In accordance with Article 15, Paragraph 1, Item 2 of the Energy Law (Official Gazette of the Republic of Serbia, No. 84/2004) and Article 12 of the Statute of the Energy Agency of the Republic of Serbia (Official Gazette of the Republic of Serbia, No. 52/2005),

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

### DECISION

# ON ESTABLISHING THE METHODOLOGY FOR SETTING TARIFF ELEMENTS FOR CALCULATING ELECTRICITY PRICES FOR TARIFF CUSTOMERS

- 1. This Decision shall establish the Methodology for Setting Tariff Elements for Calculating Electricity Prices for Tariff Customers, which is attached to this Decision and constitutes an integral part thereof.
- 2. This decision shall be published in the Official Gazette of the Republic of Serbia.

Council of the Energy Agency of the Republic of Serbia

President of the Council

Ref. No.

Belgrade, 21 July 2006

Ljubo Macic

## **METHODOLOGY**

# FOR SETTING TARIFF ELEMENTS FOR CALCULATING ELECTRICITY PRICES FOR TARIFF CUSTOMERS

## I. SCOPE OF THE METHODOLOGY

This Methodology shall determine the manner of setting tariff elements for calculating electricity prices for tariff customers, including the price of electricity generated and the prices of services for tariff customers, as well as elements for setting the price of heating energy generated in combined heating and power plants (cogeneration process).

# **II. METHODOLOGY APPROACH**

The Methodology is based on the mechanism of price control of the electricity generated, the price of services for tariff customers and the price of heating energy generated in the combined process, by application of the regulatory "cost plus" method, which is used to set the maximum allowed revenue in the regulatory period

for the energy entities performing the activities of electricity generation and electricity and heating energy generation in the cogeneration process, electricity trading for the purpose of supplying tariff customers (hereinafter: wholesale trade) and electricity retail trading for the needs of tariff customers (hereinafter: retail trade), i.e. the price which enables the coverage of justified operational costs, as well as the appropriate return on assets employed in the activities of electricity generation and electricity and heating energy generation in the cogeneration process.

The maximum allowed revenue of an energy entity shall be allocated to tariff elements on the basis of:

- 1) planned energy parameters, structure and value of electricity facilities, and
- 2) the share of variable and fixed costs in the total costs of the energy entity.

The energy entities' revenue from the performance of energy activities in the regulatory period, regulated in accordance with this Methodology, shall be calculated on the basis of values of the tariff elements. The values of tariff elements represent the tariff system accounting units for billing the electricity delivered to tariff customers.

#### **III. TERMS AND DEFINITIONS**

The terms used in the methodology shall have the following meanings:

Revenue allocation	Allocation of the maximum allowed revenue on tariff elements;
Maximum allowed revenue	Maximum revenue of an energy entity which covers all justified costs incurred by performance of the regulated energy activity in the regulatory period and allows an adequate return on regulated assets;
Location of cost	Physical or other location in an energy entity at which a particular cost is incurred;
System services	Services required in order to provide safe, reliable and stable operation of the electricity power system. System services provide frequency regulation and power transformation (primary, secondary, tertiary regulation), voltage regulation and reactive power;
Tariff elements	Calculation parameters of the tariff system whereby the performance of regulated energy entities is quantified and prices resulting from these levels of performance are calculated.

Other terms used in this Methodology shall have the same meaning as in the Energy Law.

## IV. SETTING MAXIMUM ALLOWED REVENUE

The maximum allowed revenue of an energy entity shall be calculated separately for every energy activity, on the basis of justified operational costs, and also on the basis of adequate return on assets employed for performing the activities of electricity generation and electricity and heating energy generation in the cogeneration process.

If during the regulatory period, justified operational costs on the basis of which maximum allowed revenue of the energy entity was initially set become significantly different from the reasonably incurred costs due to objective circumstances (a change in the Energy Balance of the Republic of Serbia or a significant change in the price of imported electricity), maximum allowed revenue for that regulatory period may be adjusted.

