MARKET CODE

December 2025

In accordance with Article 109, paragraph 1, point 12) and Article 175, paragraph 2 of the Law on Energy (*The Official Gazette of the Republic of Serbia*, Nos. 145/14, 95/18 - as amended, 40/21, 35/23 - as amended, 62/23, 94/24 and 109/25 – as amended) and Article 28, paragraph 1, point 29 of the Articles of Association of the company Elektromreža Srbije Belgrade (*The Official Gazette of the Republic of Serbia*, No. 88/16), with all its subsequent amendments and supplements, the Assembly of the Joint Stock Company Elektromreža Srbije Belgrade, at its 180th extraordinary session, held on 22 December 2025, hereby adopts this:

MARKET CODE

1 GENERAL PROVISIONS

1.1 MARKET CODE

1.1.1 Market Code (hereinafter: the Code) regulates more precisely the balance responsibility of market participants, the balancing electricity market, calculation of balancing group imbalances, calculation of balance responsible parties' financial settlement, financial settlement in managing consumption through aggregation, covering of expenses incurred in re-dispatching in the distribution system, payment security instruments and the criteria for determining the amount and period for which is requested, calculation of electricity for the purposes of system balancing and ensuring the safe operation of the system, the manner of provision and procedure of procurement of ancillary services, obligations of market participants in terms of ensuring the needed reserve capacity, in case when a transmission system operator may not ensure such a capacity through a market mechanism, the procedure for data exchange between market participants involved in aggregating and other participants, the methodology for calculation of the maximum price of balance capacity reserve for procurement of balancing capacity in case of an exemption according to market principles, and other issues relevant for the operation of the electricity market.

1.2 COMMUNICATION

1.2.1 The written communication among the transmission system operator, distribution system operator, closed distribution system operator, market operator and other market participants, as well as delivery of invitations, decisions, notices and other documents, is done as a direct delivery through couriers, mail, registered mail, e-mail or an

1.2.2 information system.

1.2.3 The delivery is deemed completed on the day of market participant's receipt of the written notification, or on the day when it is entered into the information system, in accordance with this Code.

If the transmission system operator, distribution system operator, closed distribution system operator, market operator or market participants change their principal place of business, phone number, fax number or e-mail address, they are obliged to notify each other without any undue delay.

1.3.1

1.3 COMMISSION FOR MONITORING IMPLEMENTATION OF THE MARKET CODE

1.3.2

1.3.3 The Commission for Monitoring Implementation of the Market Code (hereinafter: Commission) is an advisory body which monitors the implementation of the Market Code and reviews initiatives for amendment and/or supplement of this Code.

The transmission system operator ensures the conditions for the Commission's work.

Members of the Commission are representatives of the market participants who have previously arranged the balance responsibility, as follows:

- 4 representatives of the transmission system operator, where one of them acts as the Chairperson of the Commission;

- 1 representative of the power producer which has the dominant participant status,
- 1 representative of power producers which don't have the dominant participant status,
- 1 representative of RES power producers that is not a feed-in tariff beneficiary,
- 1 representative of the distribution system operator,
- 1 representative of the closed distribution system operator,
- 1 representative of market operators,
- 1 representative of the guaranteed supplier,
- 1 representative of the last resort supplier,
- 1 representative of suppliers,
- 1 representative of wholesale suppliers,
- 1 representative of final customers whose facilities are connected to the transmission system
- 1 representative of active customers whose facilities are connected to the transmission system
- 1 representative of electrical energy storage operators whose facilities are connected to the transmission system
- 1 representative of the aggregator.

1.3.4 A representative of the Energy Agency of the Republic of Serbia (hereinafter: the Agency) participates in the activities of the Commission, without voting and decision making rights.

1.3.5 The Commission member who represents a group of electricity market participants is appointed for a period of two years.

1.3.6 Representatives of the group of electricity market participants are appointed via direct election by the said electricity market participants, in line with the procedure organised, publicly and transparently. by the transmission system operator.

1.3.7 The Commission shall adopt the Rules of Procedure that regulate:

- the organisation and manner of the Commission's work;
- the organisation and manner of holding the Commission sessions;
- the course of a session;
- the compilation and delivery of the minutes of meeting, decisions, conclusions, opinions, proposals, recommendations, and the like;
- keeping files and materials that have resulted from the Commission's activities
- and other matters of significance for the work of the Commission

2 GLOSSARY

2.1 DEFINITIONS

Certain terms used in this Code, within the meaning of this Code, shall have the following meanings:

Aggregation group - A group of generating modules, controllable load and electricity storages, unified by the aggregator.

Balancing group – The virtual area which can withdraw/from which electricity may be withdrawn, and which is used for calculation and financial settlement in terms of balance responsibility. It includes a set of points for injection/withdrawal of electricity in the transmission or distribution system, as well as the receipt and delivery of the electricity per electricity trading blocks.

Balance responsible party – An electricity market participant which is balance responsible for imbalances of its balancing group in the electricity market.

Electricity trading block – Reported electricity exchanges between two balancing groups in the same bidding zone (internal trade), or one balancing group and a partner from another bidding zone (exchanges between bidding zones), in a given time interval, with a defined value of the block and the direction of electricity .

Evaluation intervals are four-hour blocks for which balancing service providers submit bids at daily auctions for balancing capacity, and they are as follows: 00:00-04:00, 04:00-08:00, 08:00-12:00, 12:00-16:00, 16:00-20:00 and 20:00-24:00.

Time interval – The time period for which the nomination of daily plans is made for electricity trading blocks between bidding zones is 1 hour, while the one for nomination of daily plans is made for production, consumption and blocks of electricity exchange within bidding zones is 15 minutes.

Daily base price – The price published by the market operator which represents a median price of the hourly prices realised in the accounting interval for which this price is calculated on the organised electricity market in Serbia for the relevant market day.

Dominant participant – A balancing service provider in charge of balancing entities whose installed electricity generation capacity and storage capacity exceeds 40% of the total value of the installed power of all electricity generation capacities in the commercial area which do not use any variable entities.

Bidding zone - the biggest geographical area within which the electricity market participants can exchange electricity without allocation of transmission capacity

Information system – Information and telecommunication infrastructure for gathering, processing, transfer, publishing and storage of information.

Balancing Capacity Procurement Calendar - A calendar denoting time periods for purchase of balancing capacity by the transmission system operator and the deadlines for delivery of an invoice for procurement of balancing capacity, compiled by the TSO and published at its website.

Electricity Market Settlement and Payment Calendar - A calendar which determines the dates of issuance of invoices by the transmission system operator and the maturity of these

invoices for regular obligations in accordance with this Code, which is compiled by the transmission system operator and published on its website.

Withdrawal/Injection point – A place where electricity is withdrawn or injected for which it is possible to provide information on the realized injection or withdrawal of the electricity in the accounting (billing) period.

Maximum price is a price that balancing service providers may offer at an auction for balancing capacity in the corresponding evaluation interval for each type and direction in €/MW/h.

Imbalance netting – A market mechanism for exchange of energy between transmission system operators from different bidding zones in real time with a view to avoiding any activation of reserve in opposite directions.

Accounting interval – a temporal unit for calculating imbalances of balance responsible parties at the electricity market, which amounts to 15 minutes.

Accounting period – The period for which the invoice for a monthly fee is issued for imbalance of the balancing group and the invoice for the engaged balance energy (from the second calendar day of a month at 00:00 h until the first calendar day of the following month at 24:00 h).

Opportunity cost is a cost of a missed opportunity of wholesale electricity market participants due to the obligation to provide balancing capacity for the needs of the transmission system operators in €.

Market day – The time period that includes 96 accounting intervals, starting with the first accounting interval at 00:00 (Central European Time). In the day of the switch from summer to winter daylight saving time, the market day has 100 accounting intervals. In the day of the switch from winter to summer daylight saving time, the market day has 92 accounting intervals.

Other terms used in this Code which are not listed in Chapter 2.1 have the same meanings as in the Law on Energy (hereinafter: the Law) and the Law on the Use of Renewable Energy Sources. In accordance with the Law on Energy and the Law on the Use of Renewable Energy Sources, the term "secondary reserve" has the same meaning as the term "Automatic Frequency Restoration Reserve", while the term "secondary regulation" has the same meaning as the term "energy from the Automatic Frequency Restoration Reserve".

2.2 ACRONYMS

Acronyms used in this Code:

aFRR – Automatic Frequency Restoration Reserve

aFRRe – balancing energy resulting from the activation of the Automatic Frequency Restoration Reserve

aFRReD – balancing energy resulting from the activation of the Automatic Frequency Restoration Reserve Downward

aFRReG – balancing energy resulting from the activation of the Automatic Frequency Restoration Reserve Upward

avg – average data value

ABE – total activated balancing energy

BRP - balance responsible party

Y – year

GCC – Grid Control Cooperation - cooperation for imbalance netting

AOC– Annual opportunity cost

D – market day

d – calculator of days in the quarter

EN – energy values used for calculation of risk value

EI –Accepted electricity trading block which a balancing group delivers to another bidding zone

EIC W – unique Energy Identification Code for identification of a balancing service provider resource

EIC X – unique Energy Identification Code for identification of electricity market participants

EIC Z – unique Energy Identification Code for identification of a Withdrawal/ Injection (W/I) point

ENTSO-E – European Network of Transmission System Operators for Electricity

EW – Accepted electricity trading block which a balancing group receives from another bidding zone

EUR – euro

FCR – Frequency Containment Reserve

h – calculator of the corresponding evaluation interval hour

UMCN – unique master citizen number

QRP – quarterly reference price

M – month

MF1 – monthly fee for imbalances of the balancing group, received by the BRP

MF2 – monthly fee for imbalances of the balancing group, paid by the BRP

MP – maximum price for each of the types and directions of balancing capacity for appropriate evaluation interval and quarter

mFRR – Manual Frequency Restoration Reserve

mFRRe – Balancing energy resulting from the activation of the Manual Frequency Restoration Reserve for the balancing system

aFRReD – Balancing energy resulting from the activation of the Manual Frequency Restoration Reserve Downwards for the balancing system

mFRReG – Balancing energy resulting from the activation of the Automatic Frequency Restoration Reserve Upwards for the balancing system

mFRRs – Balancing energy resulting from the activation of the Manual Frequency Restoration Reserve for ensuring secure operation of the balancing system

aFRRDS – Balancing energy resulting from the activation of the Manual Frequency Restoration Reserve Downwards for ensuring secure operation of the balancing system

mFRRGS – Balancing energy resulting from the activation of the Manual Frequency Restoration Reserve Upwards for ensuring secure operation of the balancing system

WIP – Withdrawal/Injection point

N – number of days in the quarter

NBS – National Bank of Serbia

UDS – unbalanced daily schedules

BGIF – fee for the balancing group imbalance

upward – subscript denoting the upwards direction of ensuring balancing capacity

downward – subscript denoting the direction of ensuring balancing capacity down

BGI –balancing group imbalance

ai – subscript denoting the accounting interval

P – period for which a fee for imbalanced daily schedule is calculated

VAT– Value Added Tax

TIN – Tax Identification Number

AIBG – acceptable balancing group imbalance

AHRP – average hourly reference price

BSP – balancing service provider

Q – quarter ∈ {Q1, Q2, Q3, Q4}

q – quarter calculator

br – subscript denoting a balancing resource

RV – risk value for a case of default by a BRP for an accounting period

ref – code denoting a reference market

RSD –Serbian dinar

HQBC – required hourly quantity of balancing capacity

HOC – Hourly Opportunity Cost

system

T – evaluation interval ∈ {0–4h, 4–8h, …, 20–24h}

t – evaluation interval calculator

TMP – total metered position of the balancing group

TEW – total electricity withdrawn at the withdrawal/ injection points

TNP – total nominated position of the balancing group

TEI– total electricity injected at the withdrawal/ injection points

c – subscript denoting a contract

AP – average price of balancing energy for a calendar year

BCP – balancing capacity price in the appropriate hour at the reference market

SP – settlement price

Yh – number of hours in a year

3 BALANCE RESPONSIBILITY

3.1 INTRODUCTION

Balance responsibility on the electricity market is an obligation of market participants to, for each accounting interval:

(a) ensure a balance of production, consumption, and electricity trading blocks;

3.1.1 (b) assume financial responsibility towards the transmission system operator for:

- unbalanced daily schedules after completion of the process of intraday modification of daily schedules
- imbalance resulting from differences in realized production and consumption and accepted electricity trading blocks, in view of imbalance adjustments
- imbalances resulting from an imposed electricity trading block in case that operational limitations are applied in accordance with the rules governing the operation of the transmission system (the Grid Code).

3.1.2 Market participants have the right to transfer their balance responsibility to another participant and to assume the balance responsibility of another participant pursuant to the agreement on the balance responsibility transfer, in accordance with the Law.

3.1.3 An electricity supplier which has concluded, for one or several withdrawal/injection points, a full supply contract with the final customer, shall assume the balance

3.1.4 responsibility for those withdrawal/injection points.

If a supplier transfers its balance responsibility to another market participant, that market participant shall assume the balance responsibility for all withdrawal/injection

3.1.5 points of the final customer with whom the supplier has concluded a full supply contract.

In the case that supplier who has concluded, for one or several withdrawal/injection

3.1.6 points, a full supply contract with the final customer, has not regulated its balance responsibility, the final customer is treated as the one with no supplier and as the one who has not regulated its balance responsibility for those withdrawal/injection points.

3.1.7 If the final customer has not regulated its balance responsibility but has concluded a supply contract on a pre-defined quantity of electricity, the final customer shall be treated as the one who does not have a supplier.

3.1.8 In case that a market participant is a BRP and, in addition to the bilateral/organised market, also participates, or a part of its balancing group participates, in the balancing market, it shall be the BRP for withdrawal/injection points for which it has undertaken balance responsibility for electricity trading blocks, and for enforcement of orders for activation of balancing energy resulting from operation at the balancing service market.

In case that a participant which is a BRP participates only in the balancing market, it is a BRP for enforcement of orders for activation of balancing energy resulting from operation at the balancing service market.

3.2 BALANCE RESPONSIBILITY AND BALANCING GROUPS

Only one market participant can be a BRP for one balancing group. This market participants must be registered as a BRP in a manner regulated in Section 3.3.

The obligations of a BRP and of market participants regarding the assumption of the balance responsibility are stipulated in Sections 3.3. and 3.6. of this Code, and in the act governing the switching of suppliers and aggregators.

3.2.1

Each withdrawal/injection point in the transmission system and distribution system must be assigned to one balancing group. The process of transferring the withdrawal/injection point from one balancing group to another is stipulated in Section 3.6. and in the rules on supplier and aggregator switching.

3.2.2

3.2.3

The BRP nominates the daily schedule for each balancing group, as defined in the Grid Code.

3.2.4

If it is ascertained that there was a period of unauthorized withdrawal or injection of electricity through the withdrawal/injection point, that withdrawal/injection point will be, when calculating the balance responsibility, assigned to the balancing group responsible for the aggregate point of injection into the transmission, distribution or closed distribution system operator, for covering energy losses in the transmission, distribution, or closed distribution system, depending on the system to which this injection point is connected.

3.2.5

3.2.6

Each BRP is obliged to, at its own expense, provide all required communication and information systems necessary for communication with the transmission, distribution and closed distribution system operators, in accordance with the rules governing the operation of the transmission, distribution and closed distribution system and with this Code.

3.3 PROCEDURE FOR ACHIEVING THE STATUS OF A BALANCE RESPONSIBLE PARTY

3.3.1

An electricity market participant that wants to achieve the BRP status shall submit the application for BRP registration to the transmission system operator, in accordance with the rules determined by the transmission system operator and published on its official website.

3.3.2

The application for the BRP status must contain at least the following information about the applicant:

(a) the business name, principal place of business, registration number, TIN and EIC X of the applicant (for legal persons),

(b) the full name, residential address and UMCN of the applicant (for individuals);

3.3.3

(c) the names and contact details of the persons in charge of communication with the transmission system operator;

(d) the names of persons authorised to conclude a contract.

In addition to the application referred to in point 3.3.2., the applicant with the principal place of business abroad must provide the following documents:

(a) an excerpt from a business registry or court registry no older than 3 months as of the date of application submission;

(b) a certificate that the applicant is not subject to bankruptcy and liquidation proceedings, issued by a competent institution, no older than 3 months as of the date of application submission;

(c) the balance sheets and income statements with an independent auditor report for the previous three years, or a shorter period, if the applicant has been doing business for a period of less than three years. If the applicant is not an audit obligor, it shall submit a statement confirming that.

(d) the business name, registration name and TIN of the tax representative, if any

These documents must be submitted to the transmission system operator in Serbian or English language. If the original documents are not in Serbian or English language, they must be accompanied by a translation in Serbian or in English, certified by an authorized court interpreter.

3.3.4 In addition to the submitted information referred to in points 3.3.2. and 3.3.3, the transmission system operator shall also verify information on bankruptcy and liquidation and the applicant's financial statements, as well as information on the status of the license for performing energy activity, and on the tax representative from publicly available sources or from registries of transmission system operators.

3.3.5 The transmission system operator is obliged to verify and ascertain the orderliness of the of the application and documentation referred to in point 3.3.3 within 3 working days from the date of the submission of the application.

3.3.6 If the information in the application is incomplete or incorrect or if the documentation is incomplete, or if the transmission system operator has not been able to obtain all the necessary information referred to in point 3.3.3, the TSO s obliged to notify the applicant thereof within 3 working days and give them another deadline of 15 working days to correct the application and submit the missing documentation. If, even after an

3.3.7 extension of the deadline, the applicant fails to submit the required information and documentation, the applicant will be deemed not to have filed the application.

