL}},$$

where

zisk_{sum} [CZK] is the value of the maximum reasonable profit derived from a price locality and related in aggregate to thermal energy production and/or thermal energy distribution, determined under point (3.1),

 \mathbf{Q}_{CL} [GJ] is the amount of thermal energy supplied to thermal energy customers and the thermal energy supplier's own use in the price locality.

(4.9) The thermal energy supplier can include in the calculations of thermal energy prices at a price locality, in aggregate in the absolute value, profit $zisk_{sum}$ up to no more than the level of the maximum value of reasonable profit determined under point (3.1).

(4.10) If the resulting thermal energy price is calculated during a calendar year, no more than a profit equalling no more than the reasonable profit determined under point (4.8) prorated to the part of the calendar year for which the supplier is calculating the resulting billing of thermal energy can be included in the thermal energy price.

(4.11) The supplier calculates the thermal energy prices for each of the levels of thermal energy transfer within the price locality. The supplier can also calculate the thermal energy prices for the various levels of thermal energy transfer separately for

- a) centrally heated hot water,
- b) equipment for cooling production,
- c) supply points of one thermal energy distributor,
- d) a supply point or a group of supply points with individual thermal energy prices under point (4.13),
- e) the house substation(s) of one customer, which the supplier is using.

(4.12) A thermal energy price under point (4.11) may not be calculated separately should it cause a disadvantage to the other supply points in costing terms.

(4.13) The thermal energy price for one supply point or a group of supply points at the same level of thermal energy transfer within one price locality may vary if the supply points differ from the

other supply points at the same level of thermal energy transfer in terms of their specific connection conditions, or when the thermal energy supply for such supply points differs from that for the other supply points at the same level of thermal energy transfer

- a) by the specific technical nature, profile or amount of thermal energy supply, by the costing conditions compared with those of other supply points, or by using the thermal energy supply system only as a back-up thermal energy source, or
- b) by the duration for one or more calendar years of the obligation under the thermal energy supply contract. This does not preclude the option to agree on a price during a calendar year.

Thermal energy can also be priced on an individual basis for one customer's supply points within one integrated complex of buildings if at least one supply point meets any of the conditions for an individual thermal energy price under points a) and b).

(4.14) The thermal energy price for one or more supply points at the same level of thermal energy transfer within one price locality may also differ by the economically justified costs caused by the customer and related solely to the customer's supply points.

(4.15) The economically justified variable and fixed costs required for thermal energy production and/or distribution that the supplier has the right to reflect in the calculation of thermal energy prices at one level of thermal energy transfer, comprise

- a) the costs, or a part thereof, incurred at this level of thermal energy transfer if the supplier also calculates the thermal energy price for the downstream level of thermal energy transfer, and
- b) the costs, or a part thereof, incurred in thermal installations operated by one supplier upstream of this level of thermal energy transfer if the supplier also calculates the thermal energy price for the upstream level of thermal energy transfer.

(4.16) The portion of the economically justified variable costs under point (4.15) for calculating thermal energy prices at one level of thermal energy transfer is based on the ratio of the amount of thermal energy equalling the thermal energy supply plus the supplier's own use of thermal energy at this level of thermal energy transfer to the amount of thermal energy intended for further thermal energy distribution. The procedure under point (4.23) is used *mutatis mutandis*.

(4.17) The portion of the economically justified fixed costs under point (4.15) for calculating thermal energy prices at one level of thermal energy transfer is based on the ratio of

- a) the sum of the thermal outputs agreed for distributing thermal installations and consuming appliances connected to the distributing thermal installation at that level of thermal energy transfer, plus the value of the supplier's own use of thermal output, plus the value of the output of the distributing thermal installation equalling losses in the supplier's distributing thermal installation, to
- b) the sum of the thermal outputs agreed for all distributing thermal installations and consuming appliances connected at the next level of thermal energy transfer, plus the value of the supplier's own use of thermal output, plus the value of the output of the distributing thermal installation equalling losses in the supplier's distributing thermal installation at the next transfer level.