## IV. 1. Common Costs, Assets and Other Revenues

Common costs shall be those costs which are incurred in order to enable an energy entity performing two or more energy activities, or another different activity in addition to the energy activity, to operate as a whole, but are not directly attributable to any specific cost location.

Common assets shall be those assets of the energy entity which cannot be directly allocated to specific activities (e.g. land, building structures, vehicles, equipment and the like).

Other common revenues shall be those revenues realized by employing energy entity's assets which cannot be directly allocated to specific activities.

Common costs, assets and other revenues shall be allocated to the energy activity for which maximum allowed revenue is set, in accordance with this Methodology (electricity generation, electricity and heating energy generation in the cogeneration process, wholesale trade and retail trade) and to other energy activities and any other activities, according to transparent rules (formulas) established in accordance with accounting standards and objective criteria.

The appertaining part of common costs, assets and other revenues allocated to the energy activity for which the maximum allowed revenue is set in accordance with this Methodology, shall be included in the calculation of the maximum allowed revenue of the energy entity for the performance of that activity.

# IV. 2. Electricity Generation

Maximum allowed revenue of an energy entity for the performance of the activity of electricity generation shall be calculated per generation units, according to the following formula:

```
MOPt = OTt + At + PPCK * RSt - PZNt - OPt + KEt, where
OTt = VOTt + FOTt, therefore
MOPt = VOTt + FOTt + At + PPCK * RSt - PZNt - OPt + KEt
```

## where:

t – regulatory period,

MOPt –maximum allowed revenue of the energy entity for the performance of the activity of electricity generation in the period t (dinars),

OTt – operational costs in the period t (dinars),

At – depreciation costs in the period t (dinars),

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

RSt – regulated assets in the period t (dinars),

PZNt – penalty for unavailability on the basis of exceeded planned rate of equivalent forced interruptions in the period t (dinars),

OPt – other revenues in the period t (dinars),

KEt – adjustment factor in the period t (dinars),

VOTt – variable operational costs in the period t (dinars),

FOTt – fixed operational costs in the period t (dinars).

The costs included in the calculation of the maximum allowed revenue shall be determined according to data on the planned electricity generation from the Energy Balance of the Republic of Serbia, i.e according to the data used for preparation thereof.

## IV. 2.1. Operational Costs

Operational costs shall represent the justified costs incurred by the performance of the energy activity of electricity generation, and comprise:

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

These operational costs shall also include:

- environmental protection costs, and
- operational costs of assets acquired without capital contributions.

Operational costs incurred by the performance of the energy activity of electricity generation may be variable and fixed operational costs.

Variable operational costs shall represent the justified costs which alter with the change in the volume of electricity generation, such as the costs of coal, other fuels, chemicals, materials, generation related liabilities to the state and other variable operational costs. These costs shall be determined according to the technical and energy parameters of the generation unit, consumption standards and the estimated market prices for the regulatory period.

The cost of coal for electricity generation, for which a market price cannot be determined, shall be calculated for coal production units (coal mines) in the manner established in Clauses IV.1. and IV.2. of this Methodology, i.e. by applying the "cost plus" method. The cost of other fuels shall be set according to the estimated market prices for the regulatory period.

Fixed operational costs shall represent the justified costs which do not alter with the change in the volume of electricity generation.

The assessment of justifiability of the costs shall be conducted with regards to the nature of the cost in question, by analysis of its purposefulness, analysis of quantity and price, as well as benchmark analysis of the data on costs from the previous period and costs of energy entities performing the same energy activity in the country and the region.

# IV. 2.2. Depreciation Costs

Depreciation costs shall represent costs of depreciation of the assets used for the purpose of performing the energy activity of electricity energy generation; depreciation costs shall also include the costs of depreciation of the assets acquired without capital contributions.

Depreciation costs shall comprise the costs of depreciation of existing assets and costs of depreciation of assets to be placed in service during the regulatory period in question.

