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Pursuant to Article 55, paragraph 5 of the Law on the Use of Renewable Energy Sources ("Official Gazette of RS", No. 40/21),

Ministry of Mining and Energy brings

Rules

on the method of calculation and presentation of the share of all types of energy sources in the sold electricity

"Official Gazette of RS", No. 2 of 13 January 2023

Article 1.

This Rulebook prescribes the way in which the final customer is calculated and shows the share of all types of energy sources in the sold electricity, as well as the way of controlling the calculation.

Article 2

Some terms used in this policy have the following meanings:

1) the used and expired guarantees of origin are only those guarantees of origin which were in the possession of the supplier and which, in the sense of the regulations governing the guarantees of origin, are considered used or expired;

2) the electricity sold is the electricity consumed by the end customers;

3) electricity produced is net electricity from the power plant to the electricity network, which excludes:

(1) the consumption of electricity in connection with that production,

(2) pumping / storage energy,

4) the national residual mix is the structure of electricity sold in the Republic of Serbia whose structure of origin has not been proven by the used guarantees of origin, which is necessary for the suppliers of the share of all types of energy sources in the sold electricity to the end customers,

5) the incentive system is a set of instruments at the hands of privileged producers of electricity in the production of renewable energy sources in accordance with the Law;

6) the residual mix of the supplier is the structure of the supplier's electricity supply to its end customers whose structure of origin has not been proven by the utilized guarantees of origin and which is necessary for the calculation of the share of all types of energy in the sold electricity to end customers;

7) The tariff package of services is the supplier's offer to the final customers to conclude a supply contract that the final customers can freely choose, or not choose, compiled in accordance with the Law governing the field of energy and regulations regulating trade and consumer protection:

(1) by which the supplier obliges the final customers to provide them with a certain price, in addition to electricity supply, a certain share or shares of all or

some of the renewable energy sources in the electricity sold, on the basis of a statement on the use of guarantees of origin, or

(2) by which the supplier does not oblige the final customers to provide them with a certain share or shares of all or some of the renewable energy sources in the electricity sold;

8) The third area, are all states, i.e. control areas, if the transmission system operator is not a member of the European Association of Bodies for the Issue of Guarantees of Origin, i.e. in the event that the transmission system operator is a member of the European Association of Bodies for the Issue of Guarantees of Origin, the third areas are states, i.e. control areas whose attribute structure does not enter into the calculation of the European attribute mix;

9) attributes represent the primary energy sources that describe electricity, regardless of whether it is an electricity produced, sold, imported or exported;

10) the control area is an integral part of the interconnection operated by one transmission system operator.

Other terms used in this Regulation, which are not defined in paragraph 1 of this Article, have the meaning specified by the regulations governing the use of renewable energy sources.

Article 3

The share of all types of energy in the sold electricity to the final customers is determined for the previous calendar year, as the supplier calculates:

1) the share of all types of energy sources in the sold electricity sold by the supplier to all its end customers;

2) the share of all types of energy sources in the sold electricity sold by the supplier to its end customers using the same tariff package of supplier services.

The supplier determines, calculates and calculates the share of all types of energy sources in the sold electricity to its final customers referred to in paragraph 1 of this Article exclusively by applying the mathematical formula from item. 9.1. and 9.2. Methodologies for the calculation and presentation of the share of all types of energy sources in electricity to end customers (hereinafter referred to as: Methodology), which is printed as an attachment with this Rulebook and makes it an integral part.

Article 4

The structure of electricity generated in the incentive system is determined for the total electricity generated by the privileged electricity producers in the previous calendar year.

The Guaranteed Supplier shall determine and publicly publish on its website a report on the quantities and structure of electricity produced in the incentive system by the end of February of the current year for the previous year.

The guaranteed supplier, authorized contracting party, in displaying the structure of generated electricity in an incentive system uses the energy source divide and displays the structure of the electricity produced in the system under the acquisition in accordance with point. 3-6. Methodology.

The supplier shall, authorized contracting party, during the calculation of the share referred to in Article 3, paragraph 1 of this Rulebook, use the data from the report referred to in paragraph 2 of this Article in accordance with the Methodology.