3.3.8 The TSO is obliged to, no later than 5 working days after receipt of a correct application, provide the applicant with information on the risk value. The applicant shall choose a security instrument and sign a balance responsibility agreement.

3.3.9 If the applicant fails to submit a signed balance responsibility agreement within 30 days from the date of delivery of the information on the risk value, the transmission system operator will assume that the applicant has withdrawn from the signing of the balance

3.3.10 responsibility agreement.

After the receipt of the signed balance responsibility agreement, the transmission system operator shall sign the agreement and submit it to the applicant, leaving the applicant a deadline of 60 days for submission of a payment security instrument.

The balance responsibility agreement will become effective on the first day following the date on which the transmission system operator receives a payment security instrument of the applicant, by which the applicant achieves the BRP status.

After achieving the BRP status, the transmission system operator shall, based on the composition of the balancing group, assign one or more roles to the BRP for the purpose of nomination of daily schedules, as follows:

(a) the responsible party for nominating electricity generation (only if it has, within the balancing group, as a withdrawal/injection point, a point of withdrawal of electricity from a power producer of from a storage);

3.3.11

(b) the responsible party for nominating electricity consumption (only if, within the balancing group, it has, as a withdrawal/injection point, a point of electricity delivery to the final customer or the aggregate point for delivery to the transmission or distribution or closed distribution system operator, to cover energy losses in the transmission, distribution or closed distribution systems or in the storage);

(c) the responsible party for nominating electricity trading blocks (assigned to all applicants);

In case that a BRP participates in the balancing market, the transmission system operator assigns the role of the party which participates in the balancing market/balancing service market to the BRP.

3.3.12

The transmission system operator shall notify the distribution system operator and the closed distribution system operator of the effective date of the balance responsibility agreement with the BRP.

3.3.13

The transmission system operator is obliged to, immediately after the entry into force of the balance responsibility agreement, provide the BRP with access to the information systems in accordance with the assigned roles and the operational instruction which is published on the website of the transmission system operator.

3.3.14

3.3.15

The transmission system operator shall update and publish a list of BRPs on its website.

3.3.16

The transmission system operator, distribution system operator and closed distribution system operator are obliged to exchange and align their data on the BRPs.

3.3.17

A BRP is obliged to, in case of any changes to the data from the balance responsibility registry, timely update its data in this registry.

3.4.1

3.4 BALANCE RESPONSIBILITY AGREEMENT

The balance responsibility agreement shall particularly include:

(a) mutual rights and obligations of the transmission system operator and the BRP;

(b) the type, value and delivery deadlines and validity periods of the payment security instrument, the validity period of the payment security instrument in case of a termination of the balance responsibility agreement, as well as conditions for activation of the security instrument;

3.4.2

(c) conditions for termination of the balance responsibility agreement.

A part of the balance responsibility agreement which is kept through a balance responsibility registry shall contain the following:

(a) a list of the withdrawal/injection points in the transmission system;

(b) summary data for withdrawal/injection points in the distribution system and closed distribution system;

(c) a list of the market participants with which the BRP has concluded an agreement on the transfer of balance responsibility;

(d) a list of balancing entities in the transmission system;

(e) summary data on balancing entities in the distribution system and closed distribution system;

The transmission system operator shall publish the model balance responsibility agreement on its official website.

3.4.3 ## 3.5 BALANCE RESPONSIBILITY REGISTRY

3.5.1 The transmission system operator shall establish and administer a registry of balance responsibility for the withdrawal/injection points in the transmission system and balance responsibility of participants in balancing service delivery.

3.5.2 The distribution system operator and closed distribution system operator shall establish and administer a registry of balance responsibility for the withdrawal/injection points in the distribution system, and balance responsibility of participants in balancing service delivery.

3.5.3 A balance responsibility registry of the transmission system operator must contain at least the following information:

(a) business data about the BRP: the business name, principal place of business, details about authorized persons, registration number and tax identification number of the BRP, or details about the tax representative, if any;

(b) BRP's EIC X code;

(c) information on the balance responsibility agreement, annexes to the balance responsibility agreement, records and other contract documents;

(d) financial information about the BRP: established risk value, type, value and validity period of the payment security instrument;

(e) information on the composition of the balancing group according to which the role of the responsible party is assigned, for the purposes of the nomination of daily schedules;

(f) a list of the withdrawal/injection points in the transmission system with corresponding EIC Z codes and information about the approved power of sconsumption, approved power of the generating modules, approved storage power, for each W/I point of the balancing group in question, and information on whether the W/I point is a balancing entity;

(g) business data about the market participant to which the withdrawal/injection point is registered: the business name, principal place of business, details about authorized personnel, registration number and tax identification number of that market participant (for legal persons and entrepreneurs);

(h) business data about the market participant which is enabling the utilization of the balancing service provider resource which is connected to the W/I point in the transmission system: the business name, principal place of

business, details about authorized personnel, registration number and tax identification number of that market participant (for legal persons and entrepreneurs);

(i) the basis on which that withdrawal/injection point is assigned to the relevant balancing group – type of contract, with information about the effective date and validity period of the agreement by which balance responsibility is transferred to the BRP;

(j) information on the BSP which is using balancing service provider resources from the balancing group of the BRP;

(k) a pre-qualified balancing service provider resource with the appropriate technical characteristics, manner of regulating the balance responsibility, and their contracts for delivery of balancing service;

(l) business data about the Supplier of the relevant withdrawal/injection point in case that the Supplier is not the BRP, as well as the type of the supply contract;

(m) the manner in which access to the transmission system for the relevant withdrawal/injection point is regulated (information on the agreement on access to the transmission system);

(n) the total number of withdrawal/injection points in a distribution system and closed distribution system within the relevant balancing group, total approved power of consumption and total approved power of all generating modules and storages and the basis for assigning withdrawal/injection points to the balancing group (an agreement on the transfer of balance responsibility, the full supply contract, or the withdrawal/injection point is assigned to the applicant);

(o) business data of all other balancing group members (wholesale supplier or the Supplier), as well as the effective date and the validity period of the agreement on the transfer of balance responsibility between the BRP and the members of the balancing group.

3.5.4

A balance responsibility registry of the distribution system operator, or the closed distribution system operator, must contain at least the following information:

(a) a list of the withdrawal/injection points in the distribution system, with information about the approved power of consumption and approved power of the generating modules and storages;

(b) information about the customer of the distribution system or closed distribution system for each withdrawal/injection point;

(c) information about the Supplier for each withdrawal/injection point, and the basis on which the Supplier supplies the relevant withdrawal/injection point;

(d) information about the BRP for each withdrawal/injection point and the basis on which that withdrawal/injection point is assigned to the relevant balancing group;

(e) the manner in which access to the distribution system for relevant withdrawal/injection point is regulated (information on the agreement on access to the distribution system);

(f) a list of pre-qualified balancing entities with the appropriate technical characteristics, manner of regulating the balance responsibility, and their contracts for delivery of balancing service;

The distribution system operator or closed distribution system operator shall provide the transmission system operator with necessary information for maintaining a balance responsibility registry.

3.5.5 The BRP is obliged to report - to the transmission system operator, distribution system operator and closed distribution system operator - any amendment or supplement of the data contained in the balance responsibility registries.

3.5.6 Any BRP has the right to access their own data from in transmission, distribution and/or closed distribution system operator's registry.

3.5.7 Details on active BRPs with currently assigned roles, as well as details on the supplies and wholesale suppliers which have transferred their balance responsibility, constitute the public portion of the registry and are publicly available on the TSO's web site.

3.5.8

3.6 CHANGES IN COMPOSITION OF THE BALANCING GROUP

3.6.1 The composition of the balancing group shall be modified in the following cases:

(a) when an existing withdrawal/injection point is included in the balancing group pursuant to a concluded agreement on the transfer of balance responsibility;

(b) when an existing withdrawal/injection point is included in the balancing group on the basis of the supplier switching procedure in line with the Rules on Supplier and Aggregator Switching, except when a new supplier or aggregator is a member of the same balancing group as the previous supplier or aggregator;

(c) when a new withdrawal/injection point is included in the balancing group, or excluded from the system;

(d) when a wholesale supplier, or supplier or aggregator, is included in the balancing group, pursuant to a concluded agreement on the transfer of balance responsibility;

(e) when a withdrawal/injection point is excluded from the balancing group on the basis of an expiry of the agreement on the transfer of balance responsibility;

(f) when a withdrawal/injection point is excluded from the balancing group in case of the expiry of the full supply contract;

(g) when a withdrawal/injection point is excluded from the balancing group in case of a termination of the full supply contract due to outstanding accrued obligations;

3.6.2

(h) when a wholesale supplier, or supplier or aggregator, is excluded from the balancing group, on the basis of an expiry of the agreement on the transfer of balance responsibility;

A special kind of change of the composition of the balancing group is inclusion and exclusion of balancing service provider resource due to balance responsibility for

deviation from the prescribed value of the order for activation of balancing energy. The composition of the balancing group shall be modified in the following cases:

(a) when a BSP is included in the balancing group pursuant to the concluded agreement on the transfer of balance responsibility;

(b) when a BSP is excluded from the balancing group on the basis of an expiry of the agreement on the transfer of balance responsibility;

(c) when a BSP is included in the balancing group on the basis of a procedure of switching the aggregator as prescribed in the Rules on Supplier and Aggregator Switching;

(d) when a BSP is excluded from the balancing group on the basis of a procedure of switching the aggregator as prescribed in the act governing supplier and aggregator switching.

3.6.3 In the case referred to in point 3.6.1. (a), the BRP that agrees to assume the balance responsibility for the existing withdrawal/injection point is required to submit to the transmission system operator a Declaration on the Transfer of Balance Responsibility between the BRP and the final customer, or the producer or storage for the respective withdrawal/injection point.

3.6.4 If the withdrawal/injection point is hosted by the distribution system, or closed distribution system, the BRP that is agreeing to assume the balance responsibility for an existing withdrawal/injection point is required to submit to the DSO or closed DSO a Declaration on the Transfer of Balance Responsibility. The distribution system operator or closed distribution system operator is required to inform the transmission system operator about the date and time of the changes in the composition of the balancing group (the date of determination of the measurement data for the respective withdrawal/injection point).

3.6.5 In a case referred to in point 3.6.1. (b) for withdrawal/injection points in the transmission system, the transmission system operator shall switch the supplier and aggregator and change the composition of the balancing group, in accordance with the act governing supplier and aggregator switching.

3.6.6 In a case referred to in point 3.6.1. (b) for the withdrawal/injection points in the distribution system, the distribution system operator or closed distribution system operator shall switch the supplier in accordance with the act governing supplier and aggregator switching, and is obliged to submit the following to the transmission system operator:

(a) new total approved power of consumption at the withdrawal/injection points in the distribution system or closed distribution system for the BRP (full supplier) whose balancing group has undergone a change in the composition;

(b) new total approved power of all generating modules and storages connected to the WIPs in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(c) new total approved power of all generating modules of RES producers and storages connected to the WIPs in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(d) the total number of WIP in the distribution system or a closed distribution system for the BRP whose balancing group has undergone a change in the composition.

The transmission system operator shall change the composition of the balancing group on the basis of data submitted by the distribution system operator or closed distribution system operator.

In a case referred to in point 3.6.1. (c) for new withdrawal/injection points in the transmission system, the transmission system operator shall change the composition of the balancing group in accordance with the connection process, for points that are excluded in the cases defined in the Law on Energy.

3.6.7

In a case referred to in point 3.6.1. (c) for new withdrawal/injection points in the distribution system, the distribution system operator or closed distribution system operator is obliged to submit the following to the transmission system operator:

3.6.8

(a) new total approved power of consumption for the WIP in the distribution system for the BRP into whose balancing group a new withdrawal/injection point is being included;

(b) new summary approved power of all generating modules and storages connected to the WIP in the distribution system or closed distribution system for the BRP into whose balancing group a new withdrawal/injection point is being included;

(c) new total approved power of all generating modules of RES producers and storages connected to the WIPs in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(d) the total number of withdrawal/injection points in the distribution system for the BRP into whose balancing group a new withdrawal/injection point is being included.

3.6.9

The transmission system operator shall change the composition of the balancing group on the basis of the data submitted by the distribution system operator and closed distribution system operator.

3.6.10

In a case referred to in point 3.6.1. (d), the BRP which agrees to take balance responsibility for the wholesale supplier or the supplier or aggregator, is obliged to provide the transmission system operator with a Declaration of the Transfer of Balance Responsibility between the BRP and the relevant supplier. The transmission system operator shall inform the relevant distribution system operator or closed distribution system operator about the change of the composition of the balancing group, within 2 working days from the receipt of the application.

In a case referred to in point 3.6.1. (e), the BRP from whose group the withdrawal/injection point is being excluded shall submit an application to the transmission system operator for a change of the composition of the balancing group, and attach the Declaration on expiry of the Agreement on the Transfer of Balance Responsibility for that withdrawal/injection point, unless the BRP has indicated the expiry date of the agreement on the transfer of balance responsibility in the Declaration on the Transfer of Balance Responsibility referred to in point 3.6.9. If the withdrawal/injection point is in the distribution system or closed distribution system, the BRP from whose group the withdrawal/injection point is being excluded shall

submit an application for a change of the composition of the balancing group to the distribution system operator or the closed distribution system operator, and attach the Declaration on the Transfer of Balance Responsibility for that withdrawal/injection point, with the date of expiry of the agreement on the transfer of balance responsibility. The distribution system operator or closed distribution system operator is required to inform the transmission system operator about the date and time of the changes in the composition of the balancing group (the date of determination of the measurement data for the respective withdrawal/injection point).

3.6.11 In a case referred to in point 3.6.1. (g) for the withdrawal/injection point in the transmission system, the transmission system operator shall change the supplier on the basis of the Supplier's Notification on the Termination of the Full Supply Contract, in accordance with the Rules on Supplier Switching, and make changes to the composition of the balancing group.

3.6.12 In a case referred to in point 3.6.1. (g) for the withdrawal/injection point in the distribution system, the distribution system operator or closed distribution system operator shall switch the supplier on the basis of supplier's notification on an expiry of the full supply contract, in accordance with the Rules on Supplier and Aggregator Switching, and shall also submit to the transmission system operator:s

(a) new total approved power of consumption for the withdrawal/injection point in the distribution system or closed distribution system for the BRP (full supplier) whose balancing group has undergone a change in the composition;

(b) new total approved power of all generating modules and storages connected to the WIPs in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(c) new total approved power of all generating modules of RES producers and storages connected to the WIPs in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(d) the total number of WIPs in the distribution system or a closed distribution system for the BRP whose balancing group has undergone a change in the composition.

3.6.13 The transmission system operator shall change the composition of the balancing group on the basis of the data submitted by the distribution system operator or closed distribution system operator.

3.6.14 In a case referred to in point 3.6.1. (h) for WIPs in the transmission system, the transmission system operator shall switch the supplier, based on the Supplier's Notification on the Termination of the Full Supply Contract, due to outstanding accrued liabilities, in accordance with the Law, and make changes to the composition of the balancing group.

In a case referred to in point 3.6.1. (h) for the withdrawal/injection point in the distribution system, the distribution system operator or closed distribution system operator shall switch the supplier, based on the Supplier's Notification on the Termination of the Full Supply Contract, due to an outstanding accrued debt in accordance with the Law, and is obliged to submit the following to the transmission system operator:

(a) new total approved power of consumption for the withdrawal/injection points in the distribution system or closed distribution system for the BRP whose balancing group has undergone a change in the composition;

(b) new total approved power of all generating modules and storages connected to the WIP in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(c) new total approved power of all generating modules of RES producers and storages connected to the WIPs in the distribution system or closed distribution system for the BRP whose balancing groups has undergone a change in the composition;

(d) the total number of WIPs in the distribution system or a closed distribution system for the BRP whose balancing group has undergone a change in the composition.

The transmission system operator shall change the composition of the balancing group on the basis of data submitted by the distribution system operator or closed distribution system operator.

3.6.15 In a case referred to in point 3.6.1. (i), the BRP which excludes a wholesale supplier or supplier from its balancing group, shall submit to the transmission system operator a Declaration of the Termination of the Agreement on the Transfer of Balance Responsibility. The transmission system operator shall inform the relevant distribution system operator or closed distribution system operator about the change of the composition of the balancing group, within 2 working days from the receipt of the application.

3.6.16 If the supplier, in a case referred to in point 3.6.1. (i), has a signed contract for the sale of electricity for full supply, the final customer will be deemed not to have a selected

3.6.17 supplier or a resolved matter of balance responsibility.

3.6.18 In a case referred to in point 3.6.2, the BRP which includes or excludes a balancing entity into/from their balancing group shall submit to the transmission system operator an approval by the owner of the withdrawal/injection point that the balancing entity connected to that WIP shall be included into/excluded from the BRP's balancing group.

3.6.19 In a case referred to in point 3.6.2. (a), the BRP which agrees to take balance responsibility for a deviation from the prescribed value of the order for activation of balancing energy of the BSP, is obliged to provide the transmission system operator with a Declaration of the Transfer of Balance Responsibility between the BRP and the BSP.

3.6.20 If the BSP is connected to the distribution system or closed distribution system, the BRP which agrees to take balance responsibility for the BSP is obliged to submit to the DSO or closed DSO a Declaration on the Transfer of Balance Responsibility. The distribution system operator or closed distribution system operator is required to inform the transmission system operator about the date and time of the changes in the composition of the balancing group.

For a case referred to in point 3.6.2 (a), when an aggregator transfers balance responsibility to the BRP, all balancing entities for which the aggregator bears balance responsibility for a deviation from the prescribed value for activation of balancing energy of that BRP, shall be included in the balancing group of that BRP for balance

responsibility for a deviation from the prescribed value for activation of balancing energy.

