Pursuant to Article 15, and in connection with article 36 of the Energy Law (Official Gazette of the Republic of Serbia, No. 84/2004) and article 12 of the Energy Agency of the Republic of Serbia Statute (Official Gazette of the Republic of Serbia, No. 52/2005),

The Council of the Energy Agency, at the 21<sup>st</sup> Council Session held on 21 July 2006, passed

#### DECISION

#### FOR SETTING TARIFF ELEMENTS FOR CALCULATING PRICES FOR ACCESS TO AND USE OF SYSTEM FOR OIL TRANSPORT THROUGH OIL PIPELINES

- 1. Methodology for setting tariff elements for calculating prices for access to and use of system for oil transport through oil pipelines has been determined and is attached to this decision.
- 2. This decision is to be published in the Official Gazette of the Republic of Serbia.

The Council of the Energy Agency of the Republic of Serbia

Ref No. 511/8 Belgrade, 21 July 2006 President of the Council Ljubo Macic

## **METHODOLOGY**

#### FOR SETTING TARIFF ELEMENTS FOR CALCULATING PRICES FOR ACCESS TO AND USE OF SYSTEM FOR OIL TRANSPORT THROUGH OIL PIPELINES

(The Methodology was published in the Official Gazette of the Republic of Serbia No. 68 on August 9, 2006)

# I. SUBJECT OF THE METHODOLOGY

This Methodology determines ways of setting tariff elements for calculating prices for access to and use of system for oil transport through oil pipelines (hereafter: use of system).

# II. METHODOLOGY APPROACH

Methodology is based on the mechanism of price control for use of system for oil transport through oil pipelines, by application of the regulatory "cost plus" method which is used to set maximum allowed revenue in the regulatory period for energy entity for oil transport through oil pipelines, i.e. the price which enables a return on justified operating costs as well as a return on assets employed.

# **III. TERMS AND DEFINITIONS**

Terms used in the methodology have the following meaning:

Revenue allocation	Allocation of maximum allowed revenue on tariff elements
Section/part of pipeline	Technical-technological whole used for oil transport through oil pipelines to which all elements of maximum allowed revenue can be allocated.
Maximum allowed revenue	Maximum revenue of energy entity that reimburses all justified costs incurred while carrying out regulated energy activities in the regulatory period and allows an adequate return on regulated assets.
Location of Cost	Physical or other location in energy entity at which a specific cost is incurred
Regulatory fee	Part of tariff for access and use of system that is allowed as energy entity cost and represents income of the Energy Agency of the Republic of Serbia, in accordance with the law
Tariff elements	Parameters of tariff system that quantify the performance of regulated energy entities and calculate prices resulting from these levels of performance.

# IV. SETTING MAXIMUM ALLOWED REVENUE

Maximum allowed revenue of an energy entity is calculated based on justified operating costs incurred while carrying out energy activity of oil transport through oil pipelines and based on an adequate return on assets employed for carrying out this activity.

If during the regulatory period, due to change in Energy Balance of the Republic of Serbia, the justified operating costs on which maximum allowed revenue of energy entity is set, are significantly different to costs reasonably incurred, correction of maximum allowed revenue can be made for that regulatory period.

## IV.1. Common costs, assets and other revenues

Common costs are costs incurred while enabling operation of an entire energy entity consisting of two or more energy activities, or of an entity that besides energy activity carries out some other activity, and that cannot be directly linked to a specific cost location.

Common assets are energy entity assets that cannot be directly allocated to separate activities (e.g. land, facilities/buildings, vehicles, equipment etc.).

Other common revenues are revenues earned by employing energy entity assets that cannot be directly allocated to separate activities.

Common costs, assets and other revenues are allocated to the energy activity for which maximum allowed revenue is set, in accordance with this Methodology and to other energy and other activities, based on transparent rules (keys) set in accordance with accounting standards and objective criteria.

Part of the common costs, assets and other revenues allocated to the energy activity for which maximum allowed revenue is set in accordance with this Methodology, is included in calculating the maximum allowed revenue of the energy entity for carrying out the activity.

# IV.2. Oil transport through oil pipelines

Calculating the maximum allowed revenue of the energy entity for oil transport through oil pipelines will be done by applying the following formula:

 $MOP_t = OT_t + A_t + PPCK * RS_t - OP_T + KE_t$ 

where:

t – regulatory period

MOP<sub>t</sub> - maximum allowed revenue of the energy entity for oil transport through oil

pipelines in period t (in dinars),

OT<sub>t</sub> –operating costs in period t (in dinars),

At -depreciation costs in period t,

PPCK - rate of return on regulated assets calculated as weighted average cost of capital

(in %),

RS<sub>t</sub> – regulated assets in period t (in dinars),

 $OP_T$  – other revenues in period t (in dinars).