Article 5

The transmission system operator shall calculate the national cut- off mix in accordance with point 9.1. Methodology, based on:

- 1) data on the producer's produced electricity for each power plant that is connected to a transmission, distribution or closed distribution network;
- 2) data on total electricity sold to all end customers in the transmission, distribution or closed distribution network;
- 3) data on losses of electricity in a transmission, distribution or closed distribution network;
- 4) data on the realized exchange of electricity by individual borders;
- 5) data on the exchange of attributes with a European mix of attributes in accordance with the Methodology;
- 6) data on used and expired guarantees of origin;
- 7) data on received and delivered electricity by buyer - producers..

For the purposes of the budget referred to in paragraph 1 of this Article, the operator of the distribution and closed distribution system shall provide the transmission system operator with the data referred to in paragraph 1, item 1) - 3) of this Article for power plants connected to the distribution or closed distribution network until March 1 of the current year for the previous calendar year.

For the purposes of the budget referred to in paragraph 1 of this Article, the operator of the distribution and closed distribution system shall submit the data referred to in paragraph 1 item 1) of this Article to the operator of the transposed system, stating the source of energy or technology for each power plant.

Article 6

By 31 May of the current year, the transmission system operator shall publish on its website an annual report on the national residual mix for the previous calendar year .

The annual report referred to in paragraph 1 of this Article shall contain:

- 1) data on production and consumption of electricity in the Republic of Serbia, import and export of electricity, taking into account the structure of electricity;
- 2) data on issued, expired and used by them the guarantees of origin of electricity in the Republic of Serbia;
- 3) data on the structure of the national residual mix and the data used in determining the structure of the national residual mix;
- 4) the share of individual energy sources in the national cut- off mix.

The transmission system operator shall, in the preparation of the annual report referred to in paragraph 1 of this Article, use the division of the energy sources and the structure of electricity in accordance with point. 3-6. Methodology.

The supplier shall use the data from the report referred to in paragraph 2 of this Article in the calculation of the share referred to in Article 3, paragraph 1 of this Charger.

Article 7

Suppliers deliver to end customers once a year in the period from July 1 to July 31 of the current year for the previous calendar year, a report containing an overview of electricity in the electricity sales of all energy countries in the region..

The report from paragraph 1 of this article is submitted as an integral part of the bill or with the bill for the electricity sold, which is issued in the period from July 1 to July 31 of the current year.

The report referred to in paragraph 1 of this Article shall be prepared in accordance with point. 11.1. and 11.2. Methodology.

Suppliers, prior to submitting the report to the customer referred to in paragraph 1 of this Article, shall publish on their website the following information for the previous calendar year:

- 1) the share of individual energy sources in total electricity sold to all its end customers;
- 2) the structure of the energy of the erased guarantees of the origin of electricity to all its end customers;
- 3) link to the transmission system operator's report for the previous calendar year referred to in Article 6 of this Rulebook;
- 4) link to the web site of the originating source registry, as well as the guarantor of the overseer, in relation to the incentive system referred to in Article 4 of this Regulation.

Article 8

For the purposes of budget control, the supplier shall submit to the Energy Agency of the Republic of Serbia by 31 July of the current year for the previous year:

- 1) data on total sold electricity to its end customers;
- 2) information on the total used guarantees of origin for each tariff package of services;
- 3) data on the structure of electricity sold for each tariff package of services separately, in accordance with the Methodology;
- 4) the trial report of the report to the final customer and at least one reporting to the buyer who sent it in the previous year.

Article 9

On the day of entry into force of this rulebook, the Rulebook on the method of calculation and presentation of the share of all types of energy sources in the sold electricity ("Official Gazette of RS", number 96/17) ceases to be valid.

Article 10

This Rulebook shall enter into force on the eighth day from the date of its publication in the "Official Gazette of the Republic of Serbia".

No. 110-00-40 / 2021-10

In Belgrade, December 26 , 2022

Minister,

Dubravka Đedović, s.r.