3.6.21 In a case referred to in point 3.6.2. (b), the BRP from whose group the BSP is being excluded is obliged to submit to the transmission system operator an application for a change to the composition of the balancing group, and to submit the Declaration of the Termination of the Agreement on the Transfer of Balance Responsibility for that BSP, except in a case when the validity period of the agreement on the transfer of balance responsibility is listed in the Declaration on the Transfer of Balance Responsibility referred to in point 3.6.19. If the BSP is in the distribution system or closed distribution system, the BRP from whose group the withdrawal/injection point is being excluded shall submit an application for a change of the composition of the balancing group to the distribution system operator or the closed distribution system operator, and attach the Declaration of the Termination of the Agreement on the Transfer of Balance Responsibility for that BSP. The distribution system operator or closed distribution system operator is required to inform the transmission system operator about the date and time of the changes in the composition of the balancing group.

3.6.22 For the case referred to in point 3.6.2 (b), when an agreement on the transfer of balance responsibility for a deviation from the prescribed value for activation of balancing energy between the aggregator and the BRP expires, all balancing entities for which the aggregator bears balance responsibility for a deviation from the prescribed value of the order for activation of balancing energy shall be excluded from the balancing group of that BRP for balance responsibility for activation from the prescribed value of the order for activation of balancing energy.

3.6.23 In a case from point 3.6.2 (c) and (d), the procedure shall be conducted in accordance with the Rules on Supplier and Aggregator Switching, and the aggregator shall be switched and a change made to composition of the balancing group.

3.6.24 If all the required information and documents referred to in points 3.6.3, 3.6.4, 3.6.9, 3.6.10. and 3.6.15. are not submitted by the BRP, the system operator is obliged to inform the BRP thereof and give it a subsequent deadline of 5 working days to correct the application and submit completed documentation. If the BRP does not submit the required information and documents within the subsequent deadline, the application for a change to the composition of the balancing group shall be deemed not to have been submitted.

3.6.25 The transmission system operator and the BRP whose balancing group has undergone a change to its composition shall sign an annex to the balance responsibility agreement, if the change to the composition of the balancing group affects the risk value. The transmission system operator may request a new payment security instrument for the BRP, depending on the changes to the composition of the balancing group, in accordance with Section 3.8.

3.6.26 The transmission system operator is obliged to confirm the changes relating to an inclusion or exclusion of withdrawal/injection points from the balancing group referred to in points 3.6.1. (a), 3.6.1. (d) 3.6.1. (e) и 3.6.1. (h), no later than 3 working days from the date of receipt of the application for a change to the composition of the balancing group. The date when this change becomes effective shall be notified by the transmission system operator to:

(a) the BRP to which the change applies to;

(b) the competent distribution system operator or closed distribution system operator.

The distribution system operator or closed distribution system operator is obliged to enter such changes into the distribution registry no later than 3 working days from the date of receipt of the notification by the transmission system operator.

3.6.27 The transmission system operator shall, on the basis of the implemented procedure of changing the composition of the balancing group, update the data from the transmission registry which refer to the BRP whose balancing group has undergone a change to its composition.

3.6.28 The distribution system operator or closed distribution system operator shall, on the basis of am implemented procedure of switching the supplier, or on the basis of a notification by the transmission system operator on the change of the composition of

3.6.29 the balancing group, update the data from the distribution registry for the respective withdrawal/injection points.

3.6.30 The BRP which has undertaken balance responsibility for a withdrawal/injection point on the market shall undertake obligations starting from the date of the change of the supplier as determined in the Rules on Supplier and Aggregator Switching, or from the date it was entered into the Balance Responsibility Registry pursuant to the agreement on the transfer of balance responsibility.

3.6.31 The BRP from whose group the withdrawal/injection point has been excluded shall retain obligations on the basis of balance responsibility until the date of the change of supplier as determined in the Rules on Supplier and Aggregator Switching, or until the date when it is removed from the balance responsibility registry pursuant to the agreement on the transfer of balance responsibility.

3.6.32 The application for changes to the composition of the balancing group shall be in electronic form. The manner of submission and the contents of the application on the change of the composition of the balancing group shall be determined by the transmission system operator and published it on its website.

3.7 TERMINATION OF THE BALANCE RESPONSIBILITY AGREEMENT

3.7.1

3.7.2 When a BRP that is entitled to a BRP status according to the Law decides not to enjoy the BRP status any longer, it is obliged to notify all members of the balancing group in advance and to submit a Declaration on the Transfer of Balance Responsibility to the transmission system operator in written form.

3.7.3 In a case referred to in point 3.7.1. for the BRP whose balancing group hosts withdrawal/injection points or balancing entities, the termination period lasts 30 days from the date of receipt of the Declaration on the Transfer of Balance Responsibility. During the termination period, the BRP has all rights and obligations under the Balance Responsibility Agreement.

In a case referred to in point 3.7.1. for the BRP whose balancing group does not host withdrawal/injection points, the termination period lasts 5 working days from the date of receipt of the notice of the cancellation of the Balance Responsibility Agreement. During the termination period, the BRP has all rights and obligations under the Balance Responsibility Agreement.

The transmission system operator is obliged to unilaterally terminate the Balance Responsibility Agreement with the BRP in the following cases:

(a) when the BRP has not submitted the appropriate payment security instrument in accordance with point 3.3.9;

3.7.4 (b) when the BRP has not submitted the appropriate payment security instrument in accordance with point 3.8.13;

(c) when the BRP has not submitted a new bank guarantee within a prescribed period or has not submitted an amendment of the existing one on the basis of the transmission system operator's notification, in case of a change of the risk value in accordance with Chapter 3.8;

(d) when the BRP has not provided the additional amount on the deposit account on the basis of the transmission system operator's notification within a prescribed deadline, in the case of a change of risk value in accordance with point 3.8.14;

(e) when the BRP has not delivered an adequate new payment security instrument within the prescribed period, in a case of changing the type of payment security instrument in accordance with point 3.8.14;

(f) when proceedings of bankruptcy or liquidation of the BRP have been initiated;

(g) when the BRP has lost its license for carrying out energy activities;

(h) when the BRP has not fully settled its due monetary obligation to the transmission system operator that was agreed in accordance with this Code, within the period stipulated in the Electricity Market of Settlement and Payment Calendar, or within the period stipulated by this Code regarding the monetary obligations based on the calculation referred to in point 7.6.4.13.1 hereof;

(i) when the BRP has not fulfilled its other obligations under the Balance
3.7.5 Responsibility Agreement or this Code, and fails to remedy such breach within an extended deadline determined in accordance with this Code.

3.7.6 In a case referred to in points 3.7.4. (a), (b), (c), (d) and (e), the Balance Responsibility Agreement shall be deemed terminated on the first day following the expiry date for fulfilment of obligations.

3.7.7 In the case referred to in point 3.7.4. (f), the Balance Responsibility Agreement shall be deemed terminated on the first day following the delivery of the notice of unilateral
3.7.8 termination of the contract.

In a case referred to in point 3.7.4. (h), the Balance Responsibility Agreement shall be deemed terminated from the date of finality of the Agency's decision on temporary revocation of the license.

In a case referred to in point 3.7.4. (i), the transmission system operator shall, prior to the termination of the Balance Responsibility Agreement, invite the BRP to settle its due financial obligation in full within an extended deadline of one working day. If the BRP does not settle its due financial obligation in full within this extended deadline, the agreement will be deemed terminated from the first day following the expiry of the extended deadline, and the transmission system operator will have the right to activate the payment security instrument to collect the BRP's outstanding monetary obligations.

In a case referred to in point 3.7.4. (j), the transmission system operator is obliged to grant to the BRP an appropriate extended deadline no longer than 5 working days, to eliminate or rectify the omissions caused by non-compliance with the obligations from the Balance Responsibility Agreement and the prescribed obligations assumed under this Code. If the BRP fails to discharge its obligations in the prescribed manner within the extended deadline, the agreement shall be deemed terminated from the first day following the day of expiry of the extended deadline for discharging the obligations.

3.7.9

The transmission system operator is obliged to notify the BRP in writing of the unilateral termination of the agreement in accordance with point 3.7.4, where the notification will have a declarative character, except in a case referred to in point 3.7.4. g). The BRP will enjoy all the rights and obligations from the Balance Responsibility Agreement until the date when the Balance Responsibility Agreement is deemed terminated.

3.7.10

In cases referred to in points 3.7.1. and 3.7.4, the transmission system operator is obliged to submit the notification on termination of the Balance Responsibility Agreement and cessation of the BRP status to:

3.7.11

(a) the BRP to which the cessation of the status applies, as a result of the termination of the agreement;

(b) aggregators, suppliers, or wholesale suppliers which are in the balancing group for which that BRP was balance responsible;

(c) final customers, or producers whose withdrawal/injection points, connected to the transmission system, belong to the balancing group for which the BRP was balance responsible;

(d) a BSP whose W/I points are connected to the transmission system, and which were in the balancing group of the BRP on the basis of balance responsibility for deviation from the prescribed value of the order for activation of balance energy;

(e) distribution system operators or closed distribution system operators whose area hosts withdrawal/injection points that are associated with the balancing group for which the BRP was balance responsible;

(f) market operator;

3.7.12

(g) reserve supplier

and to record the change in the balance responsibility registry within the same day.

After receiving a notification from the transmission system operator, the distribution system operator or the closed distribution system is obliged to deliver a notification on termination of the Balance Responsibility Agreement, and cessation of the BRP status, to final customers or power producers whose withdrawal/injection points are connected to the distribution system or closed distribution system and assigned to the balancing group for which the BRP was balance responsible, as well as owners of balancing entities whose WIPs were connected o the distribution or closed distribution system.

3.7.13

Participants in the electricity market under points 3.7.11. and 3.7.12. are obliged to, upon receipt of the notice, regulate balance responsibility for their withdrawal/injection points in accordance with the obligations defined by the Law, this Code and the Rules on Supplier and Aggregator Switching.

3.8 DETERMINATION OF THE RISK VALUE IN CASE OF DEFAULT AND PAYMENT SECURITY INSTRUMENTS

The risk value in case of a default by the BRP for the accounting period (hereinafter: the risk value), regarding imbalances of balancing group, shall be determined by the transmission system operator pm the basis of the following formula:

3.8.1 $$RV = max(max(EN_1, EN_2, EN_3, EN_4, EN_5) * D * AP, Nmax)$$

where:

RV – risk value;

EN_1 - estimated daily electricity consumption of the balancing group which corresponds to the total maximum approved power of withdrawal/injection points of the balancing group consumption; (total approved power of the balancing group x 24 hours)

EN_2 – estimated daily electricity generation of the balancing group which corresponds to the total maximum approved power of withdrawal/injection points of the balancing group production (total approved power of the balancing group x 24 hours);

EN_3 - average daily value of balancing group's nominated electricity trading blocks, in the withdrawal direction, over the preceding twelve-month period;

EN_4 – value of the balancing capacity for hourly regulation upwards of the balance group, multiplied by 24 hours;

EN_5 – value of the balancing capacity for hourly regulation downwards of the balance group, multiplied by 24 hours.

D – number of days (D=5);

AP – futures value of the annual base product for the following year at the reference organised electricity market in Serbia on the working day preceding the day of calculation of the risk value, multiplied by 1.3

N_{max} - maximum value of the sum of the balancing group's monthly negative imbalance fee in cases when the BRP is paying EMS in accordance with point 7.6.4, and the unbalanced daily schedule fees during the accounting period in accordance with Chapter 7.6.5, from which monthly fees for engaged balance energy are deducted in cases when EMS is paying the BRP in accordance with Chapter 5.14 within a period of 12 months from the date of calculating the risk value.

3.8.2

3.8.3 If it is not possible to determine the values of energy parameters (EN_1, EN_2, EN_3, EN_4, EN_5) for the BRP's balancing group referred to in point 3.8.1, or if the transmission system operator determines that the EN_1, EN_2, EN_3, EN_4, EN_5 values of the balancing group will be significantly changed due to changes in the composition of the balancing group, the transmission system operator shall determine the BRP`s risk value on the basis of planned values of these parameters for the balancing group in accordance with the rules governing the operation of the transmission system (the Grid Code).

The transmission system operator shall determine a new risk value for each BRP based on the change in the realized energy values referred to in point 3.8.1, changes of the price *AP* or in the composition of the balancing group.

The transmission system operator shall, on the basis of the newly determined risk value, request a change to the value of the payment security instrument. In the case of a change of the forward values of the annual base product for the following year, in the ±10% range, no change of risk value of the BRSP will be considered in the domain of the price *AP*.

3.8.4 If the BRP requests that the estimated risk value be greater than the risk determined by the transmission system operator, the transmission system operator will change the risk value on the basis of a request submitted by the BRP.

3.8.5 The value of an appropriate payment security instrument shall be determined on the basis of the established risk value, where it cannot be lower than EUR 1,000,000.00 or higher than EUR 5,000,000.00. If N_{max} is higher than or equal to EUR 5,000,000.00,

3.8.6 the maximum value of the payment security instrument shall be three times higher than the value of N_{max}. In a case when a market participant is only providing balancing services, and if it is the Balance Responsible Party for a deviation from the prescribed value of the order for activation of balance energy; the value of the payment security instrument may not be lower than 100,000.00 EUR.

3.8.7 Collection of receivables - in case of a default by the BRP's - shall be guaranteed via an appropriate payment security instrument acceptable for the TSO, to be provided by the BRP in accordance with the Balance Responsibility Agreement.

3.8.8 The payment security instruments are:

(a) for a BRP with the principal place of business in the Republic of Serbia;

- bank guarantee issued by a bank with the principal place of business in the Republic of Serbia;
- special purpose deposit issued by a bank with the principal place of business in the Republic of Serbia.

(b) for a BRP without a principal place of business in the Republic of Serbia:

- bank guarantee to warrant payment, issued by a foreign bank;

3.8.9

- special purpose deposit issued by a bank with the principal place of business in the Republic of Serbia.

3.8.10 The transmission system operator, distribution system operator and the closed distribution system operator without a licence for electricity supply in the capacity of a BRP when purchasing electricity for compensation of losses, and the market operator or legal person which carries out affairs on behalf of and for the account of the market operator in accordance with the Law, in the capacity of the BRP, are not required to

3.8.11 provide a payment security instrument.

3.8.12 The BRP can choose one of the payment security instruments in accordance with this Code. The payment security instrument, in accordance with the law governing enforcement and security, is not subject to forced collection.

The BRP is entitled to change the type of payment security instrument once in a calendar year. The previous payment security instrument shall be valid until the newly selected payment security instrument has become active.

The BRP shall take care of the maturity period of the chosen payment security instrument, and, through a timely extension of the validity period of the existing

instrument, or submission of a new one, maintain the active status of the Balance Responsible Party as long as the Balance Responsibility Agreement lasts.

The BRP is required to submit a new or to extend the existing payment security instrument 65 days before the date of expiry of the existing payment security instrument.

3.8.13 Within 30 days from the request of the transmission system operator, the BRP is required to submit the appropriate payment security instrument in case of a change in the type of payment security instrument or in the event of a change to the risk value.

3.8.14 A bank guarantee for the BRP with the principal place of business in the Republic of Serbia shall be issued by a commercial bank with the principal place of business in the Republic of Serbia which has a licence issued by the NBS, while a bank guarantee for

3.8.15 the BRP with the principal place of business abroad shall be issued by a foreign commercial bank.

The bank guarantee must be irrevocable, unconditional and payable at the first call, without the right to objection or remarks, with a validity period of minimum 6 months.

3.8.16 The validity period of the bank guarantee shall be 60 days after the date of termination

3.8.17 of the Balance Responsibility Agreement. The TSO may return the bank guarantee to the BRP before the expiry of the 60 days period, provided that the transmission system operator, distribution system operator and/or closed distribution system operator have confirmed that there would be no adjustments to the previous accounting periods, and if the TSO and the BRP have subsequently settled their mutual financial liabilities.

3.8.18 The bank guarantee for payment guarantee shall be issued to the amount three times higher than the determined risk value for the BRP in question, in view of the limitations referred to in point 3.8.6., and in case of activation of the bank guarantee, the amount of the guarantee will be reduced in accordance with the payments effectuated by the bank guarantor at the request of the transmission system operator. Such a guarantee can

3.8.19 be activated partially, and at most up to the value of the bank guarantee.

For the BRP with the principal place of business in the Republic of Serbia, the bank guarantee shall include the foreign currency clause, i.e. the value of the bank guarantee

3.8.20 shall be expressed in EUR, payable in RSD, by applying the middle exchange rate of NBS applicable on the day of payment.

3.8.21 For a BRP with the principal place of business abroad, a bank guarantee shall specify the value in EUR, and be collectable in EUR.

In case of the BRP defaulting its financial obligations towards the transmission system operator as provided by this Code and/or the Balance Responsibility Agreement, the

3.8.22 transmission system operator shall collect the entire due amount of unpaid receivables plus the legally prescribed default interest by activating the bank guarantee, about which the TSO will notify the BRP in writing at least 3 working days before the activation of the bank guarantee.

Special purpose deposit is a payment security instrument where the BRP deposits funds in a dedicated account in a bank with the principal place of business in the Republic of Serbia which holds an operational license issued by the NBS. The funds in the dedicated account shall be deposited by the BRP for the benefit of the transmission system operator, for a period no shorter than 3 years, and in the amount three times higher than the determined risk value for each BRP, in view of the limitation referred to in point 3.8.6.

The BRP, he bank and the transmission system operator shall conclude the contract on the opening and administration of a special purpose deposit.

3.8.23 For a BRP with the principal place of business in the Republic of Serbia the special purpose deposit (escrow) shall be nominated, kept and maintained in EUR, payable in RSD by applying the NBS' middle exchange rate applicable on the payment date, pursuant to the Balance Responsibility Agreement.