KE<sub>t</sub> – correction element in period t (in dinars),

Costs that are included in calculating maximum allowed revenue of energy entity for oil transport through oil pipelines are set according to planned parameters for oil transport through oil pipelines from the Energy Balance of the Republic of Serbia, i.e. according to data used for approving the Balance.

Costs for reimbursing losses in systems for oil transport through oil pipelines are not included in calculation for maximum allowed revenue of the energy entity carrying out energy activity of oil transport through oil pipelines. Loss rate for oil transport in oil pipelines is set at 0.15% where there is no possibility for measuring with flow meters, i.e. at the actual loss rate, and in cases where measuring can be done with flow meters, the rate cannot be higher than the normal loss rate of energy entities carrying out the same activity in neighbouring countries.

#### IV.2.1. Operating costs

Operating costs represent the justified costs of the energy entity for oil transport through oil pipelines and they comprise :

- 1) material costs
- 2) costs of salaries, benefits and other personal expenditures
- 3) production services costs,
- 4) non-material costs

These operating costs also include:

- environmental costs
- operating costs of assets acquired without capital contributions.
- regulatory fee that is part of the use of system tariff and which represents 0.4% of the maximum allowed revenue of the energy entity for oil transport through oil pipelines and which is set before calculating this cost.

Whether the costs are justified is assessed according to the nature of a specific cost by carrying out analyses of justification, analyses of quantity and price and benchmarking of costs against costs incurred in the previous period and against costs of energy entities carrying out the same activity.

#### IV.2.2. Depreciation costs

Depreciation costs represent costs of depreciation for the assets that are used for carrying out the energy activity of oil transport through oil pipelines, where the allowed costs of depreciation encompass the costs of depreciation of the assets acquired without capital contribution.

Depreciation costs encompass the costs of depreciation of existing assets and depreciation costs of assets that will be activated in the monitored regulatory period.

The depreciation costs of the existing assets and assets that will be activated in the monitored regulatory period, are calculated by using a pro rata method in proportion to the estimated life time of the assets.

Depreciation costs of the regulated assets that will be activated in the monitored regulatory period are calculated as that makes 50% of activated non-material investments, real estate, facilities and equipment in construction work progress and down payments for the procurement of such assets.

Allowed depreciation costs are calculated according to the following formula:

 $A_t = APS_t + AAS_t$ 

where:

A<sub>t</sub> – depreciation costs in period t (in dinars),

APS<sub>t</sub> – depreciation costs of the existing assets in period t (in dinars),

AAS<sub>t</sub> – depreciation costs of the assets that will be activated in period t (in dinars).

IV.2.3. Regulated assets

Regulated assets represent the net value of non-material investments (except goodwill), real estates, facilities and the equipment which is used for carrying out the energy activity of oil transport through oil pipelines, excluding:

- net value of the assets acquired without capital contributions, such as grants, participation of third parties in the construction of oil pipelines system, etc.
- value of non-material investments, real estate, facilities and equipment in construction work in progress and down payments for the procurement, that are not activated in the regulated period, and which are not justified nor efficient.

Justification and efficiency of an investment are set according to:

- need for development of oil transport through oil pipelines system for meeting the increase of oil demand, as well as for improvement of quality and security of supply,
- technical technological, economic and other parameters and indicators of the justification and the efficiency of the investments and,
- harmonisation of the investments with five year development plans of the energy entity.

Regulated assets form the regulatory asset base which is used for the calculation of the rate of return on assets employed that the energy entity is allowed to obtain in the regulatory period.

The value of the regulated assets is calculated as the arithmetic mean of the opening and closing values of the regulated assets in the regulatory period according to the following formula:

RSt = (pRSt + kRSt)/2

where:

RS<sub>t</sub> – regulated assets in period t (in dinars),

pRS<sub>t</sub> – opening value of regulated assets in period t,

 $kRS_t$  –closing value of regulated assets in period t ,

Opening value of regulated assets is calculated according to the following formula:

 $pRS_t = pNVS_t - pSBN_t - pNSUP_t$ ,

where:

 $pNVS_t$  – net value of non-material investments (except goodwill), real estate, facilities and equipment at the beginning of period t (in dinars),

 $pSBN_t$  – net value of the assets obtained without capital contributions at the beginning of the regulatory period t (in dinars),

pNSUPt – value of non-material investments (except goodwill), real estate, facilities and equipment in construction work in progress and down payments for the procurement of those assets at the beginning of the period t that will not be activated in the period t, or that are not justified and/or efficient, (in dinars).