The output of the distributing thermal installation equalling losses in the distributing thermal installation under a) and b) above is the result of dividing the amount of losses in the distributing thermal installation, in MWh, by 6,500 hours. The supplier can include the losses in the

distributing thermal installation in the determination of the values of thermal output under a) and b) above only when the amount of losses can be determined from the difference between the amount of thermal energy measured at inlet into the distributing thermal installation at the relevant transfer level and the amount of thermal energy supplied to consuming appliances or distributing thermal installations at this transfer level.

(4.18) Where the supplier measures the daily thermal output actually taken by all connected distributing thermal installations and consuming appliances at the relevant levels of thermal energy transfer and for the supplier's own use, then in order to determine the portion of economically justified fixed costs under point (4.17) the supplier can use, instead of the sum of the thermal outputs, the sum of the average values of the highest daily thermal output taken by all connected distributing thermal installations and consuming appliances at the relevant level of thermal energy transfer and the supplier's own use, which is based on the measured values over at least the last three but not more than five last complete calendar years, or over a shorter period where the supplier has been supplying thermal energy for a period shorter than three years. To determine the above-mentioned portion of economically justified fixed costs, the supplier uses, instead of the sum of the thermal outputs under point (4.17) a) and b), the sum of the average values of the highest daily thermal output taken at the supply points of all distributing thermal installations and consuming appliances connected to the distributing thermal installation at the relevant level of thermal energy transfer, including the supplier's own use and the value of the output of the distributing thermal installation equalling losses in the supplier's distributing thermal installation, if the sum of these values is lower than the sum of the thermal outputs under point (4.17) a) or b).

(4.19) If the values of the thermal output taken by all consuming thermal appliances connected to the distributing thermal installation under (4.17) or (4.18) are not known, the supplier uses the sum of the agreed amounts of thermal energy, or the amounts of thermal energy expected to be supplied under (4.23), the amount of the supplier's own use, and the expected losses in further thermal energy distribution. If the thermal energy customer has in place a double-component thermal energy price and has no agreement on the amount of thermal energy, the supplier uses the amount of thermal energy resulting from multiplying the agreed thermal output by 1,800 hours.

(4.20) If the supplier calculates multiple thermal energy prices at one level of thermal energy transfer under (4.11),

- a) it further allocates the variable costs allocated under (4.15) to the various thermal energy pricing calculations proportionally to the amounts of thermal energy,
- b) for the further allocation of the fixed costs allocated under (4.15) to the various thermal energy pricing calculations, points (4.17) and (4.19) are used *mutatis mutandis*.

(4.21) The amount of the economically justified variable and fixed costs in the calculation of thermal energy prices is based on the allocation under (4.15) to (4.20); this means

- a) the expected economically justified costs for the whole calendar year in the case of the preliminary price calculation under (4.5), or
- b) the economically justified costs for the whole complete calendar year actually entering the resulting price calculation under (4.6).

(4.22) The costs that the supplier has the right to pass through to the calculation of preliminary thermal energy prices include the following:

a) The economically justified variable costs for the whole calendar year, provided that the fuel and energy costs can be averaged under point (2.2.1.3); when the variable costs change

during the calendar year, in the new preliminary price calculation these costs are calculated as the product of the new price of the input (fuel or energy) and the amount of this input for the whole calendar year;

b) The economically justified fixed costs for the whole calendar year at all times, including when a new preliminary price calculation was made during the calendar year.

(4.23) The amount of thermal energy used in the calculation of thermal energy prices equals the supplier's thermal energy supply and its own use of thermal energy, except for the supplier's own use of thermal energy for process purposes in the thermal installation, provided that

- a) in the calculation of preliminary thermal energy prices, it equals the expected amount of thermal energy supplied over the whole calendar year; upon a change in the amount of thermal energy during the calendar year, unless such change is known from the beginning of the calendar year, the new amount of thermal energy in the new preliminary price calculation is specified for the whole calendar year at all times; the supplier determines the amount of thermal energy expected in the calendar year on the basis of the average of the amounts of thermal energy actually supplied over at least the last three but not more than five last complete calendar years, or over a shorter period where the supplier has been supplying thermal energy for a period shorter than three years, taking into account any justifiably expected change in the amount of thermal energy in the calendar year;
- b) in the calculation of resulting thermal energy prices, it equals the actual amount of thermal energy supplied for the whole complete calendar year based on the readings from thermal energy measurements.