3.8.24 For a BRP with the principal place of business abroad, the special purpose non-resident deposit is nominated, kept and maintained in EUR and payable in EUR in accordance with the Balance Responsibility Agreement.

3.8.25 In a case of the BRP defaulting its financial obligation to the transmission system operator as provided for by this Code and/or the Balance Responsibility Agreement, the transmission system operator is entitled, at the first written request towards the
3.8.26 bank, to collect the entire due amount claimed from the BRP, plus legal interest from the Special purpose (guarantee) deposit.

3.8.27 The validity period of the special purpose (guarantee) deposit must be 60 days after the date of termination of the Balance Responsibility Agreement. The TSO may give its consent to the Bank to release the funds deposited before the expiry of the 60 days period, provided that the transmission system operator, distribution system operator and/or closed distribution system operator have confirmed that there would be no adjustments to the previous accounting periods, and if the TSO and the BRP have subsequently settled their mutual financial liabilities.

4 TYPE AND SCOPE OF ANCILLARY SERVICES

4.1 INTRODUCTION

The transmission system operator procures ancillary services, which include ancillary services for balancing purposes and non-frequency ancillary services, but do not include congestion management.

Ancillary services for balancing purposes are:

4.1.1
- Frequency Containment Reserve;
- Automatic Frequency Restoration Reserve;

4.1.2
- Manual Frequency Restoration Reserve.

Non-frequency ancillary services are services for the purpose of:

- static voltage regulation,

4.1.3
- option of non-voltage release, and
- option of islanded operation of a part of the system.

This chapter defines the manner and procedure of procurement of ancillary services for the balancing purposes and non-frequency services.

4.1.4

The transmission system operator procures ancillary services for balancing purposes in

4.1.5

accordance with the Framework Agreement for Procurement of Balancing Capacity (hereinafter: Framework Agreement), on the basis of the rules prescribed in this chapter. The transmission system operator procures non-frequency services in accordance with the Framework Agreement for Voltage Regulation and the Ancillary Services Contract for Non-Voltage Release and Non-Voltage Operation of a Part of the System.

4.1.6

The transmission system operator concludes contacts/agreements referred to in Article 4.1.5 for procurement of ancillary services with the service provider, which may be:

(a) power producer;

(b) aggregator;

(c) storage operator; or

(d) final customer

4.1.7

whose facilities are connected to the transmission, distribution or closed distribution system, and whose balancing entities meet the requirements of pre-qualification or qualification procedures, in accordance with the Grid Code.

The power producer and the aggregator which has a power producer in its aggregation group are obliged to offer ancillary services to the transmission system operator in the same volume and type established in accordance with pre-qualification or qualification tests.

4.2.1

4.2 MANNER AND PROCEDURE OF PROCUREMENT OF ANCILLARY SERVICES FOR THE BALANCING PURPOSES

The transmission system operator procures ancillary services for balancing purposes, concluding a Framework Agreement with all the producers and aggregators whose

aggregation group includes a power producer, regulating the conditions and manner of provision of different types of ancillary services, in accordance with technical characteristics established in the prequalification procedure and the calculation of the needs of the transmission system operator. All other interested BSPs have an option to sign a Framework Agreement with the transmission system operator.

4.2.2 The transmission system operator, on the basis of its needs, implements auctions for procurement of balancing capacity. A producer and aggregator whose aggregation group includes a power producer capacity and with which the transmission system operator has a concluded Framework Agreement, has the obligation to take part in auctions for procurement of balancing capacity. A BSP which is not a power producers have the right to take part in auctions for procurement of balancing capacity, if it has concluded a Framework Agreement with the transmission system operator.

4.2.3 Balancing capacity is procured in auctions implemented separately for the upward and downward direction, except in the case of an exception approved by the Agency, in accordance with the Law on Energy.

4.2.4 The transmission system operator implements auctions for the periods listed in the Balancing Capacity Procurement Calendar. The deadlines and the calendar of auctions are published on the TSO's website at least 7 days before the start of auctions.

4.2.5 The amount of balancing capacity procured by the operator is published on the TSO's website in the electronic system for implementation of the competition (hereinafter: Auction Platform).

4.2.6 The transmission system operator, through the Auction Platform, defines the capacity in MW for procurement of balancing capacity per accounting intervals, direction (up or down) and the duration of the delivery. The procured amount may be different for each accounting interval.

4.2.7 The BSP which has concluded a Framework Agreement with the TSO submits auction bids through the Auction Platform in the deadlines defined in the Balancing Capacity Procurement Calendar. The manner of submission of auction bids is published by the TSO on its website.

4.2.8 A BSP submits bids for balancing capacity as a price paired up with the offered capacity. The bid price is expressed in €/MW/h, rounded to two decimal places, excluding VAT. The offered capacity in the BSP's bid may not be higher than the value from its prequalification bid for the corresponding direction. In case that the Agency, due to the lack of competition at the ancillary service market, has approved an exemption and application of other forms of procuring balancing capacity to a transmission system operator, the price in a submitted bid may not be higher than the maximum price calculated in accordance with the methodology referred to in Appendix 1.

4.2.9 The period when the competition is implemented may be:

- a calendar year, i.e. from 1 January, 00:00 h to 31 December, 24:00 h for the observed year
- of a certain series which includes multiple calendar months, i.e. from the first day of the calendar month in the series of multiple calendar months, 00:00, to the last day of the calendar month in the series of multiple calendar months, 24:00 for the observed series of months

- a calendar month, e.g. starting from the first day of the calendar month, 00:00 h to the last calendar months, 24:00 h for the observed month
- a calendar week, e.g. from Monday, 00:00 h to Sunday, 24:00 h, or
- multiple calendar days, i.e. from the first day of the range of multiple calendar days, 00:00 h, to the last day of the series of multiple calendar days, 24:00 h for the observed series
- a calendar day from 00:00 to 24:00 h
- a part of a calendar day, divided into evaluation intervals;
- a part of a calendar day, divided into intervals shorter than the evaluation intervals.

Manner of selecting the bid

4.2.10.1 The operator shall order all the accepted bids in the ascending order, according to the individual price from the BSPs bid, creating a list of priorities for each direction separately, or for each individual auction for each validity period of a product.

4.2.10

4.2.10.2 If a bid which is being considered together with already accepted bids does not exceed the value of the requested amount of balancing capacity, this bid is considered accepted, and the BSP is obliged to provide the balancing capacity service.

4.2.10.3 The price from an accepted BSP bid is the price at which the TSO pays the contracted service.

4.2.10.4 If there are two or more bids, with the same price from the bid, an the sum of these bids, together with the already accepted bids, exceeds the value of the requested capacity, bids are ranked according to the amounts of offered capacity, from the highest to the lowest, and the bids are accepted in the amounts up to the quantity of requested capacity. If two or more bids have the same price from the bid, and the same quantity of offered capacity, bids are accepted according to the time when the bid was submitted, from the earliest to the latest submitted bid.

4.2.10.5 The transmission system operator is obliged to pay the defined balancing capacity price for each MW/h of ensured balancing capacity in accordance with the auction results.

4.2.10.6 If balancing capacity is not provided for the transmission system operator in accordance with the auction results, the TSO shall not pay the defined value to the BSP for unsecured balancing capacity.

4.2.10.7 The transmission system operator will, in case that the obligation of ensuring balancing capacity is not fulfilled, collect an amount from the BSP which is determined on the basis of the weighted price of the BSP from the accepted bids, multiplied by 1.5 for each MW/h of unsecured balancing capacity, where the quantities from the accepted BSP bids are used as weights.

4.2.11

Notifying the BSP

4.2.11.1 After the end of the auction for procurement of balancing capacity, the TSO shall publish the results of the auction.

4.2.11.2 The time for notifications is defined in the Balancing Capacity Procurement Calendar.

4.2.11.3 The BSP whose bid is accepted is obliged to submit a bid for balancing energy in the minimum value of the accepted bid for balancing capacity.

Invoicing

4.2.12.1 The BSP issues invoices to the transmission system operator for each MW/h of ensured balancing capacity in accordance with the auction results.

4.2.12 4.2.12.2 In a case referred to in point 4.2.10.7. The transmission system operator issues an invoice for each MW/h of unsecured balancing capacity.

4.2.12.3 The deadlines for issuance and payment of invoices are published in the Balancing Capacity Procurement Calendar.

4.2.12.4 The invoice shall be issued in accordance with the law on value-added tax. Payments are, for a BSP with the principal place of business in the Republic of Serbia, made in a dinar equivalent value in euros, calculated at the official middle exchange rate determined by the exchange rate list of the NBS on the date of payment. For a BRP based abroad, the payment is made in euros. The invoice shall be delivered by e-mail or through the e-invoicing system pursuant to the Law on Electronic Invoicing.

Transfer of the obligation to provide balancing capacity

4.2.13 4.2.13.1 A BSP is entitled to transfer the obligation to provide balancing capacity to another prequalified BSP.

4.2.13.2 A BSP which transfers the obligation to provide balancing capacity and the BSP which receives it must notify the Transmission System Operator on the wish for and approval of the transfer of the obligation, by sending a Request for Transfer of Obligation to Provide Balancing Capacity until 12:00 h of the day preceding the day when the service is provided.

4.2.13.3 The transmission system operator is entitled to reject a request for transfer of obligation to provide balancing capacity in cases referred to in point 4.2.13.4. In the case that a request for transfer of the obligation to provide balancing capacity is rejected, the Transmission System Operator is obliged to submit an answer with the reasons for the rejection of the request for transfer of the obligation to provide balancing capacity to the BSP.

4.2.13.4 A transfer of the obligation to provide balancing capacity may not be realized if the BSP which receives the obligation to provide balancing capacity is not prequalified, has no signed Framework Agreement with a TSO for that value of balancing capacity for which it receives the obligation to provide balancing capacity, or, if, together with a previously contracted quantity at an auction, or through a previous transfer, exceeds the value for which it was prequalified.

4.2.13.5 A fee for provision of balancing capacity is paid by a BSP which provides capacity at a price from the bid of the initial capacity tenderer. In the case that a BSP to which the obligation to provide balancing capacity has not fulfilled the obligation to provide balancing capacity, the transmission system operator charges it a fee in the amount which is to be paid by the initial tenderer in accordance with point 4.2.10.7.

4.3 NON-FREQUENCY ANCILLARY SERVICES AND PROCUREMENT OF NON-FREQUENCY ANCILLARY SERVICES

4.3.1 The transmission system operator procures non-frequency ancillary services from all market participants in accordance with the technical characteristics, based on market principles, unless it is decided, in the procedure prescribed by the Law, that this is not economically justifiable, that a relevant number of providers does not exist, or that a secure and reliable operation of the transmission system may be impeded, in which case non-frequency services are procured from all service providers whose facilities are connected to the transmission system, if they have gone through the qualification process, at regulated prices determined by the Energy Agency of the Republic of Serbia.

In terms of voltage regulation, the Ancillary Services Contract for Non-Voltage Release and Non-Voltage Operation of a Part of the System in particular:

4.3.2

(a) defines generating modules and other equipment with its technical characteristics which are important for voltage regulation, obliging the service provider to implement voltage regulation;

(b) regulates the manner in which the transmission system operator verifies the provision of an ancillary service and the manner in which the service provider is informed on the results of the verification.

4.3.3 In terms of participation in the process of no-volt release and island operation service, the Ancillary Services Contract for Non-Voltage Release and Non-Voltage Operation of a Part of the System concluded between a TSO and a power producer in particular:

(a) defines generating modules which provide the service of non-voltage release, or which have the option of island operation with technical characteristics important for these operation regimes,

(b) regulates the manner in which the transmission system operator verifies the provision of an ancillary service and the manner in which the service provider is informed on the results of the verification.

5 BALANCING ELECTRICITY MARKET

5.1 INTRODUCTION

The transmission system operator is responsible for organization and administration of the balancing electricity market.

The transmission system operator purchases or sells balancing electricity (hereinafter referred to as: the balancing energy) in the balancing electricity market for the purpose of:

5.1.1

5.1.2

(a) maintaining real-time balance between generation, consumption and exchange of electricity;

(b) providing secure power system operation;

(c) upholding the necessary level of Automatic Frequency Restoration Reserve and Manual Frequency Restoration Reserve;

in compliance with the Grid Code.

5.1.3 Balancing energy is injected into the transmission/ distribution/closed distribution system, or is withdrawn from the transmission/distribution/closed distribution system over periods laid down in the Transmission system operator's order for activating the balancing reserve or exchange of energy due to an imbalance of TSOs' control areas in the process of imbalance netting.

5.1.4 Balancing capacity means all available reserve on the balancing electricity market: Balancing reserve includes:

(a) mandatory balancing capacity on the basis of the Ancillary Services Contract referred to in point 4.3;

(b) all available capacities of balancing service provider resources which remain after the daily schedules have been accepted,

5.1.5

(c) available capacities stipulated in the balancing energy purchase and sale contract with other transmission system operators which define electricity exchange.

A balancing service provider resource is:

(a) a generating module;

(b) a group of generating modules – within one or more generation sites;

(c) controllable load which is a reversible hydro power plant or pumped storage site when in pumping regime;

(d) controllable load of an active customer –final customer's facility which may regulate withdrawal or injection of energy upon a request of the transmission system operator;

(e) an electricity storage facility;

(f) a group of generating modules, controllable load and electricity storages at one W/I point;

and for W/I points which comprise the balancing resource, the daily schedule is nominated to the transmission system operator, individually or within the daily schedule of the balancing group.

Energy trading in the process of imbalance netting means an exchange of energy of the control areas' imbalances between the GCC member transmission system operators.

The operational application of the purchase process and sale of balancing energy on the relevant market day begins after the transmission system operator's validation of
5.1.6 accepted daily schedules for that day, in compliance with the Grid Code, and it ends at 24:00h of the same market day.

5.1.7 The operational application of the process of engagement of balancing energy includes activation of balancing capacity for the purpose of upwards regulation (when the transmission system operator purchases balancing energy) or downwards regulation
5.1.8 (when the transmission system operator sells balancing energy), as well as exchange of energy due to an imbalance of control areas between TSOs in the process of imbalance netting.

Administration of balancing mechanism includes: collection and verification of bids
5.1.9 for engaging the balancing capacity upwards or downwards, creation of merit order lists for engagement of balancing capacity, calculation of quantities of engaged balance energy, and financial settlement on the basis of balancing energy withdrawn/injected for the relevant market day.

5.1.10 Regulation upward is accomplished:

(a) via an order for a increase of active power injection of a balancing service provider resource;

(b) via an order for a decrease of active power withdrawal of a balancing service provider resource;

(c) via nan order for purchase of balance energy from the transmission system operator from another bidding zone.

5.1.11

(d) via purchase of balancing energy based on the imbalance netting.

Regulation downward is accomplished:

(a) via an order for a decrease of active power injection of a balancing service provider resource;

(b) via an order for a increase of active power withdrawal of a balancing service provider resource;

(c) via nan order for a sale of balance energy to the transmission system operator from another bidding zone.

5.2.1

(d) via delivery of balancing energy based on the imbalance netting.

5.2 PARTICIPATION IN BALANCING ENERGY ENGAGEMENT

Participation of balancing service provider resources is regulated by a balancing mechanism participation agreement, which the TSO and market participant that has a balancing entity in the TSO's bidding zone are obliged to conclude, granting that market participant the BSP status.

Power producers and aggregators whose aggregation group includes a producer in the transmission system control area are obliged to make all of the available capacities of their balancing entities for provision of balancing services available to the TSO for the purpose of balancing energy engagement.

5.2.2 The BRP is responsible for nomination of daily schedules of the balancing service provider resources from their balancing group.

5.2.3 Participation of TSOs from other bidding zones in balance energy engagement is regulated by agreements between TSOs which regulates the purchase and sale of balance energy, as well as exchange of energy in the imbalance netting process.

5.2.4

5.3 REGISTRY OF BALANCING SERVICE PROVIDERS

The transmission system operator establishes and administers the Registry of BSPs.

The Registry of BSPs contains in particular the following information:

5.3.1

5.3.2

(a) official name, principal place of business and contact details of a BSP;

(b) entry into force of a balancing mechanism participation agreement, the number under which the agreement is registered, and the validity period of the agreement in question;

(c) names and contact details of persons authorised to implement balance energy engagement;

(d) a list of balancing entities within the competence of a BSP;

(e) EIC X of the BSP whose balancing group has assigned balancing service provider resources;

(f) EIC Z and EIC W codes for each balancing service provider resources;

5.3.3 (g) technical characteristics of the balancing service provider resource.

5.3.4 A BSP is obliged to submit all information needed to maintain the Registry of BSPs to the transmission system operator.

5.3.5 The BSP is entitled to inspect all the data n the Registry of BSPs which refer to it.

5.3.6 A market participant is obliged to report each amendment or supplement of data contained in the Registry of BSPs to the transmission system operator.

The transmission system operator keeps a Registry of BSPs in a distribution system and submits data from this Registry to the TSO.

5.4.1

5.4 BIDS FOR BALANCING ENERGY ENGAGEMENT, MERIT ORDER LIST AND REDISPATCHING BIDS

Every BSP which is obliged to provide balancing capacity is obliged to submit a bid for engagement of balancing energy upwards and downwards for energy from the mFRR. BSPs which are not obliged to provide balancing capacity are entitled to submit a bid for engagement mFRR balancing energy.

A BSP which does not have the dominant participant status shall submit a bid for each balancing entity separately, except for the aggregator, which shall submit a single bid for the entire aggregation group.

The dominant participant must submit a bid that includes all the balancing service provider resource within its competence.

5.4.2 A bid shall contain a set of energy-price pairs based on which the price of activated balancing energy up/down can be determined.

5.4.3 The price in the bid must be higher than or equal to -15 000 EUR/MWh and lower than 15 000 EUR/MWh. The price is denominated in EUR/MWh with two decimal places.