The closing value of the regulated assets is calculated according to the following formula:

 $kRS_t = pRS_t - A_t + \Delta SUP_t - NOPS_t - \Delta SBN_t - \Delta NSUP_t$ 

where:

 $A_t$  –depreciation costs in period t calculated in a way that is consistent with this Methodology (in dinars),

 $\Delta SUP_t$  – change of value of non-material investments (except goodwill), real estate, facilities and equipment in construction work in progress and down payments for the procurement of these in period t,

 $NOPS_t$  – net value of assets that are discarded and/or permanently disposed of in period t,

 $\Delta SBN_t$  – change of value of assets acquired without capital contributions in period t (in dinars),

 $\Delta NSUP_t$  – change of value of non-material investments (except goodwill), real estate, facilities and equipment in construction working progress and down payments for the procurement of these and that will not be activated in period t, or that are not justified and efficient (in dinars).

IV.2.4. Rate of return on regulated assets

Rate of return on regulated assets is set as the weighted average cost of capital of energy entity carrying out the energy activity of oil transport through oil pipelines.

Weighted average cost of capital is weighted average of rate of return on equity and average rate of return on debt and is calculated prior to taxation according to the following formula:

PPCK = (SK \* CSK) / (1 - SP) + PK \* CPK,

where SK + PK = 1

where:

PPCK – rate of return on regulated assets calculated as weighted average cost of capital (in %),

SK – share of equity in financing regulated assets (in %),

CSK - actual price of equity prior to taxation (in %),

SP - rate of tax on profits (in %),

PK – share of debt in financing regulated assets,

CPK – weighted average price of debt.

Share of debt in financing regulated assets should be as high as possible in accordance with best international practice so as to produce a lower average price of equity.

Reasonable price of equity prior to taxation should reflect the specific risk of the company, risk of the country and prevailing terms of acquiring equity on financial markets in regulatory period.

Debt represents the sum of long-term liabilities and short-term financial liabilities.

The cost of debt is calculated as average weighted interest rate on borrowed assets, where the weights are given by the ratio of borrowed assets to total borrowed assets. The price of debt cannot be higher than the price of carefully and reasonably borrowed assets.

#### IV.2.5. Other revenues

Other revenues, besides revenues earned through carrying out the energy activity of oil transport through oil pipelines, are revenues earned by employing regulated assets for carrying out activities such as: revenue from selling side products, revenues earned through improving own performance, revenue earned through selling assets, revenue from capital contribution (grants) and other revenues.

#### IV.2.6. Correction element

Correction element is the amount that corrects the maximum allowed revenue for the following regulatory period, for deviation between actual revenue and revenue calculated in accordance with this Methodology and is based on actual oil quantities and the value of justified costs and revenues earned in the previous regulatory period.

When calculating the maximum allowed revenue for the first regulatory period the correction element equals 0.

# IV.3. Oil transport through oil pipelines consisting of two or more separate sections

Maximum allowed revenue of the energy entity carrying out energy activity of oil transport through oil pipelines, if the transport system consists of two or more sections, is calculated for each separate system section in accordance with this Methodology, where allocation of common costs and assets of the entire system for oil transport through oil pipelines is made according to transparent rules (keys) set in accordance with accounting standards and objective criteria. Maximum allowed revenue of energy entity carrying out energy activity of oil transport through oil pipelines is sum of maximum allowed revenues of separate sections of the system for oil transport through oil pipeline.

# V. ALLOCATION OF MAXIMUM ALLOWED REVENUE TO TARIFF ELEMENTS

Maximum allowed revenue of the energy entity carrying out the energy activity of oil transport through oil pipelines is allocated to the tariff element "energy carrier".

If the system for oil transport through oil pipelines consists of one section, the tariff element "energy carrier" is total oil quantity delivered to users of the oil transport system and is expressed in tone/100km.

If the system for oil transport through oil pipelines consists of two or more separate sections, the tariff element "energy carrier" is set for each section separately.

# VI. REGULATORY PERIOD

The first regulatory period begins on 1 January 2007.

The duration of the regulatory period is set at one year.