Depreciation costs of existing assets and assets to be placed in service during the regulatory period in question shall be calculated using the proportional method over the estimated useful life of the said assets.

Depreciation costs of the assets to be placed in service during the regulatory period in question shall be calculated to the base equal to 50% of the value of intangible investments placed in service, construction work in progress and advance payments made towards procurement thereof.

Depreciation costs shall be calculated according to the following formula:

At = APSt + AASt

where:

At – depreciation costs in the period t (dinars),

APSt – depreciation costs of the existing assets in the period t (dinars),

AASt – depreciation costs of the assets to be placed in service during the period t (dinars).

# IV. 2.3. Regulated Assets

Regulated assets shall represent the net value of intangible investments (except goodwill), property, plant and equipment employed in the performance of the energy activity of electricity generation, exclusive of:

- net value of the assets acquired without capital contributions, such as grants and the like, and
- the value of intangible investments, construction work in progress and advance payments made towards procurement thereof, which are not placed in service during the regulatory period, or which are not justified and/or efficient.

Justifiability and efficiency of investments shall be determined according to:

- requirements in terms of electricity generation system development, for the purpose of meeting the increase of electricity demand, as well as for the purpose of improving the security and quality of supply,
- technical, technological, economic and other parameters and indicators of the justifiability and efficiency of investments, and
- harmonisation of the investments with five year development plans of the energy entity.

Regulated assets shall be the basis for calculation of the rate of return on assets employed that the energy entity may obtain in the regulatory period.

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

```
RSt = (pRSt + kRSt) / 2
```

#### where:

RSt – regulated assets in the period t (dinars),

pRSt – opening value of the regulated assets in the period t (dinars),

kRSt – closing value of the regulated assets in the period t (dinars).

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

```
pRSt = pNVSt - pSBNt - pNSUPt,
```

### where:

pNVSt – net value of intangible investments (except goodwill), property, plant and equipment at the beginning of the period t (dinars),

pSBNt – net value of assets acquired without capital contributions at the beginning of the period t (dinars),

pNSUPt – value of intangible investments, construction work in progress and advance payments made towards procurement thereof at the beginning of the regulatory period which will not be placed in service during the regulatory period, or which are not justified and/or efficient (dinars).

Closing value of regulated assets shall be calculated according to the following formula:

$$kRSt = pRSt - At + \Delta SUPt - NOPSt - \Delta SBNt - \Delta NSUPt$$

#### where:

At – depreciation costs in the period t calculated by using the method determined by this Methodology (dinars),

 $\Delta SUPt$  - change in the value of intangible investments (except goodwill), construction work in progress and advance payments made towards procurement thereof in the period t (dinars),

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

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

ΔNSUPt – change in the value of intangible investments (except goodwill), construction work in progress and advance payments made towards procurement thereof, which will not be placed in service during the period t, or which are not justified and/or efficient (dinars).

## IV. 2.4. Rate of Return on Regulated Assets

The rate of return on regulated assets shall be determined as the weighted average price of capital of an energy entity performing the energy activity of electricity generation.

The weighted average price of capital shall be the weighted average of rate of return on equity capital and weighted average rate of return on debt capital and shall be 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 price of capital (%),

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

CSK – real price of equity capital prior to taxation (%),

SP – rate of corporate tax according to the current legislation (%),

PK – the share of debt capital in financing regulated assets (in %),

CPK – weighted average price of debt capital (%).

The share of debt capital in financing regulated assets should be as high as possible in accordance with best international practice so as to ensure a lower average price of the total capital.

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

With respect to this Methodology, debt capital shall represent the sum of long-term liabilities and short-term financial liabilities.

The price of debt capital shall be calculated as weighted average interest rate on total borrowed assets, where the weight factors are the share of borrowed assets in total borrowed assets. The price of debt capital may not be higher than the price of cautiously and reasonably borrowed assets.