5.4.4 Energy is expressed as a value of no less than 1 MWh.

5.4.5 The price in the bid for regulation up cannot be less than the price realised on the day ahead organised electricity market in Serbia in the observed accounting interval.

5.4.6 The price for engagement of the first 25 MWh upward submitted by the dominant participant cannot be higher than the price realised on the day-ahead organised market

5.4.7 increased by the higher value between 30 EUR and 40% of the absolute value of the price realised on the day-ahead organised market in the observed accounting interval.

5.4.8 The price for engagement of the first 25 MWh upward submitted by the dominant participant cannot be lower than the price realised on the day-ahead organised market in Serbia reduced by the higher value between 30 EUR and 60% of the absolute value of the price realised on the day-ahead organised electricity market in the observed accounting interval.

5.4.9 In addition with the bid, the dominant participant shall submit:

(a) a merit order list for engaging balancing service provider resources in the tertiary regulation (hereinafter referred to as: the Merit Order List)

(b) the price for engaging respective balancing entities down and up when they are engaged for ensuring the secure operation of the transmission system (hereinafter referred to as: Offer for redispatching)In addition to the bid, the

5.4.10 dominant participant shall also deliver information about the availability of balancing service provider resources.

5.4.11 In the Merit Order List and Redispatching Bid, the dominant participant shall include the entire available reserve of the balancing entities within its competence.

5.4.12

5.4.13 The dominant participant is obliged to submit separate Merit Order Lists and Offers for redispatching for regulation up and down.

A BSP which is not dominant is obliged to also submit a Offer for redispatching.

The transmission system operator determines the form, contents and method of submission of the bid, which shall particularly include the following information:

5.4.14

(a) energy-price pairs for regulation up/down;

(b) BSP's EIC X code;

(c) trading day and accounting interval to which the bid relates;

The transmission system operator determines the form, contents and method of submission of the Merit Order List and the Offer for redispatching, which shall particularly include the following information:

(a) direction of regulation (upward or downward) to which the Merit Order List and Offer for redispatching relates;

(b) BSP's EIC X code;

(c) the market day to which the engagement list applies;

(d) a list of balancing entities with the following information:

- EIC W code of the balancing entity engaged;
- the ordinal number of priority (1 to x, where 1 implies the top priority for engagement);
- the price for engaging a balancing service provider resource with a view to ensuring the secure operation of the transmission system.

5.5 SUBMISSION AND VERIFICATION OF BIDS FOR BALANCING ENERGY ENGAGEMENT, THE MERIT ORDER LIST AND OFFER FOR REDISPATCHING

5.5.1 A BSP shall submit a bid for engagement of balancing energy, the Merit Order List and a Offer for redispatchingto the transmission system operator for the relevant market day, no later than 16:00 h on the previous day.

5.5.2 Upon receipt of the bid for engagement of balancing energy, the Merit Order List and the Offer for redispatching, the transmission system operator shall verify the correctness of their form and content.

5.5.3 If a BSP has not submitted bids for engagement of balancing energy, the Merit Order Lists and Offers for redispatchingin the form, content and within the deadline for their submission in accordance with this Market Code, they shall be deemed invalid, and the

5.5.4 transmission system operator will, without delay, notify the BSP thereof.

Upon receipt of the notification referred to in point 5.5.3., a BSP shall, without delay, submit the correct bids, Merit Order Lists or Offers for redispatching. For all BSPs which are obliged to submit bids, Merit Order List and Offers for redispatching, the

5.5.5 last valid bids, Merit Order Lists and Offers for redispatchingare applied until delivery of new correct ones.

5.5.6 For the relevant market day, a BSP may submit modified bids no later than 45 minutes before the accounting interval to which that modification relates.

5.5.7 For the relevant market day, the dominant participant may submit modified Merit Order Lists no later than 15 minutes before the start of the accounting interval to which that modification relates, or within a deadline otherwise determined on the basis of the conditions and needs of the system.

Submitted Offers for redispatching for the relevant market day cannot be modified after submission of a correct bid.

5.6 BIDS FOR ENGAGEMENT OF BALANCING ENERGY FROM THE TRANSMISSION SYSTEM OPERATOR FROM ANOTHER BIDDING ZONE

Bids for electricity trading with a TSO from another bidding zone are submitted in a manner, within the deadlines and under the conditions determined by the contract regulating the purchase and sale of electricity with TSOs from other bidding zones.

5.6.1 5.7 LIST OF ENGAGEMENT OF BALANCING RESERVE IN MANUAL FREQUENCY RESTORATION RESERVE

The transmission system operator determines two merit order lists for engagement of balancing reserve in the manual frequency restoration reserve for each accounting interval, depending on the balancing product:

5.7.1

(a) a balancing reserve merit order list within the accounting interval (hereinafter referred to as: List of purchasing balancing capacity for mFRR i.e. mFRR product);

(b) bids for purchasing of cross-border tertiary regulation energy.

The list for purchasing balancing capacity for mFRR is determined according to the minimal cost principle, on the basis of:

5.7.2

(a) bids for engagement of regulation up/down;

(b) Merit Order List, if it is submitted;

5.7.3 The list for cross-border tertiary regulation energy shall be determined according to the principle of minimum costs on the basis of bids for electricity trading from transmission system operators from another bidding zone.

5.8 ENGAGEMENT OF BALANCING CAPACITY IN MANUAL FREQUENCY RESTORATION RESERVE

5.8.1

5.8.2 The transmission system operator shall activate the offers in the merit order in accordance with the mFRR list. In case of an insufficient volume of the reserve, the transmission system operator shall engage a cross-border product.

5.8.3 In case of a threat to the security of the transmission system, or threat to the security of the interconnection, the transmission system operator shall activate Redispatching Bids, in accordance with the rules governing the transmission system operation.

5.8.4 Bids for participation in the provision of the balance energy shall be activated by the transmission system operator via instructions to the balancing service provider resources in accordance with the rules governing the transmission system operation (the Grid Code).

All instructions for engagement of balancing entities must be recorded by the transmission system operator. Instruction details to be recorded shall contain in particular the following:

(a) the reason for engaging the balancing service provider resources (e.g. power system balancing, provision of secure operation of the power system, operational limitation, etc);

(b) EIC W code of the engaged balancing service provider resources;

(c) engagement period;

(d) direction of manual frequency restoration reserve: regulation upward or regulation downward;

(e) instructed modification of power capacity in MW in respect to the valid daily schedule of the balancing service provider resources, resulting in a new daily schedule of the balancing service provider resources.

If the balancing service provider resource is engaged for maintaining the required level of reserve for the automatic frequency restoration reserve and manual frequency restoration reserve, system balancing will be recorded as the reason for engagement of the balancing service provider resource.

A system imbalance resulting from activation of the operational limitation shall be eliminated by the transmission system operator by engaging balancing energy, and the system balancing is recorded as the reason for the engagement.

5.8.5

The transmission system operator is obliged to keep records on the activated balancing reserve for a cross-border product. The following details are to be recorded:

5.8.6

(a) volume of activated balancing reserve in MW;

(b) engagement period;

(c) the transmission system operator whose balancing energy has been activated

5.9 ENGAGEMENT OF BALANCING RESERVE IN AUTOMATIC FREQUENCY RESTORATION RESERVE

5.9.1

5.9.2 The transmission system operator shall activates the automatic frequency restoration reserve in accordance with the Grid Code.

Engagement of balancing service provider resource for the automatic frequency restoration reserve must be recorded by the transmission system operator. The following details are to be recorded:

(a) EIC W code of the balancing entity engaged;

(b) engagement period;

5.9.3

(c) direction of activation: regulation upward or regulation downward;

(d) energy engaged in MWh for the automatic frequency restoration reserve purposes.

The engaged energy of a balancing service provider resource for the automatic frequency restoration reserve at each accounting interval is an integral of the differential between the desired power and the balancing service provider resource's baseload from the daily schedule, with observance of manual frequency restoration reserve. The desired power is calculated by a network load regulator (i.e. the automatic frequency restoration reserve system) and it means the target power at which the network load regulator wishes to bring the balancing service provider resource, in order to eliminate an error of the control area for which the transmission system operator is responsible.

5.10 IMBALANCE NETTING

Energy trading of control areas' imbalance between the transmission system operators is carried out in accordance with the concluded contract and the interconnection rules.

Energy trading resulting from imbalance netting must be recorded by the TSO. The following details are to be recorded:

5.10.1 (a) time period in imbalance netting;

5.10.2 (b) energy traded in MWh for the imbalance netting purposes for each accounting period.

The energy traded in the imbalance netting at each accounting interval is determined separately for the energy exchanged upward (inflow) and the energy exchanged downward (outflow).

5.10.3 The energy exchanged upward is an integral of the energy exchanged in inflow direction at the accounting interval. The energy exchanged downward is an integral of

5.10.4 the energy exchanged in outflow direction at the accounting interval.

5.11 CALCULATION OF ENGAGEMENT OF BALANCING ENERGY FROM BALANCING SERVICE PROVIDER RESOURCES

5.11.1 The transmission system operator for each BSP shall determine the volume of engaged balancing energy from the balancing service provider resource at each accounting interval on the basis of:

(a) engaged automatic frequency restoration reserve up and down;

(b) given orders for manual frequency restoration reserve upward and downward, and the reason for engagement.

5.11.2

Balancing energy referred to in point 5.12.1.a) shall be determined as;

$$aFRR_{BSP,ai} = \sum_{br} (aFRR+_{br,ai} - aFRR-_{br,ai})$$

where:

$aFRR_{BSP}$ – balancing energy in the transmission system as a result of engagement of the automatic frequency restoration reserve from the balancing service provider resource BSP;

aFRR+ – balancing energy resulting from the activation of the automatic frequency restoration reserve up

aFRR– – balancing energy resulting from the activation of the automatic frequency restoration reserve down;

br – subscript denoting a balancing resource;

ai – subscript denoting an accounting interval.

Balancing energy referred to in point 5.11.1.(b) engaged to balance the system is determined as:

$$mFRR_{BSP,ai} = \sum_{br} (mFRR+_{br,ai} - mFRR-_{br,ai})$$

5.11.3

where:

$mFRR_{BSP}$ – balancing energy resulting from the activation of the manual frequency restoration reserve for the system balancing purposes from the balancing service provider resource BSP;

mFRR+– balancing energy resulting from upward activation of the manual frequency restoration reserve for the balancing system purposes;

mFRR – balancing energy resulting from downward activation of the manual frequency restoration reserve for the balancing system;

br – subscript denoting a balancing resource;

ai– subscript denoting an accounting interval.

5.11.4 Balancing energy referred to in point 5.11.1. (b) engaged for ensuring secure operation of the power system is determined as:

$$mFRRs+_{ai} = \sum_{br} mFRRs+_{br,ai}$$

and

$$mFRRs-_{ai} = \sum_{br} mFRRs-_{br,ai}$$

where:

$mFRRs+_{ai}$ – balancing energy resulting from upward activation of the manual frequency restoration reserve for ensuring secure operation of the power system;

$mFRRs-_{ai}$ – balancing energy resulting from downward activation of the manual frequency restoration reserve for ensuring secure operation of the power system;

5.11.5

br – subscript denoting a balancing resource;

ai – subscript denoting an accounting interval.

The total volume of engaged balancing energy in the power system in upward manual frequency restoration reserve for the system balancing purposes is determined as:

$$mFRR+_{system,ai} = \sum_{br} (mFRR+_{br,ai})$$

where:

$mFRR+_{system,aii}$ – balancing energy resulting from upward manual frequency restoration reserve for the balancing system purposes;

mFRR+– balancing energy resulting from downward manual frequency restoration reserve for the balancing system purposes;

br – subscript denoting a balancing resource;

ai – subscript denoting an accounting interval;

system – subscript denoting a power system.

The total volume of engaged balancing energy in the power system in downward tertiary regulation for the system balancing purposes is determined as:

5.11.6

$$mFRR-_{system,ai} = \sum_{br} (mFRR-_{br,ai})$$

where:

$mFRR-_{system,ai}$ – balancing energy in the transmission system resulting from downward manual frequency restoration reserve for the balancing system purposes;

aFRR – balancing energy resulting from downward manual frequency restoration reserve for the balancing system purposes;

br – subscript denoting a balancing resource;

ai – subscript denoting an accounting interval;

system – subscript denoting a power system.

5.11.7

The total volume of engaged balancing energy in the power system in manual frequency restoration reserve for the system balancing purposes is determined as:

$$mFRR_{system,ai} = \sum_{br} (mFRR+_{ai} - mFRR-_{ai})$$

where:

$mFRR_{system,ai}$ – the total balancing energy in the transmission system resulting from manual frequency restoration reserve for the balancing system purposes;

mFRR+– the total balancing energy in the transmission system resulting from upward manual frequency restoration reserve for the balancing system purposes;

mFRR– – balancing energy in the transmission system resulting from downward tertiary regulation for the balancing system purposes;

5.11.8

br – subscript denoting a balancing resource;

ai – subscript denoting an accounting interval;

system – subscript denoting a power system.

It is not allowed to sum up, within one accounting interval, the balancing energy resulting from the engagement of upward manual frequency restoration reserve for the purposes of ensuring a secure operation of the electric power system ($mFRRs+_{ai}$) and the balancing energy resulting from the engagement of downward manual frequency

restoration reserve for the purposes of ensuring a secure operation of the power system ($mFRRs_{-ai}$).

The price of the engaged balancing energy referred to in point 5.11.2 resulting from the engagement of upward and downward manual frequency restoration reserve from the balancing entities for each accounting interval equals:

5.11.9

(a) maximum price of engaged balance energy from manual frequency restoration reserve in the same direction in accounting intervals when $aFRR_{BSP,ai} > 0$ and $mFRR_{system,ai} > 0$;

(b) minimum price of engaged balance energy from manual frequency restoration reserve in the same direction in accounting intervals when $aFRR_{BSP,ai} < 0$ and $mFRR_{system,ai} < 0$;

(c) bid price of the dominant participant which corresponds to upward regulation in the amount of 25 MWh, when $aFRR_{BSP,ai} > 0$ and $mFRR_{system,ai} \leq 0$;

(d) bid price of the dominant participant which corresponds to downward regulation in the amount of 25 MWh, when $aFRR_{BSP,ai} < 0$ and $mFRR_{system,ai} \geq 0$;

(e) equals zero when $aFRR_{BSP,ai} = 0$.

5.11.10 The price of the engaged balancing energy for the system balancing purposes referred to in point 5.11.3 resulting from engagement of upward and downward manual frequency restoration reserve from the balancing service provider resourcesis determined on the basis of the last activated bid in that direction for each accounting interval.

5.11.11 The price of the engaged balancing energy required for ensuring secure power system operation referred to in point 5.11.4 is determined for each balancing service provider resource separately on the basis of the Offer for Redispatching.

5.12 CALCULATION OF BALANCING ENERGY ENGAGED IN THE IMBALANCE NETTING PROCESS

5.12.1 The transmission system operator shall determine the volume of energy exchanged in the imbalance netting process for each interval, separately for:

(a) energy withdrawn from the GCC (GCC_{ai+}):

$$GCC_{ai+} = \sum_{imbbg+} GCC_{imbbg+}$$

where:

GCCimbbg+ – energy withdrawn in the imbalance netting process in an individual sample within the accounting interval;

imbbg + – interval of 4 seconds when energy was withdrawn

ai– subscript denoting an accounting interval.

(b) Energy injected into the GCC (GCCai-):

$$GCC_{ai-} = \sum_{imbbg-} GCC_{imbbg-}$$

where:

GCCimbbg- – energy injected in the imbalance netting process in an individual sample within the accounting interval;

imbbg- – interval of 4 seconds when energy was injected

ai – subscript denoting an accounting interval.

5.12.2 With a view to determining the weighted imbalance settlement price in the imbalance netting process, the transmission system operator shall establish prices for each accounting interval and for both directions of energy trading in the imbalance netting process, as prices of engaged downward secondary regulation and of engaged upward secondary regulation in the observed accounting interval, and submit it to the GCC Coordinator.

5.12.3 The price of the traded energy resulting from the imbalance netting for each accounting interval is set as a weighted price of the imbalance energy traded between the TSOs of the GCC members.

5.13 REPORT ON THE ENGAGEMENT OF BALANCING ENERGY FROM BALANCING SERVICE PROVIDER RESOURCE

5.13.1

5.13.2 The transmission system operator shall, no later than 3 working days after the relevant market day, draw up a report on the balancing energy engaged from balancing entities for the relevant market day, and send it to the BSP.

The BSP's report on balancing energy engaged from balancing service provider resource must in particular contain the following information:

(a) BSP's EIC X code;

(b) market day to which the report refers;

(c) EIC W code of the balancing entity engaged;

(d) reason for engaging the balancing service provider resource;

(e) volume of the manual frequency restoration reserve engaged for system balancing, including the pertinent price at the corresponding accounting interval;

(f) compensation for total manual frequency restoration reserve engaged for the system balancing for each accounting interval and for each market day to which the report refers;

(g) volume of the engaged automatic frequency restoration reserve including the pertinent price at the corresponding accounting interval;

(h) compensation for total engaged automatic frequency restoration reserve required for the system balancing for each accounting interval and for each market day to which the report refers;

(i) volume of the manual frequency restoration reserve engaged for ensuring the secure power system operation at the corresponding accounting interval per balancing service provider resource, including the pertinent price;

(j) compensation for total manual frequency restoration reserve engaged for ensuring secure power system operation for the market day to which the report refers;

5.13.3 A BSP may lodge a complaint to the transmission system operator in respect to the contents of the report on the engaged balancing energy from the balancing service provider resource no later than 3 working days from the receipt of the report. If no complaint is lodged by the BSP within the specified deadline, the report shall be deemed final.