ANNEX

METHODOLOGY FOR THE BUDGET AND EXPRESSION OF THE PART OF ALL TYPES OF ENERGY SOURCE IN SOLD ELECTRIC ENERGY BY LATEST BUYERS

1. The shares of all types of energy sources in the sold electricity to the end- users are calculated using the appropriate mathematical formulas determined by this methodology.
2. All mathematical formulas in this methodology use mathematical matrices describing the energy for the calculation needs of point 1 of this methodology, the elements, symbols, meanings and methods of use in the formulas are described in greater detail in point. 3-7. this methodology.
3. Attributes are used as elements in mathematical matrices and have 12, in the following order:
 - (1) solar energy,
 - (2) wind energy ,
 - (3) hydropower,
 - (4) geothermal energy,
 - (5) energy from biomass,
 - (6) energy from renewable sources whose source is not determined,
 - (7) energy from coal,
 - (8) energy from brown coal and lignite,
 - (9) energy from natural gas,
 - (10) energy from petroleum products,
 - (11) energy from fossil fuels whose source is not determined,
 - (12) nuclear energy.

In addition to dividing electricity into attributes, electricity is presented in mathematical formulas as structured energy, total energy and energy stagnation.

4. Structured energy is a mathematical matrix expressed as a vector of a kind with 12 elements. Structured energy is symbolically represented with square brackets [SE], where the symbol "SE" in square brackets at this point has only an abstract meaning for the purposes of explanation; otherwise, in concrete formulas for structured energy, different symbols are placed in the brackets depending on what they symbolize (eg [RM], [IE], [FiT], etc.)

Each element of a structured energy matrix represents one of the attributes of the 12 attributes defined in point 3 of this methodology.

The elements of the structured energy matrix express the amount of energy and their unit is MWh.

When in the mathematical formulas behind the corner brackets, the sign "i" is put in the following way: "[] and", this means that the i-th element of the structured energy matrix is represented, that is, the "i" can have a value from 1 to 12, depending on the attribute it represents.

5. The total energy is the sum of 12 elements of the structured energy matrix and is expressed in MWh.

Mathematically, the total energy is expressed as $E = \sum [SE]$

If the total energy is known, but its structure is not known, the total energy in the mathematical formula is denoted as E.

6. The energy structure is expressed in the form of a mathematical matrix, and it is a vector of a type with 12 elements, where each element of the vector represents one of the attributes of the identified 12 attributes from item 3 of this methodology.

The structure of energy is symbolically represented with curly braces "{SE}", where the symbol "SE" in curly brackets at this point has only an abstract meaning for the purposes of explanation; otherwise, in the specific formulas for the energy structure, different symbols are placed in curly brackets depending from what they symbolize (eg {RMbI}, {Si}, {SS} and the like).

Elements in the energy structure ectre represent the percentage value of the attribute share, with the sum of all 12 elements of one vector 100%.

When in a mathematical formula a symbol is placed in curly braces "{ }", this means that the structure of energy is represented.

When, in mathematical formulas, the sign "i" is put behind the curly brace in the following way: "{ } i", which means that the i-th element of the energy structure matrix is represented, that is, the "i" can have a value from 1 to 12, depending on the attribute it represents.

7. The computer collection and retrieval operations of mathematical matrices are performed by performing the specified calculation operations exclusively between the corresponding matrix elements. For example, the addition of two matrices [SEa] and [SEb], each of which has 12 elements that match the

previously defined attributes, the sum of which is the third matrix [SEc], is mathematically described by the following equation:

$$[SEa] + [SEb] = [SEc]$$

whereby the following operations are performed with certain elements:

$$[SEa]_1 + [SEb]_1 = [SEc]_1$$

...

$$[SEa]_{and} + [SEb]_{and} = [SEc]_{and}$$

...