IV.2.5. Penalty for Unavailability on the Basis of Exceeded Planned Rate of Equivalent Forced Interruptions

The penalty for unavailability on the basis of exceeded planned rate of equivalent forced interruptions shall be set on the basis of actual and planned rates of equivalent forced interruptions in the previous regulatory period, and shall be calculated according to the following formula:

$$PZNt = RKt_{-1} * \{1 - [(1 - OSPZt_{-1}) / (1 - PSPZt_{-1})]\}$$

#### where:

PZNt – penalty for unavailability in the period t on the basis of exceeded planned rate of equivalent forced interruptions in the period t-1 (dinars),

 $RKt_{-1}$  – the part of maximum allowed revenue that is reimbursed from the tariff element "available capacity" in the period t-1 (dinars),

OSPZt<sub>-1</sub> – actual rate of equivalent forced interruptions in the period t-1 (%),

PSPZt<sub>-1</sub> – planned rate of equivalent forced interruptions in the period t-1 (%).

If the actual rate of equivalent forced interruptions is lower than the planned rate of equivalent forced interruptions, the resulting discrepancy shall not be not calculated, i.e. PZNt = 0.

In calculation of the maximum allowed revenue for the first regulatory period, the penalty for unavailability on the basis of exceeded planned rate of equivalent forced interruptions shall be zero.

## IV. 2.6. Other Revenues

Other revenues shall be revenues realised by employing assets intended for performing the activity of electricity generation exclusive of the revenues from electricity generation for tariff customers, such as: part of the revenue from selling electricity in the free market, part of the revenues from providing system (ancillary) services, revenue from selling heating energy and industrial steam (except in electricity and heating energy generation in the cogeneration process), revenue from selling by-products and services in the market, revenue earned through use of own products and services, revenue from sale of assets, deferred revenue in the period from realization of grants, and other revenues.

Other revenue from selling electricity energy in the free market shall be calculated as 50% of the planned revenue from electricity sale in the free market. The quantity of electricity shall be calculated as the difference between the total planned electricity generation of a generation unit according to the Energy Balance of the Republic of Serbia and the contract obligations towards the energy entity performing the activity of electricity trading for the purpose of supplying tariff customers, in accordance with the annual balance of tariff customers' demand for electricity.

The revenue from providing system services shall be calculated on the basis of fixed operational costs, depreciation costs and the share of capacity intended for provision of system services in the total installed capacity of that power plant, according to the following formula:

PSUt = (FOTt + At) \* KSUt / IK

#### where:

KSUt –capacity intended for the provision of system services, in the period t (MW),

IK – total installed capacity (MW).

From the revenue from provision of system services obtained in this way, 16% shall be attributed to providing services of voltage and reactive power regulation, and the rest to providing services of frequency regulation and power transformation (primary, secondary and tertiary regulation).

The remaining revenue from the provision of system services shall be calculated as 80% of the value of revenue from the provision of system services (PSUt), calculated according to the abovementioned formula.

# IV. 2.7. Adjustment Factor

The adjustment factor shall be a value (monetary) whereby the maximum allowed revenue for the next regulatory period is adjusted by the discrepancy between the actual revenue and revenue calculated in accordance with this Methodology, on the basis of actual energy parameters and the value of justified costs and other revenues realized in the previous regulatory period.

In calculation of the maximum allowed revenue for the first regulatory period, the adjustment factor shall be zero.

# IV. 3. Electricity Generation and Electricity and Heating Generation in the Cogeneration Process (Combined Heating and Power Plants)

The maximum allowed revenue of an energy entity for the performance of the activity of electric energy generation in a combined heating and power plant shall be calculated in the manner established in Clauses IV.1. and IV. 2. of this Methodology.

The total maximum allowed revenue for generation of heating energy, electric energy and industrial steam in combined heating and power plants shall comprise the part covering fixed costs and the part covering variable costs.

