Pursuant to Article 15, and in connection with Article 36 of the Energy Law (Official Gazette of the Republic of Serbia, No. 84/04), and Article 12 of the Statute of the Energy Agency of the Republic of Serbia (Official Gazette of the Republic of Serbia, No. 52/05),

The Council of the Energy Agency of the Republic of Serbia, at the Council Session held on December 16, 2008, passed the following

**DECISION**

on Amendments to the Decision on Establishing
the Access to and Use of System Charging Methodology - Natural Gas Transportation

*(This Decision was published in the Official Gazette of the Republic of Serbia No. 116/2008 on December 22, 2008)*

1. In the Decision Establishing the Access to and Use of System Charging Methodology - Natural Gas Transportation (Official Gazette of the Republic of Serbia, No. 68/06, 1/07, and 100/08), in the Access to and Use of System Charging Methodology - Natural Gas Transportation, Section III. TERMS AND DEFINITIONS, after paragraph 2 a new paragraph 3 is added and reads as follows:

“When calculations are done according to formulae defined in this methodology, all values expressed in percentages shall be divided by 100.”

2. In Section IV. SETTING MAXIMUM ALLOWED REVENUE, after paragraph 2 a new paragraph 3 is added and reads as follows:

“Cost justification shall be assessed on the basis of the nature of a particular cost by analyzing the reasons for which it was incurred, the quantity, and the prices driving a particular cost, and by benchmarking data on costs of energy entities in the previous period and costs of energy entities conducting the same energy activity in the country and the region.”

3. Section IV.1. **Common operating costs, assets, and other revenues** is amended and reads as follows:

“IV.1. **Common operating costs, assets, depreciation costs, and other revenues**

Common operating costs are operating costs that enable an energy entity performing two or more energy activities or an extra non-energy activity to operate as a whole, but which cannot be directly linked to any specific location of cost.

Common assets are assets of an energy entity that are necessary for an energy entity conducting two or several energy entities or an extra non-energy activity to function, and which cannot be directly allocated to any specific activity (intangible investments, except goodwill, immovables, plant, and equipment).

Common depreciation costs are depreciation costs of common assets incurred to enable an energy entity conducting two or several energy activities or an extra non-energy activity to function, and which cannot be directly linked to any specific location of cost.
Other common revenues are other revenues earned by employing common energy entity's assets that cannot be directly allocated to any specific activity.

Common operating costs, assets, depreciation costs, and other revenues are allocated to energy activities for which maximum allowed revenue is set in accordance with this methodology (natural gas transportation or natural gas transportation system operation), and to other energy and non-energy activities, based on transparent rules (formulae) specified in line with accounting standards and objective criteria."

4. In Section IV.2. **Natural Gas Transportation**, the introductory part is amended and reads as follows:

"An energy entity's maximum allowed revenue associated with natural gas transportation is calculated according to the formula below:

\[ MAR_t = OPEX_t + D_t + WACC \times RAB_t - OR_t + CF_t, \]

Where:
- \( t \) = regulatory period,
- \( MAR_t \) = maximum allowed revenue on account of conducting natural gas transportation over period \( t \) (dinars),
- \( OPEX_t \) = operating expenditure over the period \( t \) (dinars),
- \( D_t \) = depreciation costs in the period \( t \) (dinars),
- \( WACC \) = the rate of return on the regulatory asset base (%),
- \( RAB_t \) = regulatory asset base in the period \( t \) (dinars),
- \( OR_t \) = other revenues in the period \( t \) (dinars),
- \( CF_t \) = correction factor in the period \( t \) (dinars),

The adjusted maximum allowed revenue of an energy entity associated with natural gas transportation, with a natural gas transportation system utilization factor of less than 35\%, for the regulatory period, is calculated according to the formula:

\[ MAR_{a,t} = MAR_t \times (2.28 \times TSUF_t + 0.20) \]

Where:
- \( MAR_{a,t} \) = adjusted maximum allowed revenue associated with natural gas transportation in the period \( t \) (in dinar),
- \( TSUF_t \) = capacity utilization factor of the transportation networks of an energy entity at the beginning of the regulatory period, which is calculated from the formula below:

\[ TSUF_t = \frac{UTC_t}{DTC_t - CC_{transit}} \]