5.13.4 The transmission system operator will, within 3 working days from the receipt of a complaint, inform the BSP on the acceptance or rejection of the complaint. In case that a complaint is accepted, the BSP will submit a corrected report which is deemed final.

5.13.5 The transmission system operator shall inform the BRP after the expiry of the deadline for acceptance or rejection of BSP's complaints.

5.14 INVOICING AND CHARGING OF ENGAGED BALANCING ENERGY FROM THE BALANCING SERVICE PROVIDER RESOURCES

5.14.1 The transmission system operator shall calculate engaged balancing energy from the balancing service provider resources per each BSPs for the accounting period, on the basis of the amount and price of engaged balancing energy from the automatic frequency restoration reserve and manual frequency restoration reservefrom the final

5.14.2 reports on engaged balancing energy from the balancing service provider resources referred to in chapter 5.13 in that accounting period.

On the basis of the calculated engaged balancing energy from the balancing service provider resource, the transmission system operator, or BSP, shall issue an invoice for the engaged balancing energy for the accounting period on the invoicing day defined in the Electricity Market Settlement and Payment Calendar. The transmission system operator is obliged to publish the Electricity Market Settlement and Payment Calendar on its website no later than the 10th calendar day of the month M+1 for invoices which relate to month M. The due date of the invoice issued by the transmission system operator, or BSP, is the payment day defined in the Electricity Market Settlement and Payment Calendar. The invoice shall be issued in accordance with the law on value-added tax. The total amount of the invoice must be paid in full and within the stipulated deadline. Payments shall be, for a BSP with the principal place of business in the Republic of Serbia, made in a dinar equivalent value in euros, calculated at the official middle exchange rate determined by the exchange rate list of the NBS on the date of payment. For a BSP with the principal place of business abroad, the payment will be made in euros. The BSP shall pay the transmission system operator a fee for a case of engaged downward balancing energy with a positive price, and upward with a negative price. The transmission system operator shall pay the BSP a fee for a case of engaged upward balancing energy with a positive price, and downward with a negative price.

The invoice shall be delivered by e-mail or through the e-invoicing system pursuant to the Law on Electronic Invoicing, and include. at the minimum, the following details:

(a) the calculated amount of engaged balancing energy;

(b) the total amount to be collected;

5.14.3 (c) other details in accordance with the law on value-added tax.

5.15 PUBLICLY PUBLISHED DATA RELATING TO ENGAGED BALANCING ENERGY

The transmission system operator is obliged to publish the following data on its website for each accounting interval, one day after receipt of data from European balancing platforms, and no later than 15 calendar days in the month following the relevant market day:

5.15.1

(a) the total quantity and price of engaged balancing energy from the balancing entity in the electrical energy system from the mFRRe;

(b) the total quantity and price of engaged balancing energy from the balancing entity in the electrical energy system from the aFRR;

(c) the total quantity and price of balancing energy from the transmission system operators from other bidding zones.

5.15.2 The TSO is obliged to publish, on its website, for each accounting interval, data on the quantity of exchanged energy in the netting process referred to in point 5.12.1 and the weighted price referred to in points 5.12.2 and 5.12.3 immediately after the imbalance netting coordinator has obtained the information.

6 CALCULATION OF PROVIDED BALANCING SERVICES

6.1 DELIVERY OF BALANCING SERVICES

For the purpose of delivery of balancing services, each BSP is obliged to provide information to the transmission system operator on balancing entities with which the TSO is delivering balancing services.

6.1.1 An aggregator is obliged to submit information to the transmission system operator on the transmission system customer which belongs to its aggregation group and which is a balancing service provider resource. An aggregator is obliged to notify the

6.1.2 distribution system operator and closed distribution system operator on the system customer that belongs to their aggregation group and which is a balancing service provider resource.

An active customer is obliged to inform the distribution system operator on its participation in the delivery of balancing services.

6.1.3

A system customer may participate in aggregating in terms of delivery of balancing

6.1.4 services only as a part of one aggregation group, or as an independent BSP.

6.1.5 A system customer may also participate in delivery of balancing services in case of a transfer of balance responsibility. A system customer's supplier which has a contract that features pre-defined quantities shall not perform activities in the process of delivery of balancing services.

6.1.6

6.1.7 An aggregator shall regulate relation within its aggregation group.

When sending an order for activation of the aggregation group in a balancing market, an aggregator shall independently determine which balancing entity from its

6.1.8 aggregation group it will activate as a response to an order of the TSO.

For the purposes of activation of distribution system customers, a BSP is obliged to gain DSO's approval for the distribution system customer to deliver balancing services.

6.2 CALCULATION OF THE ACTIVATION OF THE BALANCING SERVICE PROVIDER

6.2.1

6.2.2

The transmission system operator shall keep a register of all balancing service provider

6.2.3 resource which are a part of aggregation groups, and a Register of Independent BSPs.

The distribution system operator shall keep a register of all balancing entities which are a part of aggregation groups, and a Register of Independent BSPs in a distribution

6.2.4 system.

An aggregator is obliged to provide the system operator with information on the manner of distributing activations from an order for activation of the aggregation group. If the order has been assigned to a balancing service provider resource which is hosted by the distribution system, the TSO shall submit information on the activation to the DSO.

Distributed activations from an aggregation group's order and realization of the order activation are used by the TSO for adjusting imbalances of the balancing groups which

include appropriate balancing service provider resources which are members of the aggregation group.

The BSP submits, to the transmission system operator and distribution system operator, individually per balancing service provider resources, information on the value of planned energy withdrawal/injection by balancing entities from/to the system. Information on the value of planned energy withdrawal/injection by balancing entities from/to the system is continuously submitted by the BSP pre-real time.

6.2.5 The baseline of a balancing service provider resource which has received an activation order is determined on the basis of submitted information referred to in point 6.2.5.

6.2.6 The baseline for a case of balancing entity activation is the final plan for energy withdrawal/injection from/to the system which was submitted by the BSP prior to the beginning of activation, or before issuance of the order.

6.2.7 The transmission system operator submits, to the BRP for a W/I point, information on the baseline in case of activation of the balancing service provider resource at the W/I point.

6.2.8

6.3 DETERMINATION OF THE FEE FOR PARTICIPATION IN CONSUMPTION MANAGEMENT

6.3.1 The financial settlement between suppliers and the final customer which has a concluded full supply contract for each accounting interval in which it has received an activation order, shall be carried out in the value determined on the basis of the baseline referred to in point 6.2.7 of this Code.

6.3.2 The financial settlement between the final customer which has a concluded contract with pre-defined quantities and its BRP for each accounting interval in which it has received an activation order, shall be carried out in the value determined on the basis of the baseline referred to in point 6.2.7 of this Code.

6.3.3

In a case referred to in point 6.3.1., financial settlement is carried out in such a manner that the supply fee in a certain accounting interval equals the quotient of the metered energy, multiplied with the price which is expressed as the initial price of the full supply contract, multiplied with the ratio of the baseline quantities and the metered energy. The supply fee is a value which would result from the case of a customer consuming electricity according to the baseline multiplied with the initial contract price for full supply in that accounting interval.

6.3.4

In a case referred to in point 6.3.2., financial settlement is carried out in such a manner that a balancing fee in the corresponding accounting interval equals the quotient of the balancing price from the agreement regulating the transfer of balance responsibility in that accounting interval, and of the value corresponding to the metered energy, from which quantities from an agreement with pre-defined quantities, and the account response, are deducted. The balancing fee is a value which would result from the case of a customer consuming electricity according to the baseline multiplied with the contract which regulates the transfer of balance responsibility in that accounting interval.

6.3.5

The distribution system operator or closed distribution system operator shall provide the transmission system operator with information on the final customers' full supplier, in case that there is a full supply contract, or about the BRP of the final customer, in case that there is a contact with pre-defined quantities.

The transmission system operator shall submit the baseline to the supplier of the final customer that has a concluded full supply contract, or the BRP of the final customer that has a contract with pre-defined quantities. The transmission system operator shall submit summary data on the baseline to the BRP. The transmission system operator shall submit summary data on the realization of the order to the BRP.

6.3.6

6.4 TECHNICAL CONDITIONS FOR PARTICIPATION IN CONSUMPTION MANAGEMENT

6.4.1.1 For participation in consumption management, independently or through aggregation, it is necessary to meet the technical requirements which enable efficient and stable functioning of the balancing market.

6.4.1.2 The minimum technical requirements to be met by the balancing service provider resource, or a group of balancing service provider resources which provide frequency containment reserve, are:

- requirements from the Grid Code relating to regulation for frequency containment, connection of the facility to the technical management system of the transmission system operator and real-time data exchange;
- the dead zone is ±10 mHz;
- the period of service delivery for declared reserve is unlimited, except for balancing entities with a limited energy reservoir when the system is not in normal operation mode, in which case this period is at least 30 minutes;
- The minimum reserve amount is 1 MW.

6.4.1.3 The minimum technical requirements to be met by the balancing entity, or a group of balancing entities, in case of Automatic Frequency Restoration Reserve, are:

- requirements from the Grid Code relating to connection of the facility to the technical management system of the transmission system operator and real-time data exchange;
- a delay in activation of a unit or group in aFRR cannot be longer than 30 seconds;
- the period of activation of the full amount of reserve is lower than 5 minutes;
- the minimum period of service delivery for declared reserve is 4 hours;
- the minimum reserve amount is 5 MW;
- the minimum response speed is 3 MW/min.

6.4.1.4 The minimum technical requirements to be met by the balancing service provider resource, or a group of balancing service provider resources, in case of Manual Frequency Restoration Reserve, are:

- requirements from the Grid Code relating to connection of the facility to the technical management system of the transmission system operator and real-time data exchange;
- the period of activation of the full amount of reserve is lower than 15 minutes;
- the minimum period of service delivery for declared reserve is 4 hours;
- the minimum reserve amount is 5 MW;
- the minimum response speed is 1 MW/min.

7 CALCULATION OF FINANCIAL SETTLEMENTS OF BALANCE RESPONSIBLE PARTIES

7.1 CALCULATION OF THE BALANCING GROUP IMBALANCE

Imbalance of the balancing group under the competence of a Balance Responsible Party is determined on the basis of the total nominated position, total metered position, and imbalance adjustments resulting from engaged balancing energy at the balancing market.

7.1.1 The total nominated position of each balancing group at the electricity market (hereinafter referred to as: total nominated position) includes all accepted of electricity trading blocks of that balancing group from the daily schedule.

7.1.2 The total metered position of each balancing group on the electricity market (hereinafter referred to as: total metered position) includes confirmed metered values

7.1.3 of withdrawn and injected electricity at that balancing group's W/I points in the transmission and distribution system.

An imbalance adjustment resulting from an activation of balancing energy at the

7.1.4 balancing market is determined depending on the membership in the balancing group of the W/I point of the balancing service provider resource.

7.1.5 For the W/I point of the balancing service provider resource, when the BRP for deviation of the prescribed value of the order of the balancing entity at that W/I point, and the BRP for the W/I point, are different legal persons, imbalance adjustment for the BRP for the W/I point is a response to the order for activation of balancing energy from automatic frequency restoration reserve and from manual frequency restoration

7.1.6 reserve at that W/I point.

For the W/I point, when the BRP for deviation of the prescribed value of the order of the balancing entity at that WIP, and the BRP for the WIP, are different legal persons,

7.1.7 the imbalance adjustment for the BRP for deviation of the order from the prescribed value, is a deviation of the order from the prescribed value.

For the W/I point of the balancing service provider resource, when the BRP for deviation of the prescribed value of the order of the balancing entity at that W/I point, and the BRP for the W/I point, are the same legal person, imbalance adjustment for the BRP is a sum of responses to the order for activation of balancing energy from automatic frequency restoration reserve and manual frequency restoration reserveat that W/I point, and deviation of the order from the prescribed value.

7.2.1

7.2 DETERMINATION OF THE TOTAL NOMINATED POSITION, TOTAL METERED POSITION AND IMBALANCE ADJUSTMENTS

Determination of the total nominated position of the balancing group

7.2.1.1 When determining the total nominated position of a balancing group, the following is to be taken into account:

(a) electricity trading blocks withdrawn by a balancing group from other balancing groups within the Serbian bidding zone;

(b) electricity trading blocks injected by a balancing group to other balancing groups within the Serbian bidding zone;

(c) electricity trading blocks withdrawn by a balancing group from other bidding zones;

(d) electricity trading blocks injected by a balancing group to other bidding zones.

7.2.1.2 The total nominated position of the balancing group under the competence of the Balance Responsible Party for the accounting interval ($TNP_{BRP,ai}$) is defined as follows:

$$TNP_{BRP,ai} = \left(\sum WETB_{BRP,ai} - \sum IETB_{BRP,ai}\right) + \left(\sum EW_{BRP,ai} - \sum EI_{BRP,ai}\right)$$

where:

WETB – accepted electricity trading block which a balancing group withdraws from another balancing group within the Serbia bidding zone;

IETB – accepted electricity trading block which a balancing group injects to another balancing group with the Serbia bidding zone;

EW – accepted electricity trading block which a balancing group withdraws from another bidding zone;

EI – accepted electricity trading block which a balancing group injects to another bidding zone;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

7.2.2 Determination of the total metered position of the balancing group

7.2.2.1 For an accounting interval, the total metered position of a balancing group is determined according to the confirmed values read from the energy meter.

7.2.2.2 When determining the total metered position of a balancing group, the following is taken into account:

(a) the total electricity injected at the withdrawal/injection points into the transmission system, distribution system and closed distribution system;

(b) the total electricity withdrawn at the withdrawal/injection points from the transmission system, distribution system and closed distribution system;

7.2.2.3 the total metered position of a balancing group under the responsibility of the BRP for W/I points, for the accounting interval ($TMPBRP,ai$) is determined as:

$$TMP_{BRP,ai} = \left(TEI_{BRP,ai} - TEW_{BRP,ai}\right)$$

where:

$TEI_{BRP,ai}$ – total electricity injected at the withdrawal/injection points into the transmission system, distribution system and closed distribution system;

$TEW_{BRP,ai}$ – total electricity withdrawn at the withdrawal/injection points from the transmission system, distribution system and closed distribution system;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

7.2.2.4 The distribution system operator and the closed distribution system operator are obliged to submit to the transmission system operator the total electricity injected to/withdrawn from the distribution system or closed distribution system within the specified deadline (no later than on the 15th day of the M+1 month) per balancing group separately, in a format defined by the transmission system operator. These data is taken into account when determining the total metered position of a relevant balancing group. In the case that the metering data are not available at an accounting interval level, the DSO and closed DSO are obliged to calculate such data using standardized load diagrams for that category of customers of the distribution system, or closed distribution system, and to submit these data to the transmission system operator.

7.2.2.5 The transmission system operator determines the transmission energy losses per accounting interval on the basis of confirmed metered values of electricity withdrawn/injected at delivery points to the transmission system, including withdrawal/injection points with neighbouring systems at the interconnected overhead power lines.

7.2.2.6 At the W/I points with the neighbouring systems at the interconnection overhead power lines, the accounting information used is the confirmed value of traded electricity.

7.2.2.7 The distribution system operator determines the energy losses in the distribution system for each accounting interval, on the basis of confirmed metered values of withdrawn/injected electricity at W/I points in the distribution system. In the case that the metering data are not available at the accounting interval level, the DSO is obliged to calculate such data using standardized load diagrams, and to submit these data to the transmission system operator.

7.2.2.8 The closed distribution system operator determines the closed distribution system losses for each accounting interval, on the basis of confirmed metered values of electricity withdrawn/injected at W/I points to the transmission system. In the case that the metering data are not available at an accounting interval level, the closed DSO is obliged to calculate such data using standardized load diagrams, and to submit these data to the transmission system operator.

7.2.2.9 In the case that there is an operational limitation which is activated in accordance with the Grid Code, the transmission system operator for each balancing group determines the amount of energy resulting from the decrease of production as a result of the operational limitation. In case that a reduced production within a balancing group is a consequence of an operational limitation, the metered position for the purposes of calculation of financial settlement of the balance responsible parties will not be adjusted.

7.2.3

BRP's imbalance adjustment

7.2.3.1 Response to the order for activation of balancing energy

7.2.3.1.1 A response to the order for activation of balancing energy is a value resulting from the activation of balancing energy of the balancing service provider resourcewhose

W/I point is in the BRP's balancing group, and which is providing balancing service independently from the membership in the BRP's balancing group.

7.2.3.1.2 The transmission system operator for each balancing group determines the response to an order for activation of balancing energy which belong to that balancing group, during the corresponding accounting interval, on the basis of the realization of the order for activation of upward and downward balancing energy from the balancing entity.

7.2.3.1.3 A response to the order for activation of balancing energy from points 7.2.3.1.2. is determined as:

$$ROABE_{BRP,ai} = \sum_{br \in BRP} (REL_{br,ai} - BL_{br,ai})$$

where:

ROABE – response to the order for activation of balancing energy;

BL – baseline of the balancing resource

REL – realization at the W/I point of the balancing service provider resourceBRP – subscript denoting a BRP which is responsible for the balancing group which hosts the balancing service provider resources;

br – balancing resource;

ai – subscript denoting an accounting interval.

7.2.3.2 Deviation from the prescribed value of the order

7.2.3.2.1 A deviation from the prescribed value of the order is a value resulting from a failure to fulfil an order for activation of the balancing energy.

7.2.3.2.2 For each BRP which is a BSP or has a BSP in its balancing group and which uses a W/I point from another balancing group as a balancing service provider resource, the transmission system operator determines the deviation from the prescribed value of the order for all balancing service provider resources from other balancing groups which have received an activation order, to which the value of the balancing energy activation order is added for balancing service provider resources whose W/I point belongs to a BRP.