The part of the maximum allowed revenue covering total fixed costs (UFTt) shall be allocated to products based on the share of the value of assets for production of a particular product in the total value of capital assets.

The part of energy entity's fixed costs allocated to the product "electric energy" shall be calculated according to the following formula:

FEEt = UFTt \* UE, where UFTt = FOTt + At + PPCK \*  $RS_{\tau}$  where:

t – regulatory period,

FEEt – the part of fixed costs that is allocated to the product "electric energy", in the period t (dinars) (FEEt),

UFTt – total fixed costs of the energy entity in the period  $\tau$  (dinars),

UE – the share of value of assets for generation of electric energy in the total assets value of the energy entity.

The part of fixed costs allocated to products "heating energy" and "industrial steam" shall be calculated by applying the same principles used in calculation for the product "electric energy".

Variable operational costs of the energy entity shall be determined and allocated to products according to the planned quantities of each of the products and the technical and energy parameters of generation units for the planned mode of operation. Variable costs allocated to products "electric energy" (VEEt), heating energy (BTE<sub>t</sub>) and industrial steam shall be determined in this way.

The maximum allowed revenue attributed to the product "electric energy" shall be calculated according to the following formula:

MOPt = VEEt + FEEt - PZNt - OPt + KEt

The meanings and explanations from Clause IV.2. shall apply to symbols in this formula and to the method of calculating its elements.

### IV. 4. Wholesale Trade

Maximum allowed revenue of an energy entity for the performance of the activity of wholesale trade shall be calculated according to the following formula:

MOPt = OTt + At + NEEt + KEt

where:

t – regulatory period.

MOPt – maximum allowed revenue of the energy entity for the performance of the activity of wholesale trade in the period t (dinars),

OTt – operational costs in the period t (dinars),

At – depreciation costs in the period t (dinars),

NEEt – the costs of electric energy procurement in the period t (dinars),

 $KE_{T}$  – adjustment factor in the period t (dinars).

Costs included in the calculation of maximum allowed revenue of an energy entity performing the activity of wholesale trade shall be set according to the data on the total quantity of electric energy required by tariff customers from the Energy Balance of the Republic of Serbia, i.e according to data on the quantity of required electric energy from the annual balance of tariff customers' demand for electric energy.

# IV. 4.1. Operational Costs

Operational costs shall represent the justified costs incurred by performance of the energy activity of wholesale trade, and comprise:

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

Operational costs shall also include the costs of employees whom the energy entity is obliged to finance, according to primary and secondary legislation of relevant state bodies.

The assessment of justifiability of the costs shall be conducted with regards to the nature of the cost in question, by analysis of its purposefulness, analysis of quantity and price, as well as benchmarking of costs against costs incurred in the previous period and against costs of energy entities performing the same energy activity.

## IV. 4.2. Depreciation Costs

Depreciation costs shall represent costs of depreciation of the assets used for the purpose of performing the energy activity of wholesale trade.

Depreciation costs shall comprise the costs of depreciation of existing assets and costs of depreciation of assets to be placed in service during the regulatory period in question.

Depreciation costs of the existing assets and assets to be placed in service during the regulatory period in question shall be calculated by using the proportional method over the estimated useful life of the assets.

Depreciation costs of the assets to be placed in service during the regulatory period in question shall be calculated to the base of 50% of intangible investments placed in service, construction work in progress and advance payments made towards procurement thereof.

Depreciation costs shall be calculated according to the following formula:

At = APSt + AASt

where:

At – depreciation costs in the period t (dinars),

APSt – depreciation costs of the existing assets in the period t (dinars),

AASt – depreciation costs to be placed in service during the period t (dinars).