Where:
- \( UTC_t \) = utilized capacity of the gas transportation pipeline at the beginning of the regulatory period (in \( m^3/h \)),
- \( DTC_t \) = designed capacity of the gas transportation pipeline (as in line with data based on which licenses are issued) (in \( m^3/h \)).
The utilized capacity of the gas transportation pipeline at the beginning of the regulatory period is calculated according to the formula below:

\[
\text{UTC}_t = \frac{\text{MDC}(t-1)}{24} \text{ (m}^3/\text{h)}
\]

Where:

\(\text{MDC}(t-1)\) = the sum of maximum daily consumption of all system users that are metered within a month of maximum consumption on the transportation system in the year preceding the regulatory period and the maximum derived daily natural gas consumption of those system users without daily metering available, at all points of delivery on the transportation system, except transit (in m\(^3\)/day/month). The maximum daily natural gas consumption that is derived for system users with no daily metering available, is calculated from the monthly consumption in the month of maximum consumption at the relevant point of delivery in the year preceding the regulatory period, translated into daily value, increased by 20\%, and rounded off.

The costs included in the calculation of the energy entity’s maximum allowed revenue associated with natural gas transportation are set according to forecast quantities of natural gas for transportation taken from the Energy Balance of the Republic of Serbia, or on the basis data used for its preparation."

In Subsection IV.2.1. Operating Expenditure, in paragraph 1 at the end of item 3) the word: “and” is deleted and a new item 4) is added which reads as follows:

“4) part of reservations for contributions and other staff benefits, paid during the regulatory period,”

The item 4) becomes now item 5).

In paragraph 2, bullet 3, the wording: “to the amount of 1%” is replaced with the wording: “to the amount of 1,25%”

The paragraph 3 is deleted.

In Subsection IV.2.2. Depreciation Costs, paragraph 2 is amended to read as follows:

“Depreciation costs comprise costs of depreciation of existing assets at the beginning of the regulatory period and costs of depreciation of new assets to be put into service during the regulatory period in question.”

In Subsection IV.2.3. Regulatory Asset Base, paragraph 1, second bullet, the word: “value” is replaced with the wording: “net value”.

In paragraph 2, third bullet is amended and reads as follows:

“harmonization of investments with the annual programme or business plan, and development plan of the energy entity.”

Paragraphs 5 and 6 are amended to read as follows:

“Opening value of the regulatory asset base is calculated according to the following formula:

\[
\text{oRAB}_t = \text{NAV}_{0t} - \text{CC}_{0t} - \text{CWIP}_{0t}
\]
Where:
NAV<sub>t</sub> = opening net value of intangible investments (except goodwill), immovables, plant, and equipment at the beginning of the period t (dinars),

CC<sub>t</sub> = opening net value of assets funded by capital contributions for the period t (dinars),

CWIP<sub>t</sub> = opening net value of intangible investments (except goodwill), immovables, plants, and equipment under construction, which will not be commissioned over the regulatory period, or which are not justified nor/or efficient, and advance payments made towards procurement thereof at the beginning of the regulatory period (in dinars).

Closing value of the regulatory asset base is calculated according to the following formula:

cRAB<sub>t</sub> = oRAB<sub>t</sub> - D<sub>RABI</sub> + ∆Capex<sub>t</sub> - Disposals<sub>t</sub> - ∆CC<sub>t</sub> - ∆CWIP<sub>t</sub>

Where:

D<sub>RABI</sub> = depreciation costs of the regulatory asset base excluding costs of depreciation of assets funded by capital contribution over the period t which are calculated according to the method defined in this methodology (dinars),

∆Capex<sub>t</sub> = change over year t in the value of intangible investments (except goodwill), immovables, plants, and equipment under construction, and advance payments made towards procurement thereof in the period t, increased by the net value of intangible investments (except goodwill), immovables, plants, and equipment under construction, and advance payments made towards procurement thereof at the beginning of the regulatory period, which will be commissioned in the period t (dinars),

Disposals<sub>t</sub> = net value of assets that have been disposed of and/or permanently withdrawn from use in the period t (dinars),

∆CC<sub>t</sub> = change in the value of assets funded by capital contributions over the period t (dinars),

∆CWIP<sub>t</sub> = change in the value of intangible investments (except goodwill), immovables, plants, and equipment under construction and advance payments made towards procurement thereof, which will not be commissioned over the period t, or which are not justified nor/or efficient, (dinars)."