(4.24) If the amount of thermal energy supplied cannot be determined under point (4.23), the supplier has the right to find its amount in the manner described in a different piece of legislation⁴.

(4.25) Extra income from failure to keep the contract values for thermal energy supply, including that of a penalising nature, reduce the economically justified costs of thermal energy production and/or distribution in the calculation of the resulting price of thermal energy.

(4.26) If the supplier starts or ends the activity during a calendar year it calculates the thermal energy price for the active part of the calendar year.

PART FIVE: Arranging Thermal Energy Prices

(5) Arranging thermal energy prices

(5.1) The supplier arranges and charges thermal energy prices calculated hereunder.

(5.2) The supplier arranges and charges thermal energy prices or components thereof in the same manner for all supply points in the case of their breakdown under (4.11).

(5.3) The supplier and the customer agree either on a single-component thermal energy price related to a unit amount of thermal energy or on a double-component price with the variable component of the price related to a unit amount of thermal energy and the fixed component of the price related either to a unit amount of thermal energy agreed in advance or to a unit of the agreed thermal output.

(5.4) A double-component thermal energy price's fixed component on which the supplier and customer agree may not exceed the economically justified fixed costs and a reasonable profit.

(5.5) With customers who operate, at a supply point, their own thermal energy source and use the supplier's distributing thermal installation as a back-up thermal energy source, the supplier can arrange only a double-component thermal energy price for such supply points.

(5.6) In the event of a change in the long-term demand for an amount of thermal energy or thermal output, which the customer proves to the supplier by 30 September, unless a later date is agreed, the supplier agrees on new values with the customer and, for determining the fixed component of a double-component price, charges them from 1 January of the following year.

PART SIX: Final Provisions

(6) Transitory provisions

(6.1) If the rent was agreed before the day on which this Price Decision becomes valid [i.e., when promulgated in the *Energy Regulation Gazette*, i.e. 22 September 2021], the actually spent costs of rent up to the amount under the hitherto effective price legislation can be passed through to the thermal energy price until 31 December 2024. If a change of the rent is agreed before 31 December 2024, the rent amount follows this Price Decision from the effective day of the agreement on the rent change; in the calculation of the resulting price of thermal energy, the rent cost will be reflected in accordance with the hitherto effective price legislation on a prorated basis for the part of the calendar year before the effective day of such agreement.

(6.2) In the case of a concession for operating a thermal installation, granted before the day on which this Price Decision becomes valid, in the calculation of the thermal energy price the consideration for performing the concession is assessed in accordance with the hitherto applicable legislation until the end of the concession term.

(6.3) The calculation of the resulting price of thermal energy for 2021 follows the hitherto effective price legislation.

(7) Repealing provisions

The following are repealed:

- 1 Energy Regulatory Office Price Decision 6/2020 of 29 September 2020 on thermal energy prices
- 2 Energy Regulatory Office Price Decision 1/2021 of 28 January 2021, amending Energy Regulatory Office Price Decision 6/2020 of 29 September 2020 on thermal energy prices

(8) Effect

This Price Decision comes into effect on 1 January 2022.

Stanislav Trávníček Energy Regulatory Office Board Chairman, *m.p.*

Annex 1: Calculation of thermal energy prices²⁷

Specification of the price locality		
Item	Calculation of the thermal energy price ²⁸	Calculation of the thermal energy price ²⁸
1 Variable costs [CZK]		
1.1 Fuel ^{29, 30}		
1.2 Emission allowances		
1.3 Thermal energy bought ³¹		
1.4 Electrical energy		
1.5 Process water		
1.6 Other variable costs ³²		
2 Fixed costs [CZK]		
2.1 Wages and mandatory insurance ³³		
2.2 Repair and maintenance		
2.3 Depreciation		
2.4 Rent		
2.5 Finance lease		
2.6 Legal reserves ³⁴		
2.7 Production overheads ³⁵		
2.8 Administrative overheads ³⁶		
2.9 Other fixed costs ³²		
3 Profit ³⁷ [CZK]		
Total fixed costs and profit ³⁸		
Total costs and profit		
Thermal energy amount [GJ, kWh] ³⁹		
Price excl. VAT [CZK/GJ, CZK/kWh]		
Price incl. VAT [CZK/GJ, CZK/kWh]		