# IV. 4.3. Costs of Electric Energy Procurement

The costs of electric energy procurement shall be calculated as the total planned costs of electric energy procurement in the regulatory period, according to the quantity established in the annual balance of tariff customers' demand, including the losses in transmission and distribution networks. These shall comprise the costs of electric energy procurement from the producers that have the obligation of electric energy generation for the needs of tariff customers by deploying the generation units in order of efficiency, and the costs of procurement from other producers in the country, in the free electric energy market, or from imports. For the electric energy procured from other producers in the country, in the free electric energy market, or from imports, the costs shall be calculated by multiplication of planned quantities and forecasted electric energy prices.

The costs of procured electric energy shall also include all associated costs of electric energy procurement in accordance with International Accounting Standards.

# IV. 4.4. Adjustment Factor

The adjustment factor shall be a value (monetary) whereby maximum allowed revenue for the next regulatory period is adjusted by the discrepancy between actual revenue and revenue calculated in accordance with this Methodology, on the basis of actual energy parameters and the value of justified costs and other revenues realized in the previous regulatory period.

In calculation of the maximum allowed revenue for the first regulatory period, the adjustment factor shall be zero.

#### IV. 5. Retail Trade

Maximum allowed revenue of an energy entity for the performance of the activity of retail trade shall be calculated according to the following formula:

MOPt = OTt + At + NEEt + TDt + NRPt + KEt

where:

t – regulatory period,

MOPt – maximum allowed revenue for the performance of the activity of retail trade in the period t (dinars),

OTt – operational costs in the period t (dinars),

At – depreciation costs in the period t (dinars),

NEEt – costs of electric energy procurement in the period t (dinars),

TDt – costs of use of the distribution system in the period t (dinars),

NRPt – charge for the receivables collection risk in the period t (dinars),

KEt – adjustment factor in the period t (dinars).

Costs included in calculating maximum allowed revenue of an energy entity performing the activity of retail trade shall be determined according to data on the total quantity of electric energy required by tariff customers from the Energy Balance of the Republic of Serbia, i.e according to data on the required quantity of electric energy from the annual balance of tariff customers' demand for electric energy.

# IV. 5.1. Operational Costs

Operational costs shall represent the justified costs incurred in the process of performing the energy activity of retail trade, and comprise:

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

The assessment of justifiability of the costs shall be conducted with regards to the nature of the cost in question, by analysis of its purposefulness, analysis of quantity and price, as well as benchmarking of costs against costs incurred in the previous period and against costs of energy entities performing the same energy activity.

# IV. 5.2. Depreciation Costs

Depreciation costs shall represent costs of depreciation of the assets used for the purpose of performance of the energy activity of retail trade in electric energy for the needs of tariff customers.

Depreciation costs shall comprise the costs of depreciation of existing assets and costs of depreciation of assets to be placed in service during the regulatory period in question.

Depreciation costs of the existing assets and assets to be placed in service during the regulatory period in question shall be calculated by using the proportional method over the estimated useful life of the assets.

Depreciation costs of the assets to be placed in service during the regulatory period in question shall be calculated to the base of 50% of intangible investments placed in service, construction work in progress and advance payments made towards procurement thereof.

Depreciation costs shall be calculated according to the following formula:.

At = APSt + AASt

where:

At – depreciation costs in the period t (dinars),

APSt – depreciation costs of the existing assets in the period t (dinars),

AAst – depreciation costs of the assets to be placed in service during the period t (dinars).

# IV. 5.3. Costs of Electricity Purchase

The costs of electricty purchase shall represent the total costs of electric energy procurement for the needs of tariff customers as set by the annual balance of the tariff customers' needs for electric energy, which comprise the sum of costs of electric energy procurement from the energy entity performing the activity of wholesale trade and of the costs of electric energy received from generation units connected to the distribution network, calculated in accordance with this Methodology.

The costs of procured electric energy shall also include all associated costs of electric energy procurement in accordance with International Accounting Standards.

## IV. 5.4. Costs of Use of the Distribution System

These costs shall be determined according to the annual balance of the tariff customers' needs for electric energy, and represent the costs of services of using the electric energy distribution system inclusive of the costs of services of using the electric energy transmission system.