Subsections IV.2.4. Rate of return on regulated assets, IV.2.5 Other revenues, and IV.2.6. Correction element are amended and read as follows:

“IV. 2.4. Rate of Return on RAB

The rate of return on the regulatory asset base is determined as the weighted average real cost of capital of an energy entity conducting natural gas transportation.

The weighted average real cost of capital is the weighted average of rate of return on equity capital and weighted average rate of return on debt capital calculated according to weight factors of 40% for equity and 60% for debt capital, and is calculated pre-tax according to the following formula:
WACC = (equity portion * cost of equity, after tax, real) / (1 - tax rate) + debt portion * cost of debt

Where equity portion + debt portion = 1

Where:
WACC = rate of return on the regulatory asset base (%),
Equity portion = the equity portion in funding the regulatory asset base (%),
Cost of equity, after tax, real = real cost of equity capital after taxation (%),
Tax rate = corporate tax rate in line with regulations in force (%),
Debt portion = the debt portion in funding the regulatory assets base (in %),
Cost of debt = weighted average real cost of debt capital (%).
The real after-tax cost of equity capital should reflect the company's specific risk, country risk, and prevailing terms of acquiring capital on the financial market over the regulatory period.
Under this subsection, the debt capital is equal to the sum of long-term liabilities and short-term financial liabilities used for financing the regulatory asset base.
The real cost of debt capital is calculated as the weighted average real interest rate on total debt, where the weight factors are the shares of debts in total debt capital. The real cost of debt capital is acceptable to the level of cautiously and reasonably borrowed assets.

IV. 2.5. Other Revenues

Other revenues, except for revenues earned by using the system, are revenues earned by employing assets intended for conducting natural gas transportation, and may be: revenue earned from transit services, revenue earned from use of own products and merchandise, revenue from sale of assets, and other revenues.

IV. 2.6. Correction Factor

The correction factor shall be a (monetary) value whereby the maximum allowed revenue for the regulatory period (t) is decreased or increased by the difference between the actual revenue according to the annual financial report of the energy entity for t-2 regulatory period and the justified revenue for t-2 regulatory period calculated in accordance with this Methodology on the basis of the actual energy parameters and the value of justified costs and other revenues earned in the t-2 regulatory period or in previous regulatory periods for which adjustments were not made.
The correction factor is calculated according to the formula below:

\[ CF_t = (JR_{t-2} - AR_{t-2}) \times (1 + CPI_{t-2}) \]

Where:
t = regulatory period,
CF_t = correction factor over period t (dinars),
JR_{t-2} = justified revenue associated with conducting the energy activity over period t-2 and calculated in line with this Methodology on the basis of actual energy parameters and values of justified costs, and other revenues (dinars);

AR_{t-2} = actual revenue associated with conducting the energy activity over period t-2 (dinars),

CPI_{t-2} = Consumer price index in the Republic of Serbia in the period t-2 in line with data published by the relevant statistics office (in %).

In the case mentioned under paragraphs 1 and 2 of this subsection, the correction factor shall not apply to the calculation of the maximum allowed revenue for the first two regulatory periods.

In case the energy entity has data on actual energy parameters and financial reports for t-1 regulatory period at the time the price act proposal is submitted, the correction factor calculation shall be based on data from the t-1 regulatory period or earlier regulatory periods for which correction was not done. In this case, the correction element shall not apply to the maximum allowed revenue calculation for the first regulatory period.