²⁷ Any income from payments for failure to keep the agreed thermal energy offtake values is included as negative values in the relevant items of thermal energy price calculation

²⁸ Within a price locality, the relevant thermal energy price is calculated under (4.11) hereof

²⁹ List of types of fuels used and costs thereof for thermal energy production

³⁰ Any income (e.g. revenues from aid to heat), except for income from payments for failure to keep the agreed

thermal energy offtake values, is included as negative values in the item 'fuel calculation'

³¹ Buying thermal energy from another thermal energy producer or distributor

 $^{^{\}rm 32}$ List of other economically justified costs, including any cost adjustments

³³ Contains only payroll costs and mandatory insurance directly related to thermal energy production and distribution in the price locality

³⁴ Unused or reversed legal reserves are posted as negative values

³⁵ Share of production overheads related to thermal energy supply and own use

³⁶ Share of the part of administrative overheads, which is related to thermal energy production and distribution

³⁷ Profit or, in the case of a negative bottom line for thermal energy production or distribution, loss expressed as a negative value

³⁸ Sum of fixed costs (item 2) and profit (item 3)

³⁹ Where the supplier presents its thermal energy price calculation to a supervisory authority in charge of prices, the amount of thermal energy is shown in gigajoules [GJ]

Annex 2: Procedure for allocating shared costs in combined heat and power generation

The procedure for allocating shared costs in combined heat and power generation (cogeneration) is used for determining the economically justified costs in the calculation of the price of thermal energy if supplied to a distributing thermal installation or directly to the customer as useful heat while the unit supplies electricity to the transmission or distribution system or directly to the customer, or the producer consumes this electricity for purposes other than its own use in heat production and/or distribution.

The thermal energy supplier allocates shared economically justified cogeneration costs employing one of the methods below in (1) to (3) of this Annex.

The supplier determines the value of the allocation coefficient for allocating a cost item to thermal energy β_{ti} at no more than $\beta_{t,max}$ determined by one of the permissible methods set out in this Annex.

The total production costs are allocated to electricity and thermal energy and, if applicable, another product produced in cogeneration, and itemised as shown in the model table below:

	Production	Electricity costs		Heat costs			Costs of another		
Item		costs						product	
		Ni	β_{ei}	N _{ei}	β_{ti}	$\beta_{t,max}$	Nti	βji	Nji
	CZK 000'	-	CZK 000'	-	-	CZK 000'	-	CZK 000'	
1. Fuel									
2. Electrical en of electricity	ergy (own use ')								
3. Process wate	er								
4. Cooling wate	er								
5. Environment waste)	t (emissions,								
6. Ashes (remo residuals)	val of solid								
7. Other variab	le costs								
8. Wages and r insurance	nandatory								
9. Repair and maintenance									
10. Depreciation									
11. Rent									
12. Lease									
13. Legal reserv	ves 🛛								
14. Production	overheads								
15. Administrative overheads									
16. Other fixed	costs								
Σ variable costs (items 1 to 7)	PNi								
Σ other fixed cos (items 8 to 16)	sts SNi								
Σ costs N _i			$\Sigma \; N_{ei}$		$\Sigma \; N_{ti}$			Σ Ν _{ji}	
Unit fixed costs (items 8 to 16) [of supply CZK/GJ]					UFCT			
Unit costs of	[CZK/kWh]		UCE			UCT		UCJ	
supply	[CZK/GJ]					UCT		UCI	

In the case of need, additional items of eligible costs can be added.

