

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 16 December 2008, passed the following

## **DECISION**

### **on Amendments to the Decision on Establishing the Access to and Use of System Charging Methodology – Electricity Transmission**

*(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 – Electricity Transmission (Official Gazette of the Republic of Serbia, No. 68/06 and 18/07), in the Access to and Use of System Charging Methodology – Electricity Transmission, Section III – TERMS AND DEFINITIONS, after paragraph 2 the following is added and reads:

“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 the paragraph 2 a new paragraph 3 is added and reads:

“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. The 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 which are incurred to enable an energy entity performing two or more energy activities, or an extra non-energy activity, to operate, 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 (electricity transmission, or electricity transmission 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 Subsection **IV.2. Electricity transmission**, paragraph 1 of the formula explanation, the wording:

“PPCK – rate of return on regulated assets calculated as weighted average cost of capital (in %)” is replaced with the following:

“WACC – rate of return on the regulatory asset base (in %),”.

In Subsection IV.2.1. *Operating expenditure*, paragraph 1, at the end of item 3) the following word is deleted:

“and” and a new item 4) is added and reads as follows:

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

The item 4) becomes now item 5).

In paragraph 2, third bullet, the wording:” that represents 1%” is replaced with: “that represents 1,25%”. The paragraph 3 is deleted.

In Subsection IV.2.2. *Depreciation costs*, the paragraph 2 is amended and reads as follows:

“Depreciation costs encompass costs of depreciation of existing assets at the beginning of the regulatory period and depreciation costs of new assets that will be activated in the regulatory period.”

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:

“- harmonisation of investments with the annual business programme and development plan of the energy entity.”

In paragraph 5, in formula explanation, the wording: “pNSUP<sub>t</sub> – value of non-material investments”, is replaced with:” CWIP<sub>0t</sub> = opening net value of intangible investments (except goodwill).”

Paragraph 6. is amended and reads as follows:

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

$$cRAB_t = oRAB_t - D_{RAB_t} + \Delta CapEx_t - Disposals_t - \Delta CC_t - \Delta CWIP_t$$

Where:

$D_{RAB_t}$  = depreciation costs of the regulatory asset base, excluding depreciation costs of assets funded by capital contribution in the period t, calculated by using the method specified in this Methodology (dinars),

$\Delta Capex_t$  = change in the value of intangible investments (except goodwill), immovables, plants, and equipment under construction, and advance payments made towards procurement thereof over the period t, increased by the net value of intangible investments (except goodwill), immovables, plants, and equipment under construction, and of advance payments for their procurement at the beginning of the regulatory period, but which will not be commissioned over the period t (dinars),

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

$\Delta CC_t$  = change in the value of assets funded by capital contributions over the period t (dinars),

$\Delta CWIP_t$  = change in the value of intangible investments (except goodwill), immovables, plants, and equipment under construction, which will not be commissioned over the period t, or which are not justified nor/or efficient, and advance payments made towards procurement thereof (dinars).”

Subsections IV.2.4. *Rate of return on regulated assets*, IV.2.5 *Other revenues*, and IV.6 *Correction element* are amended and read as follows:

“IV.2.4. *Rate of return on regulated assets*

The rate of return on the regulatory asset base is determined as the weighted average real cost of capital.

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 on a pre-tax basis according to the following formula:

$$WACC = (\text{equity portion} * \text{cost of equity, post-tax, real}) / (1 - \text{tax rate}) + \text{debt portion} * \text{cost of debt}$$

Where

$$\text{equity portion} + \text{debt portion} = 1$$

Where:

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

Equity portion = the equity portion in funding the regulatory asset base (%),

Cost of equity, post-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 cost of the equity after taxation shall reflect the specific risk of the company, risk of the country, and prevailing terms of acquiring capital on the financial market over the regulatory period.

The debt capital in the context of this subsection 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, whereas the weight factors are the shares of debt 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, besides revenues earned on account of use of transmission system, are revenues earned by employing assets intended for conducting the electricity transmission activity, and may be: revenue from sale of by-products and services, revenue earned from use of own products and merchandise, revenue earned through selling assets, and other revenues.