# IV. 5.5. Charge for the Receivables Collection Risk

Charge for the receivables collection risk, with respect to this Methodology, shall represent the cost of bad debts provisions and shall be calculated according to the following formula:

NRPt = n \* MOPmpt' / (1 - n)

where:

NRPt – charge for the receivables collection risk in the period t (dinars),

n – the percentage rate of the charge for the receivables collection risk in the period t (%),

MOPmpt' – maximum allowed revenue in the period t, calculated without regards to the charge for the receivables collection risk (dinars).

The percentage rate of the charge for the receivables collection risk for energy entities performing the energy activity of retail trade may not exceed 2%.

## IV. 5.6. Adjustment Factor

The adjustment factor shall be a value (monetary) whereby the maximum allowed revenue for the next regulatory period is adjusted by the discrepancy between actual revenue and revenue calculated in accordance with this Methodology, on the basis of actual energy parameters and the value of justified costs and other revenues earned in the previous regulatory period.

In calculation of the maximum allowed revenue for the first regulatory period, the correction element shall be zero.

#### V. ALLOCATION OF MAXIMUM ALLOWED REVENUE TO TARIFF ELEMENTS

# V. 1. Electric Energy Generation

The maximum allowed revenue from electric energy generation (MOPt) shall be allocated to the tariff elements as follows:

- available capacity, expressed in kW,
- active energy, expressed in kWh, and
- system services charge.

#### Available Capacity

The tariff element "available capacity" shall be the net output capacity of a generation unit adjusted by the rate of planned forced outages, during the regulatory period.

The part of the maximum allowed revenue, equal to the sum of total allowed fixed operational costs, depreciation costs and return on assets employed, reduced by the amount of the penalties for exceeded planned rate of unavailability based on the rate of equivalent forced interruptions, further reduced by the amount of other revenues realized by employing regulated assets, and adjusted by means of the adjustment factor, shall be allocated to the tariff element "available capacity".

The part of the maximum allowed revenue, which is realized from the tariff element "available capacity", shall be calculated according to the following formula:

RKt = FOTt + At + PPCK \* RSt - PZNt - OPt + KEt,

### where:

RKt – the part of the maximum allowed revenue that is realized from the tariff element "available capacity" in the period t (dinars),

The meanings of all elements in the formula shall be identical to those listed for calculation of the maximum allowed revenue for the activity of electric energy generation.

The value of the tariff element "available capacity" shall be expressed in dinars per month.

# **Active Energy**

The tariff element "active energy" shall be the quantity of active energy from the Energy Balance of the Republic of Serbia, or as set on the basis of the data used for preparing the Balance, intended for delivery to the transmission system during the regulatory period.

The part of the maximum allowed revenue, equal to the total sum of allowed variable operational costs for delivered electric energy, shall be allocated to the tariff element "active energy", i.e.:

AEt = VOTt

The value of the tariff element "active energy" shall be expressed in dinars per kWh and calculated as the quotient of the part of maximum allowed revenue realized from the tariff element "active energy", and the active energy.

## System Services Charge

The revenue from the provision of the system services, calculated in accordance with Clause IV. 2.6 of this Methodology, shall be allocated to the tariff element "system services charge" in full.

The allowed revenue associated with the tariff element "system services charge" shall be set for the regulatory period, and its value expressed in dinars per month.

# V. 2. Heating Energy Generation

The maximum allowed revenue from heating energy generation, calculated as the sum of the part of fixed and the part of variable costs allocated to the product "heating energy", shall be allocated to the following tariff elements:

- capacity, expressed in kWt, and
- heating energy, expressed in kWht.

## Capacity

The tariff element "capacity" shall be equal to the heating power of the combined heating and power plant.

The fixed costs allocated to the product "heating energy" (FTEt) shall be allocated to the tariff element "capacity" (Kt), i.e.:

## Kt = FTEt

The value of the tariff element "capacity" shall be expressed in dinars per month.