In case regulated prices are not implemented at the beginning of the first regulatory period, the correction factor shall be calculated only for the part of the first regulatory period with implemented regulated prices, provided that the energy entity has the financial report for the part of the first regulatory period with regulated prices implemented. Where the financial report for the first part of the regulatory period with implemented regulated prices is not available, the actual revenue is calculated for the part of the first regulatory period during which the regulated prices were not implemented, by applying regulated prices.

The first regulatory period in the context of this subsection is the calendar year during which, in line with the Energy law, implemented prices of the relevant energy entity for access to and use of system (regulated prices) are determined according to this Methodology.”

5. In Section IV.3 Natural Gas Transportation System Operation, the introductory part is amended to read as follows:

“The energy entity’s maximum allowed revenue on the basis of conducting natural gas transportation system operation is calculated according to the formula below:

$$ MAR_t = OPEX_t + D_t + WACC \times RAB_t + CCL_t - OR + CF_t $$

Where:

t – regulatory period,

MAR_t – maximum allowed revenue on account of conducting natural gas transportation system operation over the period t (in dinar),

OPEX_t – operating expenditure over the period t (in dinar),

D_t – depreciation costs in the period t (in dinar),

WACC – rate of return on the regulatory asset base (%),

RAB_t – regulatory asset base in the period t (in dinar),

CCL_t – costs of covering losses within the natural gas transportation system over the period t (dinar),

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OR – other revenues in the period t (dinar),
CFt – correction factor in the period t (dinar).”

Subsection IV.3.1. Costs of Covering Losses is amended and reads as follows:

“IV. 3.1. Costs of Covering Losses

The level of costs of covering losses within the natural gas transportation system is based on the formula below:

\[ CCL_t = L_t \times C_{NGt} \]

Where:

t – regulatory period
CCLt = costs of covering losses over the period t (dinar),
Lt = quantity of natural gas required for coverage of losses within the natural gas transportation system over the period t (in m³),
C_{NGt} = justified weighted average cost of procuring natural gas, including associated costs of procuring natural gas, for coverage of losses in the period t (dinar/m³).

Quantity of natural gas required to cover losses within the natural gas transportation system over period t, is calculated according to the formula below:

\[ L_t = \frac{QD_{1t} \times LR_{1t}}{(1-LR_{1t})} \]

Where:

QD1t – natural gas quantity for delivery from the natural gas transportation system over period t (in m³),
LR1t – justified rate of loss of natural gas within the natural gas transportation system in the period t (in %).

Natural gas quantity that is taken is equal to the sum of natural gas quantities taken from: other transportation systems, from domestic gas fields which are connected with the transportation system, and from the underground natural gas storage.

Natural gas quantity delivered from the transportation system is the sum of the quantity delivered: to customers with facilities connected to the natural gas transportation system, to natural gas distribution companies connected to the natural gas transportation system, natural gas producers, underground natural gas storage, other transportation system, for transit and own transportation system requirements.

The justified rate of natural gas loss within a transportation system in the period t is determined on the basis of: actual rates of natural gas losses in the previous three years, system state analysis, benchmarking of actual rates of losses of energy entities conducting the same activity in the country and in the region, the loss reduction plan and results of implementation of reduction measures, while, however, the justified rate of loss may not exceed the actual rate over the period t-1 (in %).
The actual annual rate of natural gas loss is calculated on the basis of actual annual quantities by dividing the difference between supplied and delivered natural gas quantities by the quantity of supplied natural gas.

In Subsection IV.3.2. Meaning of other formula elements, paragraph 1, the wording: “they include costs of purchasing natural gas for transportation system balancing requirements” is deleted.

6. In Section VI. REGULATORY PERIOD, at the end of paragraph 2 the full stop is deleted and the following wording is added: “(calendar year). Documentation and data based on which the maximum allowed revenue of the energy entity is calculated shall be submitted to the Energy Agency of the Republic of Serbia, as a rule, 45 days before submission of the price act proposal for opinion.”

7. This decision shall be published in the Official Gazette of the Republic of Serbia and apply as of January 1, 2009.

No. 703/2008-D-I/5
Belgrade, December 16, 2008

The Council of the Energy Agency of the Republic of Serbia

Council President
Ljubo Macic