The portion of costs Ni attributable to electricity, N_{ei} , and to thermal energy, N_{ti} , or, if applicable, to another product, N_{ji} , is calculated in each item *i* as follows:

For electricity [CZK 000']

$$N_{ei} = N_i \times \beta_{ei}$$

For thermal energy [CZK 000']

$$N_{ti} = N_i \times \beta_{ti}$$

For another product [CZK 000']

$$N_{ji} = N_i \times \beta_{ji}$$

At all times provided that [-]

$$\beta_{ei} + \beta_{ti} + \beta_{ji} = 1$$

where

Ni [CZK 000'] the cost item before allocation

 $\beta_{ei}~$ [-] the electricity allocation coefficient for allocating cost item Ni

 $\beta_{ti}\;\;$ [-] the thermal energy allocation coefficient for allocating cost item Ni

 $\beta_{ji}\;\;$ [-] the other product allocation coefficient for allocating cost item Ni

The production of other products concerns blowers or compressors driven by steam turbines. It also concerns the production of mechanical energy. In other cases,

 $\beta_{ii} = 0.$

Coefficients β_{ei} , β_{ti} , and β_{ji} are lower than or equal to one.

For β_{ti} :

$$\beta_{ti} \leq \beta_{t,max}$$

where

 $\beta_{t,max}$ [-] is the maximum value of the allocation coefficient for cost item Ni determined using method (1), (2) or (3) in this Annex.

Unit costs of the supply of the various products are determined as follows:

For electricity [CZK/kWh]

$$UCE = \frac{\sum N_{ei} \times 1,000}{E}$$

For thermal energy [CZK/GJ]

$$UCT = \frac{\sum N_{ti} \times 1,000}{T}$$

For another product [CZK/unit]

$$UCJ = \frac{\sum N_{ji} \times 1,000}{J}$$

where

- **E** [MWh] is the amount of electricity supplied to another market participant over the transmission or a distribution system or a direct line, or consumed by the producer for purposes other than own process use in the thermal installation,
- **T** [GJ] is the amount of thermal energy supplied to the customer or consumed by the producer for purposes other than own process use in the thermal installation,
- J [unit] is the amount of another product produced as part of cogeneration, which is supplied to the customer or consumed by the producer for purposes other than own process use in the thermal installation.

If the product of cogeneration is only electricity and heat, UCJ = 0 and J = 0.

The amount of unit fixed costs, **UFCT**, allocated using the allocation coefficient, β_{ti} , may not exceed CZK 250/GJ, and in the case of a heat producing installation the fuel costs of which are CZK 0/GJ it may not exceed CZK 350/GJ.

(1) The product method

The procedure can be used for any cogeneration equipment, with the exception of extraction condensing turbines.

The maximum allowed value of the allocation coefficient $\beta_{t,max}$ [-] is calculated as follows:

$$\beta_{t,max} = \frac{T_m}{E + T_m + J_m}$$

where

- T_m [MWh] is the amount of thermal energy supplied to the customer or consumed by the producer for purposes other than own use in heat production and/or distribution; the supplied heat amount in GJ is converted to MWh by dividing by 3.6;
- J_m [MWh] is the amount of another product produced as part of cogeneration, which is supplied to the customer or consumed by the producer for purposes other than own use in heat production and/or distribution, converted to MWh.

If the product of cogeneration is only electricity and thermal energy, $J_m = 0$.

(2) The reference price method

The procedure can be used for any cogeneration equipment.

The maximum allowed value of the allocation coefficient $\beta_{t,max}$ [-] is calculated as follows:

$$\beta_{t,max} = \frac{T \times C_t}{T \times C_t + E \times C_e + POZE + J \times C_j}$$

where

- Ct [CZK/GJ] is the reference heat price,
- Pe [CZK/MWh] is the reference market price of electricity,
- **POZE** [CZK] is operating aid to cogenerated electricity generation received in compliance with the ERO's price decision laying down support for supported energy sources for the relevant calendar year,

Cj [CZK/unit] is the average unit selling price of another product produced in cogeneration.

If the product of cogeneration is only electricity and thermal energy, J = 0, $C_j = 0$.