# **Heating Energy**

The tariff element "heating energy" is the quantity of heating energy intended for delivery to energy entities for heating energy supply of tariff customers during the regulatory period.

Variable costs allocated to the product "heating energy" (VTEt) shall be allocated to the tariff element "heating energy" (TEt), i.e.:

#### TEt = VTEt

The value of the tariff element "heating energy" shall be expressed in dinars per kWht.

#### V. 3. Wholesale Trade

The maximum allowed revenue shall be allocated to the following tariff elements:

- power, expressed in kW and
- active energy, expressed in kWh.

The tariff element "power" shall be the annual sum of monthly maximum powers supplied to energy entities performing the activity of retail trade in electricity for the needs of tariff customers (retail traders). The monthly maximum power of a retail trader shall be determined for each plant, by joint metering on every voltage level, as the highest sum of mean 15-minute coincident powers. For the purpose of calculation of the tariff element value for the regulatory period, "power" shall be the sum of monthly maximum powers intended for sale to retail traders for the needs of tariff customers, as stated in the Energy Balance of the Republic of Serbia, i.e. in the annual balance of the tariff customers' needs for electricity.

The tariff element "active energy" shall be the quantity of active energy intended for sale to retail traders for the needs of tariff customers, as stated in the Energy Balance of the Republic of Serbia, i.e. in the annual balance of the tariff customers' needs for electricity.

## Power and Active Energy

The maximum allowed revenue realized from the tariff elements "power" and "active energy" (MOPset) shall be the difference between the maximum allowed revenue for the activity of wholesale trade (MOPt) and the revenue realized by selling electricity for the purpose of covering losses in the transmission and distribution systems (PGt), according to the following formula:

MOPset = MOPt - PGt

## where:

MOPset – the part of maximum allowed revenue realized from the tariff elements "power" and "active energy" in the period t (dinars) (MARpet),

PGt – the revenue realized by sale of electricity for the purpose of covering losses in the transmission and distribution systems, calculated on the basis of the required quantities for loss coverage and the average electricity selling price of the energy entity performing the activity of wholesale trade in the period t (dinars) (LCt).

The part of maximum allowed revenue realized from the tariff element "power" shall be calculated according to the following formula:

Svt = MOPset \* (RKt + MOPt') / MOPt,

#### where:

Svt – the part of maximum allowed revenue pertaining to the element "power" in the period t (dinars),

RKt – costs of electricity received from the producer, pertaining to the tariff element "available capacity" in the period t (dinars),

MOPt' – maximum allowed revenue reduced by the sum of allowed costs of electricity procurement (MOPt' = MOPt – NEEt) in the period t (dinars).

The value of the tariff element "power" shall be expressed in dinars per kW and calculated as the quotient of the part of maximum allowed revenue realized from the tariff element "power", and the power.

The part realized from the tariff element "active energy" shall be calculated according to the following formula:

AEvt = MOPset \* AEt / MOPt,

#### where:

AEvt – the part of maximum allowed revenue pertaining to the element "active energy" in the period t (dinars),

AEt – allowed costs of electricity procurement pertaining to the tariff element "active energy" in the period t (dinars).

The value of the tariff element "active energy" shall be expressed in dinars per kWh and is calculated as the quotient of the part of maximum allowed revenue realized from the tariff element "active energy", and the active energy of tariff customers.

#### V. 4. Retail Trade

Allocation of maximum allowed revenue to tariff elements and translation of tariff elements into rates shall be set by the tariff system for billing the electricity to tariff customers, based on the average electricity price for tariff customers and the relations between rates. The average electricity price shall be calculated as the quotient of the maximum allowed revenue for the activity of retail trade and the total quantity of electricity intended for delivery to tariff customers, according to the annual balance of the tariff customers' needs for electricity.

# **VI. REGULATORY PERIOD**

The first regulatory period shall commence on 1 January 2007.

The duration of the regulatory period shall be one year.