7.2.3.2.3 A deviation from the order referred to in point 7.2.3.2.2. is determined as follows:

$$DEVO_{BRP,ai} = \sum_{be \in BRP} \left(BL_{br,ai} + mFRR_{BSP,ai} + aFRR_{BSP,ai} + mFRRs+_{BSP,ai} - mFRRs-_{BSP,ai} - REL_{br,ai}\right)$$

where:

DEVO – deviation from the prescribed value of the order for activation of balancing energy;

BL – baseline of the balancing entity from another balancing group;

mFRR – order for balancing energy resulting from the activation of the Manual Frequency Restoration Reserve for the system balancing purposes;

aFRR – order for balancing energy resulting from the activation of the Automatic Frequency Restoration Reserve;

mFRRs – order for balancing energy resulting from downward activation of the Manual Frequency Restoration Reserve for ensuring secure operation of the power system;

REL– realization at the W/IP of the balancing entity from another balancing group;

BRP – subscript denoting a BRP which is responsible for the balancing group which hosts the balancing entities;

BSP – subscript denoting a BSP which is responsible for a deviation from the prescribed value of the order for balancing entities;

br – balancing resource;

ai – subscript denoting an accounting interval.

7.2.3.3 Total value of BRP's imbalance adjustment

7.2.3.3.1 The total value of imbalance adjustment is determined as a sum of the factors from points 7.2.3.1 and 7.2.3.2.

$$IA_{BRP,ai} = \sum_{br \in BRP} (ROABE_{BRP,ai} + DEVO_{BRP,ai})$$

where:

IA – total value of imbalance adjustment

ROABE – response to the order for activation of balancing energy;

DEVO – deviation from the prescribed value of the order for activation of balancing energy;

BRP – subscript denoting a BRP which is responsible for the balancing group which hosts the balancing service provider resource;

br – balancing resource;

ai – subscript denoting an accounting interval.

7.3.1 ## 7.3 DETERMINATION OF IMBALANCE OF THE BALANCING GROUP AND UNBALANCED DAILY SCHEDULES

Imbalance of the balancing group

7.3.1.1 Imbalance of an individual balancing group (*BGIai*) is determined for each accounting period:

$$BGI_{ai} = TNP_{BRP,ai} + TMP_{BRP,ai} - IA_{BRP,ai}$$

where:

TNP– total nominated position of the balancing group;

TMP – total metered position of the balancing group;

IA – total value of imbalance adjustment of the balancing group;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

Unbalanced daily schedules

7.3.2.1 Unbalanced daily schedules of the balancing group under the responsibility of the BRP after deadline for the process of intraday modification of daily schedules (*UDSai*) are determined for each accounting interval as a sum of the summary plan of production and the electricity trading blocks received by the balancing group minus
7.3.2 the summary plan of consumption and the electricity trading blocks delivered by the balancing group.

7.3.2.2 In case of UDSai=0, the daily schedule of the balancing group is balanced.

7.3.2.3 In case of UDSai>0, the electricity surplus of the balancing group is left in the Serbian bidding zone.

7.3.2.4 In case of UDSai< 0, the electricity deficit of the balancing group is taken from the Serbian bidding zone.

7.4 BALANCING IMBALANCE WHICH IS AFFECTED BY THE DISTRIBUTION SYSTEM OPERATOR AND FEES FOR REDISPATCHING IN THE TRANSMISSION SYSTEM FOR THE DISTRIBUTION SYSTEM OPERATOR AS A RESULT OF THE OPERATIONAL LIMITATIONS AND REDISPATCHING IN THE DISTRIBUTION SYSTEM

7.4.1

The distribution system operator may impose operational limitations and redispatching
7.4.2 of power plants which are connected to the distribution system.

The DSO imposes operational limitations and redispatching and, due to power flows from the distribution system to the transmission system which exceed the limitation for
7.4.3 injection of electricity from the distribution system to the transmission system as defined by the law on energy or the law on the use of renewable energy sources.

The DSO may affect the imbalance of a BRP resulting from redispatching and operational limitations at the distribution level and the level of the transmission system, on three grounds:

(a) activation of operational limitations at the distributional level

7.4.4 (b) activation of balancing entities at the distribution level for redispatching of the distribution system

(c) due to redispatching of the transmission system which has been caused in accordance with point 7.4.2.

The system balancing costs of the quantity of activated redispatching from points 7.4.3. (b) and (c) are borne by the distribution system operator. The DSO bears the redispatching costs in the aspect defined by the rules on the operation of the transmission system which regulates a portion of the costs of redispatching at the borders of the distribution and transmission systems which cause impairment of security criteria in the transmission system.

System balancing costs referred to in point 7.4.3. (a) resulting from temporary limitations of the power of power plants connected to the distribution system which use RES are subject to the provisions of paragraph 7.2.2.9.

The DSO determines the quantity of energy activated for the purposes of redispatching at the distribution level which results in regulatory imbalances of the control area.

7.4.5

The DSP provides the TSO with data on the quantity of energy at the distribution level for each BSP or BRP for every accounting interval after the activation.

7.4.6

7.5 CALCULATION OF IMBALANCE SETTLEMENT PRICE

7.4.7

Imbalance settlement price (SP) for each accounting interval is determined as the weighted price of activated explicit offers from the manual frequency restoration reserve, engaged balancing energy from the contractual balancing reserve in case when the transmission system operator purchases balancing energy from transmission system operators from other market areas, suppliers or wholesale suppliers, engaged secondary regulation, and electricity traded in the imbalance netting process within the GCC.

7.5.1

The imbalance settlement price is a price that may equal a positive number, zero or negative number. The settlement price is the same in both imbalance directions in one accounting interval.

7.5.2

The SP can maximally be:

7.5.3

- 1.5 times higher than the maximum price for the engaged balancing energy, if the maximum price of engaged balancing energy is higher than 0,
- 0, if the maximum price of engaged balancing energy is lower than 0.

SP may not be higher than 15 000 €/MWh.

7.5.4

The SP can minimally be:

- 1.5 times lower than the minimum price for the engaged balancing energy, if the minimum price of engaged balancing energy is lower than 0,
- 0, if the minimum price of engaged balancing energy is higher than 0.

7.5.5

SP may not be lower than -15 000 €/MWh.

The transmission system operator is obliged to publish preliminary imbalance settlement price (SP) on its website for all accounting intervals within the market day D on the D+1 day, or the first day that follows, in case that the day D+1 is the day of weekend or a non-working day.

7.5.6

Final imbalance settlement price value for the accounting interval will be published by the TSO after receipt of data from the imbalance netting Coordinator.

7.6.1

7.6 FINANCIAL ACCOUNTING FOR THE BALANCING GROUP

Method of financial accounting of the balancing group imbalancee

7.6.1.1 The BRP remunerates the transmission system operator for any negative imbalance and positive settlement price and the transmission, and for any positive imbalance and negative settlement price.

7.6.1.2 The TSO remunerates the BRP for any positive imbalance and positive settlement price, and for any negative imbalance and negative settlement price.

7.6.1.3 For positive imbalance of the balancing group in case of a positive settlement price, and for negative imbalance of the balancing group in case of a negative settlement price, without any assigned withdrawal/injection point, if there is no balancing entity in that balancing group, the transmission system operator does not remunerate the BRP.

7.6.1.4 A fee for BRP or to the TSO is determined as follows:

(a) imbalances of the balancing group (IBG_{ai}) within the competence of that BRP;

(b) settlement price defined in chapter 7.5;

(c) value of acceptable imbalance of the balancing group from point 7.6.1.6.

7.6.1.5 The fee is determined in euro.

7.6.1.6 The value of acceptable imbalance of the balancing group (AIBG) is determined for each day and is equal to:

(a) the higher value between 1 MWh and 4% of the maximum scheduled hourly consumption from the balancing group's daily schedule, multiplied by ¼ h, in case that the balancing group is associated with minimum one withdrawal/injection point and that the BRP has the role of a Consumption Responsible Party and does not have the role of a Production Responsible Party;

(b) the higher value between 1 MWh and 2.5% of the maximum scheduled hourly production from the balancing group's daily schedule, multiplied by ¼ h, in case that the balancing group is associated with minimum one withdrawal/injection point and that the BRP has the role of a Production Responsible Party and it does not have the role of a Consumption Responsible Party;

(c) the higher value between 1 MWh and sum of 4% of the maximum scheduled hourly consumption from the balancing group's daily schedule , multiplied by ¼ h, and 2.5% of the maximum scheduled hourly production from the balancing group's daily schedule, multiplied by ¼ h,, in case that the balancing group has the roles of both the Consumption Responsible Party and the Production Responsible Party;

(d) the higher value between 1 MWh and 10% of the maximum scheduled hourly production from the balancing group's daily schedule, multiplied by ¼ h, in case that the balancing group is only associated with withdrawal/injection points of a RES power producer and that the BRP does not have the role of the Consumption Responsible Party, unless the nomination of consumption is a result of the existence of a storage in the BRP's balancing group;

(e) 0 MWh in the case that the BRP only has the role of a Trade Responsible Party in charge of nomination of electricity trading blocks.

(f) infinitely in case that the BRP only provides balancing services.

Determination of the fee for balancing group imbalance

7.6.2.1 The fee for the balancing group imbalance is determined as follows:

7.6.2

(a) if the balancing group imbalance is positive or equal to zero ($BGI_{ai} \geq 0$) and the settlement price is positive in the course of the observed accounting interval, then the imbalance fee to be received by the BRP (*BGIF*) equals the quotient of the imbalance of the balancing group, the imbalance settlement price (*SP*) and the coefficient K_1:

$$BGIF_{ai} = BGI_{ai} \times SP \qquad \text{where } BGI_{ai} \leq AIBG_{ai}$$

$$BGIF_{ai} = AIBG_{ai} \times SP + (BGI_{ai} - AIBG_{ai}) \times K_1 \times SP \qquad \text{where } BGI_{ai} > AIBG_{ai}$$

where the coefficient value is $K_1 = 0.7$.

(b) if the balancing group imbalance is negative or equal to zero ($BGI_{ai} \geq 0$) in the course of the observed accounting interval, then the fee for imbalance of the balancing group, to be paid by BRP (*BGIF*) equals the quotient of the imbalance of the balancing group, the imbalance settlement price (*SP*) and the coefficient K_2:

$$BGIF_{ai} = BGI_{ai} \times |SP| \qquad \text{where } BGI_{ai} \leq AIBG_{ai}$$

$$BGIF_{ai} = AIBG_{ai} \times |SP| + (BGI_{ai} - AIBG_{ai}) \times K_2 \times |SP| \qquad \text{where } BGI_{ai} > AIBG_{ai}$$

where the coefficient value is $K_2 = 1.2$.

(c) if the balancing group imbalance is negative ($BGI_{ai} < 0$) and the settlement price is positive in the course of the observed accounting interval, then the imbalance fee to be received by the BRP (*BGIF*) equals the quotient of the imbalance of the balancing group, the imbalance settlement price (*SP*) and the coefficient K_2:

$$BGIF_{ai} = |OBRP_{ai}| \times SP \qquad \text{where } |BGI_{ai}| \leq AIBG_{ai}$$

$$BGIF_{ai} = AIBG_{ai} \times SP + (|OBRP_{ai}| - AIBG_{ai}) \times K_2 \times SP \qquad \text{where } |BGI_{ai}| > AIBG_{ai}$$

where the coefficient value is $K_2 = 1.2$.

(d) if the balancing group imbalance is negative ($BGI_{ai} < 0$) and the settlement price is negative in the course of the observed accounting interval, then the imbalance fee to be received by the BRP (*BGIF*) equals the quotient of the imbalance of the balancing group, the imbalance settlement price (*SP*) and the coefficient K_1:

$$BGIF_{ai} = |OBRP_{ai}| \times |SP| \qquad \text{where } |BGI_{ai}| \leq AIBG_{ai}$$

$$BGIF_{ai} = AIBG_{ai} \times |SP| + (|OBRP_{ai}| - AIBG_{ai}) \times K_1 \times |SP| \qquad \text{where } |BGI_{ai}| > AIBG_{ai}$$

where the coefficient value is $K_1 = 0.7$.

Particularly in a case when an outage of a generating module of a thermal power plant with a nominal capacity greater than 150 MW has occurred during the accounting interval, and that thermal power plant is a balancing entity in the balancing group of the BRP, the coefficient $K_2 = 1$ is used at that as well as at all the following accounting intervals until the end of the following hour, to calculate any imbalance of that balancing group.

7.6.2.2 The fee for imbalance of the balancing group is determined for each accounting interval.

Report on calculation of the balancing group imbalance and of the fee for the balancing group imbalance

7.6.3 7.6.3.1 After receiving the data referred to in 7.2.2.4, chapter 7.4 and chapter 6, submitted by the from the distribution system operator and the closed distribution system operator, or the coordinator of the balancing platforms in which the transmission system operator takes part, but no later than the invoicing day defined in the Electricity Market Settlement and Payment Calendar, the transmission system operator will create a Final Report on calculation of the balancing group imbalance and fee for balancing group imbalance for each market day in the relevant accounting period.

7.6.3.2 The Report referred to in point 7.6.3.1 must particularly contain the following data:

(a) the total nominated position of the balancing group;

(b) the total metered position of the balancing group;

(c) the imbalance adjustment;

(d) the settlement price;

(e) the fee for balancing group imbalance

7.6.4 for each accounting interval of a market day.

Determination of the monthly fee for balancing group imbalance, invoicing and collection

7.6.4.1 According to final reports on calculation of the balancing group imbalance and the fee for balancing group imbalance, the transmission system operator carries out financial accounting for each BRP for each accounting period.

7.6.4.2 The monthly fee to be received by the BRP for the balancing group imbalance is a sum of fees for imbalances over a relevant accounting period:

$$MF_{BRP,ai} = \sum_{ai \in m} BGIF_{ai}$$

where:

MF – monthly fee for the balancing group imbalance, paid by the BRP;

BGIF – fee for the balancing group imbalance, received by the BRP referred to in point 7.6.2. 1(a);

m – subscript denoting an accounting period;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

7.6.4.3 The monthly fee to be received by the BRP for the balancing group imbalance in case of a negative settlement price, is a sum of fees for imbalances of the balancing group over a relevant accounting period:

$$MF_{BRP,ai} = \sum_{ai \in m} BGIF_{ai}$$

where:

MF – monthly fee for the balancing group imbalance, paid by the BRP;

BGIF – fee for the balancing group imbalance, received by the BRP referred to in point 7.6.2.1 (d);

m – subscript denoting an accounting period;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

7.6.4.4 The monthly fee to be received by the BRP for the balancing group imbalance which is to be paid by the BRP in case of a positive settlement price, is a sum of fees for imbalances of the balancing group over a relevant accounting period:

$$MF_{BRP,ai} = \sum_{ai \in m} BGIF_{ai}$$

where:

MF – monthly fee for the balancing group imbalance, paid by the BRP;

BGIF – monthly fee for he balancing group imbalance, paid by the BRP referred to in point 7.6.2.1. (c);

m – subscript denoting an accounting period;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

7.6.4.5 The monthly fee to be received by the BRP for the balancing group imbalance in case of a negative settlement price is a sum of fees for imbalances of the balancing group over a relevant accounting period:

$$MF_{BRP,ai} = \sum_{ai \in m} BGIF_{ai}$$

where:

MF – monthly fee for the balancing group imbalance, paid by the BRP;

BGIF – monthly fee for the balancing group imbalance, paid by the BRP referred to in point 7.6.2.1 (b);

m – subscript denoting an accounting period;

BRP – subscript denoting a BRP which is responsible for the balancing group;

ai – subscript denoting an accounting interval.

7.6.4.6 The transmission system operator is obliged to calculate the monthly fees for each balancing group for the accounting period and submit it to the BRP, no later than the accounting date set out in the Electricity Market Settlement and Payment Calendar.

7.6.4.7 Based on the calculation of fees for month M, the transmission system operator, or the BRP, issues an invoice for the accounting period no later than the invoicing day set out in the Electricity Market Settlement and Payment Calendar. The due date of the invoice issued by the transmission system operator, or BRP, is the payment day defined in the Electricity Market Settlement and Payment Calendar. The invoice shall be issued in accordance with the law on value-added tax. The total amount of the invoice must be paid in full and within the stipulated deadline. Payments will be, for a BRP with the principal place of business in the Republic of Serbia, made in a dinar equivalent value in euros, calculated at the official middle exchange rate determined by the exchange rate list of the National Bank of Serbia (NBS) on the date of payment. For a BRP with the principal place of business abroad, the payment will be made in euros.

7.6.4.8 The invoice shall be delivered by e-mail or through the e-invoicing system pursuant to the Law on Electronic Invoicing, and include. at the minimum, the following details:

(a) the total monthly fee amount for balancing group imbalance;

(b) the total amount to be collected;

(c) other details in accordance with the law on value-added tax.

7.6.4.9 The accounting input data for monthly fee may be corrected at a request of the transmission system operator, distribution system operator, closed distribution system operator or BRP, if there any changes of the input data. The transmission system operator shall decide within 15 days as of the request receipt whether the request is justified, and notifies the requesting person thereof. If the request is justified, the transmission system operator will make a recalculation of monthly fees in the next accounting period defined in Electricity Market Settlement and Payment Calendar, using the corrected data. Monthly fees for the accounting period M may be calculated no later than in the month M+12.

7.6.4.10 On the basis of the modified accounting of the monthly fee for the month M, the transmission system operator and/or BRP issues a debit note or credit note. The credit/debit note amount must be paid in full within the stipulated deadline. The credit/debit note is delivered by e-mail or through the e-invoicing system pursuant to the Law on Electronic Invoicing.