(2.1) Reference electricity price

The reference electricity price, **C**_e [CZK/MWh], is determined as follows:

$$C_e = PRM_{BL \ CAL \ YY} \times k_e$$

where

- **PRM**_{BL CAL YY} [CZK/MWh] is the arithmetic average of the resulting electricity settlement prices in EUR/MWh (the settlement price) of the BL CAL YY (base load) product for the German Power Futures market area for the following calendar year on the relevant day at European Energy Exchange AG over the period from January to June of the calendar year in which the preliminary prices are calculated. The value of the settlement price is publicly available on European Energy Exchange's website. The resulting electricity settlement price is converted to CZK/MWh at the Czech National Bank's daily EUR/CZK rate for the relevant day;
- ke [-] is the coefficient of the electricity reference price, amounting to 1.15 in the case of electricity generating plants with a total installed electrical capacity of the cogeneration units of up to 5 MW, inclusive, and to 1.10 in other cases.

(2.2) Reference heat price

The reference heat price, C_t [CZK/GJ], is determined as follows:

$$C_t = \frac{C_{ZP}}{0.91 \times \eta \times 3.6} + \frac{N_{pov}}{\eta \times 3.6} + FC_{max}$$

where

C_{ZP} [CZK/MWh] is the gas price determined as follows:

 $C_{ZP} = SERVICE PRICE + COMMODITY$

where

SERVICE PRICE [CZK/MWh] is the regulated component of the gas price, CZK 150/MWh;

- **COMMODITY** [CZK/MWh] is the arithmetic average of the resulting gas settlement prices in EUR/MWh (the settlement price) of the Calendar (Cal-YY) product for the NCG zone for the following calendar year on the relevant day at European Energy Exchange AG over the period from January to June of the calendar year in which the calculation is made. The value of the settlement price is publicly available on European Energy Exchange's website. The arithmetic average is marked up by EUR 2/MWh. The arithmetic average marked up by EUR 2/MWh is converted to CZK/MWh at the Czech National Bank's daily EUR/CZK rate for the relevant day;
- N_{pov} [CZK/MWh] is the unit cost of emission allowances;
- **η** [-] is the reference efficiency of 0.95;
- **FC**_{max} [CZK/GJ] is the maximum value of eligible fixed costs, which is allocated to heat at CZK 250/GJ; in case of a heat producing installation whose fuel

costs are CZK 0/GJ, except for the cost of fuel for start-up and stabilisation, it may not exceed CZK 350/GJ if the energy content in the fuel for start-up and stabilisation does not exceed 20% of the total energy content in the fuel;

where Npov [CZK/MWh] is

$$N_{pov} = C_{pov} \times k_t$$

where

- **C**_{pov} [CZK/t CO₂] is the average price of emission allowances calculated as the arithmetic average of the closing prices of the EEX EUA Future DEC/YY product for December of the calendar year in which the preliminary prices of thermal energy are calculated on the relevant day at European Energy Exchange AG over the period from January to June of the calendar year in which the calculation is made. The value of the settlement price is publicly available on European Energy Exchange's website. The resulting settlement price of emission allowances is converted to CZK/MWh at the Czech National Bank's daily EUR/CZK rate for the relevant day;
- k_t [t/MWh] is the reference emission factor of 0.198 t CO₂/MWh.

The Energy Regulatory Office publishes the reference electricity price, C_e and the reference heat price, C_t in a manner allowing remote access.

(3) Method based on heat supplied and produced

The procedure can be used for a complex comprised of CHP steam boilers and steam turbines.

The maximum allowed value of the allocation coefficient $\beta_{t,max}$ is calculated as:

$$\beta_{t,max} = \frac{Q_{tep+ost}}{Q_{Vn}}$$

where

- Q_{tep+ost} [GJ] is thermal energy supplied from the production plant to the thermal energy supply system or directly to customers or consumed by the producer for purposes other than the CHP plant's own use in heat production and/or distribution, net of the energy of the return flow,
- Qvn [GJ] is thermal energy produced in a boiler or an array of boilers that are part of the combined heat and power generating installation, calculated as the product of the mass flow rate of feed water times the difference between enthalpy at output from the boiler(s) and enthalpy of feed water, if this approach matches the configuration. For production plants where this approach does not match the configuration an approach that matches the configuration is used.

Thermal energy \mathbf{Q}_{Vn} can be reduced by losses between boilers and turbine sets when

- a) the production plant is comprised of units, up to 3% inclusive;
- b) otherwise, up to 8% inclusive.