#### IV.2.6. *Correction element*

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:

$$CF_t = (JR_{t-2} - AR_{t-2}) * (1 + CPI_{t-2})$$

Where:

t = regulatory period,

CF<sub>t</sub> = correction factor over period t (dinars),

JR<sub>t-2</sub> = 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<sub>t-2</sub> = actual revenue associated with conducting the energy activity over period t-2 (dinars),

CPI<sub>t-2</sub> = 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 adjustments were not made. In this case, the correction element is not applied 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 energy entity does not have the financial report for the first part of the regulatory period with implemented regulated prices, the actual revenue for the part of the first regulatory period during which the regulated prices were not implemented is calculated 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 access to and use of system prices (regulated prices) for transmission by the relevant energy entity are determined according to this Methodology. “

5. In Section **IV.3. Transmission system operation** the introductory part is amended and reads as follows:

“Setting the maximum allowed revenue for TSO is done by using the following formula:

$$MAR_{TSOt} = OPEX_t + D_t + WACC * RAB_t + C_{SSt} + CCL_t - OR_t + CF_t$$

Where:

t – regulatory period

$MAR_{TSOt}$  – max allowed revenue for carrying out electricity transmission system operation in period t (in dinars),

$OPEX_t$  –operating expenditure in period t (in dinars),

$D_t$  –depreciation costs in period t,

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

$RAB_t$  – regulatory asset base in period t (in dinars),

$C_{SSt}$  –system services costs (in dinars),

$CCL_t$  –costs of covering losses in electricity transmission system in period t (in dinars),

$OR_t$  – other revenues in period t (in dinars),

$CF_t$  – correction factor in period t (in dinars).”

Subsection IV.3.2. *Costs of covering losses* is amended and reads as follows:

“IV.3.2. *Costs of covering losses*

The costs of covering losses in the transmission system are set according to the following formula:

$$CCL_t = L_t * CL_{Et}$$

Where:

$CCL_t$  – costs of covering losses in the period t (in dinar),

$L_t$  – quantity of electricity required to cover losses within the transmission system (in kWh),

$CL_{Et}$  – electricity price for covering losses in period t (in dinars /kWh).

Quantity of electricity required for coverage of losses within the transmission system is calculated according to the formula below:

$$L_t = ED_t * LR_t / (1-LR_t)$$

Where:

$ED_t$  = electricity planned for delivery from the transmission system over period t (in kWh),

$LR_t$  = justified rate of losses of electricity within the transmission system over period t (in %).

Quantity of electricity to be delivered from the transmission system is a sum of quantities delivered to distribution systems, customers with facilities connected to the transmission network, and to neighbouring electric power systems.

The justified rate of losses of electricity within the transmission system for period t is determined from: actual rate of losses in the previous three years, system state analysis, benchmarking of actual rates of losses of energy entities conducting the same energy activity, and the loss reduction plan and measures for its implementation.

The actual annual rate of losses of electricity is calculated on the basis of actual annual quantities, by dividing the difference of total supplied and delivered electricity by the total quantity of electricity that is supplied. The total electricity supplied is equal to the sum of quantities of electricity: supplied from generation capacities connected to the transmission network, and from neighbouring electric power systems.

The electricity price for covering losses is the price as set by the total costs of purchasing electricity of the energy entity trading in electricity to supply tariff customers and the costs of that energy entity calculated in accordance with the electricity pricing methodology for tariff customers.”

After subsection IV.3.2. *Costs of covering losses* a new subsection is added and reads as follows:

#### “IV.3.2.a *Other revenue*

Other revenues, except for revenue earned on account of transmission system operation, are revenues earned by employing assets intended for conducting transmission system operation, as follows: revenue earned by applying the electricity cross-border transmission mechanism, revenue from allocation of interconnection capacities, revenue earned from sale of by-products and services, revenue earned from use of own products and merchandise, revenue earned through selling assets, and other revenues.”

In subsection IV.3.3. *Meaning of other elements of the formula*, after paragraph 2 a new paragraph 3 is added and reads as follows:

“Operating costs for conducting transmission system operation do not include the regulatory fee cost.”

6. In Section VI. REGULATORY PERIOD, at the end of paragraph 2, the item is deleted and the following 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 shall apply as of January 1, 2009.

No. 703/2008-D-I/9

Belgrade, December 16, 2008

**The Council of the Energy Agency of the Republic of Serbia**

Council President  
Ljubo Macic