$$[SEa]_{12} + [SEb]_{12} = [SEc]_{12}$$

Similarly to the previous one, the energy structure is calculated as the ratio of the structured energy and total energy, which is mathematically described by the ratio of the structured energy matrix and total energy:

$$\{SE\} = [SE] / \Sigma [SE]$$

where the values of the individual elements of the energy structure are calculated for each attribute individually according to the equation:

$$\{SE\}_i = [SE]_{and} / \Sigma [SE]$$

8. All data refer to the period of the previous calendar year, unless otherwise provided in these Rules.

BUDGET OF NATIONAL RESIDUAL MIX

9.1. National residual mix of electricity without correction with the European mix of attributes [NRMbE] is calculated according to the formula:

$$[NRMbE] = [NRMbI] - [IE]$$

wherein:

- [NRMbI] - structured energy of the national residual g of the electricity without correction for export to the third area determined according to the following formula:

$$[NRMbI] = [UP] + [ISGP] + [UE] - [IZGP] - [FiT]$$

wherein:

- [UP] - structured total electricity produced in the Republic of Serbia determined by the transmission system operator,

- [ISGP] - structured energy of expired guarantees of origin of electricity in the register of guarantees of origin in the period from April 1 of the previous year to March 31 of the current year,

- [UE] - structured net imported third-generation electrical energy calculated as:

$$[UE] = \Sigma (E_j * \{S_j\})$$

wherein:

- E_j - net physical imported electricity at the border with the state j .

- {Sj} - the energy structure of the country from which the imports were made, and is determined on the basis of the electricity production data in that country published by the European Network of Transmission System Operators for Electricity (ENTSO). Exceptionally, the structure of net imported electricity from each third area bordered by the Republic of Serbia can be based on the latest available data published by the relevant EU-level institution that publishes data on electricity production in that country or on the data of the relevant institution in the third area that publishes data on electricity production,

- [IZGP] - structured energy issued guarantees of origin of electricity in the register of guarantees of origin for production from the previous calendar year,

- [FiT] - the structured energy of electricity taken from the incentive system.

[IE] - structured energy of net exported electricity determined according to the formula:

$$[IE] = \{NRMbI\} * \sum Eiz$$

where :

- $\sum Eiz$ - total net exported electricity

- {NRMbI} - energy structure of the national residual electricity mix without correction for export to third areas

9.2. The National Residual Electricity Mix [NRM] is calculated according to the formula :

$$[NRM] = [NRMbE] + [EM]$$

wherein:

- [NRMbE] - a national residual mix of electricity without correction with a European mix of attributes,

- [EM] - a structured exchange of energy with a European mix of attributes, which can either be transferred from a nationalized mixed mix into a European mix of attributes of electricity or taken into the national residual mix of electricity from the European electricity attribute of electricity. In addition, the exchange energy with the European mix of the EM attributes is calculated according to the following formula:

$$EM = Euk - \sum [ISKGP] - \sum [FiT] - \sum [NRMbE]$$

wherein:

- Euk - the total energy sold to all end customers in the Republic of Serbia, including energy to cover losses in the transmission, distribution or closed distribution electricity network,

- $\sum [ISKGP]$ - total energy utilized guarantee of the electricity in the register of the guarantee of origin for the consumption in the previous year, and the used guarantee of origin in the other areas of the consumption of the previous calendars which year, all for the purpose of proving to end customer from Serbia that a certain amount of electrical energy generated from renewable energy sources,

- $\sum [FiT]$ - the total electric power taken from the system of stimulation.

If $EM > 0$ to tional residual mix assumes the attributes of a European mix of attributes and in this case, structured energy exchange with European mix of attributes is calculated as:

$$[EM] EM = \{*\} EAM$$

wherein:

{EAM} - European structure attributes of mix

If the $EM < 0$ National and residual mix surrender attributes in a European mix of attributes and in this case, structured energy exchange with European mix of attributes is calculated as:

$$[EM] EM = \{*\} NRMbE$$

CALCULATION OF THE SHARE OF ALL TYPES OF ENERGY SOURCES IN ELECTRICITY SUPPLIERS sold to end customers

10.1. Udeo all kind of energy source in the sold electricity supplier which is sold to end customers all SS {} is calculated as:

$$\{SS\} = \frac{[IG] + [FiT] * Es/Euk + (Es - \sum[IG] - \sum[FiT] * Es/Euk) * \{NRM\}}{Es}$$

wherein:

- [IG] structured energy utilized guarantee of origin of the supplier for consumption in cur single calendar year the register guarantee of origin and the used guarantee of origin in the other fields for consumption in the previous year, all for the purpose of proving to end customer from Serbia that a certain amount of electrical e energy produced from renewable energy sources,
- Es total energy sold by the supplier to its end customers
- euk total energy that is sold to all end customers in the Republic of Serbia, including energy to cover losses in the transmission, distribution, or a closed distribution power network
- {BAT} national energy structures of the residual electricity of mix
- [FiT] structured electrical energy taken from the system of stimulation

10.2. The share of all types of energy sources in the sold electricity sold by the supplier to end customers using the same tariff package service supplier STM {} is calculated as:

wherein:

- [IGtm] structured energy utilized guarantee of origin and of the supplier to the consumer in the previous calendar year the register guarantee of origin and the used guarantee of origin in the other fields for consumption in the previous year, all for the purpose of proving to end customer from Serbia that was measured

by the one of the amount of ink consumed electricity produced from renewable energy sources, and intended for a particular tariff package

- ETM - total energy sold by the supplier to end customers using the same tariff package

- {SRM} - structure is energy mix residual mix of the supplier, and whose structured energy is calculated according to the following formula:

$$[SRM] = (Es - \sum [IG] - \sum [FiT] * Es / Euk) * \{BAT\} + [FiT] * Es / Euk$$

wherein:

- Es total energy sold by the supplier to all its end users

- [IG] structured energy utilized guarantee of origin of the supplier for the consumption of the previous calendar year the register guarantee of origin and the used guarantee of origin in the other fields for consumption in the previous year, all for the purpose of proving to end customer from Serbia that a certain amount of electricity consumed produced from renewable energy sources,

- [FiT] structured energy taken from the system of stimulation

- euk total energy that is sold to all end- to Buyers in Serbia

- {BAT} national energy structures of the residual mix

REPORT SUPPLIERS

11.1. The report of the supplier under Article 7, paragraph 1 hereof shall contain:

(1) The basic data of a final customer,

(2) information on your plan provider that is the aklužio with end customers,

(3) information about the structure of the electricity that provides the supplier within the data plan, if this service is included in the data plan in, and if not, the supplier states that the tariff service package contains no obligation of the supplier to provide the desired structure of electricity to the end customer,

(4) data about the consumption of the end customer, the period of energy supply, clearing the measuring points and the contract / s for the supply of electric power, for which the calculation sate report to the final customer,

(5) information on the structure of the share of individual energy sources in total sold to electricity suppliers all its end customers,

(6) a link to the website reports the transmission system operator for the preceding calendar year and a link to the website of the register of guarantees of origin and guaranteed supplier in connection with a system of incentives,

(7) accompanying explanation of the importance of understanding and interpreting the report to the customer.

Data from the sub-items. (3) and (5) of this item is representative of the supplier who By applying the division of the power source and the structure of electric energy in accordance with the items. 3-6. this methodology, a pie chart, whereby the individual portions of the power source shown circular cut-outs and

that each clip is shown share expressed as a percentage in the two decimal places,

11.2. The final customer that has changed supplier may, in the period from 1 July to 31 December of the current year, from the supplier who had supplied the previous year that prompted him to submit the report referred to in Article 7, paragraph 1 hereof.

In the ultimate buyers with several billing metering points, the supplier prepares a report to the end customer from Article 7, paragraph 1 hereof for each tariff package.

If the supplier with the buyer has concluded tariff more service packages, and which undertakes to kr Ajnj customer provide the same structure of the electricity supplier can consolidate the final customer report by Article 7, Paragraph 1 of this document for the different tariff service packages.

If a customer during the reporting period with the same supplier to change the tariff package, the supplier shall report the final customer separately for each tariff package that is used.

The supplier may report the end customer from Article 7 paragraph 1 of this Ordinance shall be submitted in electronic form only if the final customer gave previous consent to this type of delivery.

The final customer and supplier can, with customer reporting under Article 7, paragraph 1 hereof, arranged and further reporting on the origin of electricity, and on the structure of electricity.