7.6.4.11 The final date for submission of a request for review of monthly fee accounting, or a request for input data correction for the month M, is the 15th calendar day of the month M+11. Any request submitted after this date shall be found unfounded.

7.6.4.12 Determination of the fee for imbalance of the balancing group, issuance and collection of invoices in the event that the value of the security instrument is compromised in the amount of more than 50%

7.6.4.12.1 In the event that, in the accounting period, the daily imbalance of the balancing group, or collectively for several days, is 50% or more of the amount of the payment security instrument, the transmission system operator may calculate the fee for the balancing group of the observed BRP. The period for which the calculation is

performed can minimally last one day, and, it can maximally be equivalent to the accounting period. In the event that the daily imbalance of the balancing group, or collectively for several days during the accounting period, exceeds 30% of the amount of the payment security instrument, the transmission system operator shall warn BRP of the possibility of applying calculation of the fee provided in this paragraph of the Market Code for the BRP's balancing group, and request BRP to promptly ensure that the balancing group under its competence is properly balanced.

7.6.4.12.2 The transmission system operator may perform several calculations during one accounting period.

7.6.4.12.3 In a case referred to in 7.6.4.12.1., the transmission system operator shall calculate the imbalance on the basis of available operational data of the balancing group, available data on the composition of the balancing group, and/or on the basis of historical records concerning the operation of the balancing group in the previous 6 months.

7.6.4.12.4 Based on the calculation referred to in 7.6.4.12.1., the transmission system operator shall immediately issue an invoice to BRP of the calculated fee for the imbalance of the balancing group with a maturity day of one working day, the amount of which must be paid in full.

7.6.4.12.5 The transmission system operator shall, in accordance with Section 7.3 and within the deadlines stipulated in the Electricity Market Settlement and Payment Calendar, calculate the balancing group imbalance for all accounting intervals falling within the period that begins on the first day following the day for which the calculation referred to in 7.6.4.12.1. was made and ending on the last day of the accounting period.

7.6.4.12.6 The transmission system operator shall, in accordance with points 7.6.1 and 7.6.2. and within the deadlines stipulated in the Electricity Market Settlement and Payment Calendar, perform the calculation of the fee for imbalance of the balancing group for the period referred to in point 7.6.4.12.5. hereof.

7.6.4.12.7 According to the account of fees referred to in 7.6.4.12.6. hereof, the transmission system operator, or BRP, issues an invoice for the accounting period on the invoicing day stipulated in the Electricity Market Settlement and Payment Calendar. The due date of the invoice issued by the transmission system operator, or BRP, is the payment day defined in the Electricity Market Settlement and Payment Calendar. The invoice shall be issued in accordance with the law on value-added tax. The total amount of the invoice must be paid in full and within the stipulated deadline. Payments will be, for a BRP with the principal place of business in the Republic of Serbia, made in a dinar equivalent value in euros, calculated at the official middle exchange rate determined by the exchange rate list of the National Bank of Serbia (NBS) on the date of payment. For a BRP with the principal place of business abroad, the payment will be made in euros. The invoice shall be delivered by e-mail or through the e-invoicing system pursuant to the Law on Electronic Invoicing.

7.6.4.12.8 If there has been a correction of the input data for the calculation referred to in 7.6.4.12.1. and the fee referred to in 6.5.5.4, the transmission system operator will recalculate the fee for the observed period referred to in 7.6.4.12.1. in such a way that the transmission system operator or the. BRP issues a credit/debit note. The

maturity date is defined in the Electricity Market Settlement and Payment Calendar. The amount on the credit/debit note must be paid in full within the stipulated period.

7.6.4.12.9 The transmission system operator may, in accordance with the point 7.6.4.9. and within the deadlines defined in the Electricity Market Settlement and Payment Calendar, change the calculation of fees referred to in points 7.6.4.12.1, 7.6.4.12.8. and 7.6.4.12.6. respectively.

Method of financial calculation of the fee for an unbalanced daily schedule

7.6.5.1 For unbalanced daily schedule (*UDSai*), the BRP pays a fee to the transmission system operator.

7.6.5 7.6.5.2 If the *UDSai* is within the range of -0.125 MWh and 0.125 MWh, the BRP shall not pay the fee to the transmission system operator.

7.6.5.3 The fee for the imbalance shall be determined on the basis of:

- unbalanced daily schedules (*UDSai*) of the balancing group for which the BRP is responsible for, after the process of intraday modification of daily schedules, and
- the maximum value of the daily base prices at the organised market in Serbia for the corresponding day, and values of price *AP* referred to in point 3.8.1 rounded up to the first larger number of hundreds

7.6.5.4 The balancing group imbalance fee (*BGIF*) equals the quotient of the absolute value of *UDSai*, maximum value of the daily base price (*DBP*) at the organized market in Serbia for the corresponding day, and values of prices AP referred to in point 3.8.1 rounded up t the first larger number of hundreds, and coefficient *E*:

$$BGIF_{ai} = |UDS_{ai}| \times E \times max(DBP; \lceil \frac{AP}{100} \rceil \times 100)$$

where the value of coefficients is:

E=2 for *UDSai>0*

E=4 for *UDSai<0*

7.6.6 7.6.5.5 The balancing group imbalance fee is determined in euros for each accounting interval.

Determination of the imbalance fee, invoicing and collection of payment

7.6.6.1 The transmission system operator is obliged to perform calculation of the total fee for the imbalance on day D+1 for each BRP for all accounting intervals. In case of application of the operational limitations which result in an electricity trading block being imposed on a BRP, the imbalance fee will not be carried out for the value of the imposed electricity trading block.

7.6.6.2 On the basis of the calculation of total fees for imbalance, the transmission system operator shall issue an invoice for imbalance on day D+1 for market day D, or on the first following working day if the day D+1 is weekend day or a non-working day, with payment deadline of one working day. The invoice shall be issued in accordance with the law on value-added tax. The total amount of the invoice must be paid in full and within the stipulated deadline. Payments will be, for a BRP with the principal place of business in the Republic of Serbia, made in a dinar equivalent value in euros, calculated at the official middle exchange rate determined by the exchange rate list of

the National Bank of Serbia (NBS) on the date of payment. For a BRP with the principal place of business abroad, the payment will be made in euros.

7.6.6.3 The invoice shall be delivered by e-mail or through the e-invoicing system pursuant to the Law on Electronic Invoicing, and include. at the minimum, the following details:

(a) the total amount of imbalance fee;

(b) the total amount to be collected;

(c) other details in accordance with the law on value-added tax.

7.7 FINANCIAL AMOUNT OF IMBALANCE AFFECTED BY THE DISTRIBUTION SYSTEM OPERATOR

The cost of activated balancing energy which results from an activated flexibility service shall be calculated in accordance with the settlement price.

7.7.1 The distribution system operator is obliged to pay those costs to the TSO for a case when negative imbalance of the system occurs due to the impact of the DSO for a case of positive settlement price, and for the case when a positive imbalance of the system occurs due to the impact of the DSO and the negative settlement price.

7.7.2 The transmission system operator is obliged to pay those costs to the DSO for a case when positive imbalance of the system occurs due to the impact of the DSO for a case of positive settlement price, and for the case when a negative imbalance of the system occurs due to the impact of the DSO and the negative settlement price.

7.7.3 The distribution system operator and the transmission system operator shall conclude a contract to regulate their mutual relations relating to system imbalance fees resulting from activation of services of flexible balancing entities at the distribution level for the purposes of distribution system operators.

7.7.4

8 TRANSITIONAL AND FINAL PROVISIONS

8.1. After approval from the Energy Agency of the Republic of Serbia, the Market Code shall be published on the official website of JSC EMS Belgrade and come into force on the day from its publishing.

8.2. All balance responsibility agreements and balancing mechanism participation agreements which were concluded before the entry into force of this Market Code shall remain in force until the conclusion of their annexes, which will be concluded no later than 31 December 2025.

8.3. The transmission system operator is obliged to, after the entry into force of the Market Code, conclude the Framework Agreement for Procurement of Balance Capacity, Ancillary Voltage Regulation Service Contract and No-Volt Release and Island Operation Service Contract no later than 31 December 2025.

8.4. The price of the last activated offer for regulation, as a method of determination of prices for the purposes of calculation of activated energy referred to in Article 5.11.10 of this Market Code, shall start to apply from 1 April 2026. Before that date, the price shall be determined on the basis of the offered price.

8.5. As of the date of the entry into force of this Market Code, Market Code 000-00--24/2024-004 of 28 November 2022 and Code amending the Market Code 000-00-ROU-24/2024-004 of 2 December 2024 shall be repealed.

CHAIRMAN OF THE ASSEMBLY

Milun Trivunac, Master of Economics

EMS JMC BELGRADE

ASSEMBLY

Classification code: 1-4-0

No. 000-00-ROU-20/2025-003

Belgrade: 22 December 2025

9 APPENDIX 1

METHODOLOGY FOR CALCULATION OF THE MAXIMUM PRICE OF BALANCE CAPACITY RESERVE

This Methodology prescribes the manner of determination of maximum prices of aFRR and mFRR balancing capacity which may be offered by the Balancing Service Provider in auctions organized by the Transmission System Operator for the purposes of ensuring balancing capacity, particularly up and down, for each of the evaluation intervals (4-hour blocks for which participants in daily auctions submit bids).

The maximum price for balancing capacity from the FCR ha been determined to be 0 €/MW/h.

The fundamental principles that this Methodology is based on are:

- The principle of missed opportunity cost of the Balancing Service Provider resulting from the ensuring of balance capacities for the TSO's purposes.
- Maximum prices are determined by using realized balancing capacity prices from auctions held at the foreign balancing market, which are, on the basis of their liquidity, used for reference auctions (benchmark approach).

Opportunity cost resulting from ensuring aFRR balancing capacity shall be determined on the basis of the engagement optimization of the HPP Djerdap 1, while the opportunity cost resulting from ensuring mFRR balancing capacity shall be determined on the basis of the engagement optimization of the PSHPP Bajina Bašta 1, in view of the fact that these two balancing entities are often used to ensure appropriate types of balancing capacities.

For modelling and calculation, optimization approach is used, and, on the basis of input and defined limitations, Annual Opportunity Cost (AOC) is used for aFRR balancing capacity and for mFRR balancing capacity by using the following assumption, input and calculations:

- The annual required balancing capacity of the appropriate type and direction is determined in accordance with the Grid Code;
- Profit maximization has been applied;
- The model of the approach for aFRR includes HPP Djerdap 1, while the model of approach for mFRR includes PSHPP Bajina Bašta with its technical (exploitation) characteristics;
- The impact of other market participants, as well as engagements of other energy resources of the Republic of Serbia, is reflected in the electricity prices at the market for the bidding zone of the Republic of Serbia;
- Import and export of electricity are simulated in such a manner that the price of electricity in the bidding zone of the Republic of Serbia reflects the import and export of electricity;
- For the required level of ensured balancing capacity, the pre-defined required balancing capacity of the appropriate type (in particular for each direction) is used, as calculated by the transmission system operator in the process of dimensioning the balancing capacity for the upcoming year;

- Hourly prices from the Hungarian day-ahead organized market from the corresponding hydrological year scaled according to the price of Serbian forward market for the upcoming year, in such a manner hat the hourly price from the Hungarian day-ahead market multiplied with the coefficient which is the ratio of the current price on the Serbian forward market for the following year, divided by average hourly prices from the corresponding hydrological year;
- Three hydrological/climate years ("wet", "dry" and average) are used for calculation:
- Three separate calculations are done for each climate year separately, where two values for the accrued profit are obtained for each calculation - for the case when no balancing capacity is not ensured, and for the case when balancing capacity is ensured;
- From the data obtained from the calculation, 3 values of opportunity cost are obtained, as a differential between the calculated net income at the wholesale market in scenarios without ensuring the required balancing capacity and with ensuring the required balancing capacity of the appropriate type and direction at the annual level;
- By calculating the average of the 3 values, the value of annual opportunity cost (AOC) is obtained;
- Annual opportunity cost is divided by the quotient of the number of hours during the year and the required Hourly Quantity of Balance Capacity (HQBC) of the appropriate direction of balancing capacity in order to determine the average hourly opportunity cost (HOC) for the appropriate type and direction of balancing capacity:

$$HOC_{avg}^{aFRRupward} = AOC^{aFRRupward}/(Yh * \text{HQBC}^{aFRRupward})$$

$$HOC_{avg}^{aFRRdownward} = AOC^{aFRRdownward}/(Yh * HQBC^{aFRRdownward})$$

$$HOC_{avg}^{mFRRupward} = AOC^{mFRRupward}/(Yh * HQBC^{mFRRupward})$$

$$HOC_{avg}^{mFRRdownward} = AOC^{mFRRdownward}/(Yh * HQBC^{mFRRdownward})$$

where:

HOC – Hourly opportunity cost

AOC– Annual opportunity cost

HQBC – required hourly quantity of balancing capacity

Yh – number of hours in a year

aFRR – Automatic Frequency Restoration Reserve

mFRR – Manual Frequency Restoration Reserve

avg – average data value

upward – subscript denoting the upwards direction of ensuring balancing capacity;

downward – subscript denoting the downwards direction of ensuring balancing capacity

- Values $HOC_{avg}^{aFRRupward}$, $HOC_{avg}^{aFRRdownward}$, $HOC_{avg}^{mFRRupward}$ and $HOC_{avg}^{mFRRdownward}$ may not be higher than 105% or lower than 95% of the determined

value $HOC_{avg}^{aFRRupward}$, $HOC_{avg}^{aFRRdownward}$, $HOC_{avg}^{mFRRupward}$ and $HOC_{avg}^{mFRRdownward}$ for the previous calendar year, respectively.

- In the first year of the application of the Methodology for Calculation of the Maximum Price of Balance Capacity Reserve for the values $HOC_{avg}^{aFRRupward}$, $HOC_{avg}^{aFRRdownward}$ and $HOC_{avg}^{mFRRupward}$ from the previous calendar year, values of the price of renting power reserve for systemic services from the Decision on the Prices of Ancillary Services for secondary and tertiary regulation for 2025.
- In the first year of the application of the Methodology for Calculation of the Maximum Price of Balance Capacity Reserve, $HOC_{avg}^{mFRRdownward}$ the calculated value is used $HOC_{avg}^{mFRRdownward}$ in accordance with the Methodology for Calculation of the Maximum Price of Balance Capacity Reserve, multiplied with the value of the ratio $HOC_{avg}^{mFRRupward}$ and $HOC_{avg}^{mFRRdownward}$ calculated in accordance with the Methodology for Calculation of the Maximum Price of Balance Capacity Reserve.

For each of the directions of the corresponding type of balancing capacity, a system (table) of maximum prices (maximum prices that BSPs may offer at auctions) is established, with the following characteristics:

- special maximum prices are determined per evaluation intervals for daily auctions, and maximum prices per evaluation intervals are determined quarterly;
- maximum prices are defined on the basis of realized balancing capacity prices in auctions which are held on the reference balancing market.

The German market is used as a reference balancing service market.

On the basis of prices from the reference (German) balancing market in the previous yar, average prices are calculated, starting from the moment of calculation, per quarter (Q) for each of evaluation intervals (T), separately for each of the directions (up/down). These prices are Quarterly Reference Prices (QRP) for each of the types of balancing capacity (aFRR/mFRR):

$$QRP_{Q,\mathrm{T}}^{aFRRupward}, QRP_{Q,\mathrm{T}}^{aFRRdownward}, QRP_{Q,\mathrm{T}}^{mFRRupward}, QRP_{Q,\mathrm{T}}^{mFRRdownward},$$

$$QRP_{Q,\mathrm{T}}^{aFRRupward} = \frac{1}{N}\sum_{d=1}^{N} BCP_{ref,Q,\mathrm{T},d}^{aFRRupward}$$

$$QRP_{Q,\mathrm{T}}^{aFRRdownward} = \frac{1}{N}\sum_{d=1}^{N} BCP_{ref,Q,\mathrm{T},d}^{aFRRdownward}$$

$$QRP_{Q,\mathrm{T}}^{mFRRupward} = \frac{1}{N}\sum_{d=1}^{N} BCP_{ref,Q,\mathrm{T},d}^{mFRRupward}$$

$$QRP_{Q,\mathrm{T}}^{mFRRdownward} = \frac{1}{N}\sum_{d=1}^{N} BCP_{ref,Q,\mathrm{T},d}^{mFRRdownward}$$

where:

QRP – quarterly reference price

N – number of days in the quarter

BCP – balancing capacity price in the appropriate hour at the reference market

ref – code denoting a reference market

Q – quarter ∈ {Q1, Q2, Q3, Q4},

T – evaluation interval ∈ {0–4h, 4–8h, …, 20–24h}.

d – calculator of days in the quarter

mFRR – Manual Frequency Restoration Reserve

aFRR – Automatic Frequency Restoration Reserve

upward – subscript denoting the upwards direction of ensuring balancing capacity;

downward – subscript denoting the downwards direction of ensuring balancing capacity

In case that procurement of aFRR balancing capacity upward and downward is not carried out separately, quarterly reference prices $,QRP-Q,\mathrm{T}-aFRRupward.$ and $,QRP-Q,\mathrm{T}-aFRRdownward.$ are identical and determined as follows:

$$QRP_{Q,\mathrm{T}}^{aFRRupward} = QRP_{Q,\mathrm{T}}^{aFRRdownward} = \\ = 0{,}5 * (\frac{1}{N}\sum_{d=1}^{N} BCP_{ref,Q,\mathrm{T},d}^{aFRRupward} + \frac{1}{N}\sum_{d=1}^{N} BCP_{ref,Q,\mathrm{T},d}^{aFRRdownward})$$

where:

QRP – quarterly reference price

N – number of days in the quarter

BCP – balancing capacity price in the appropriate hour at the reference market

ref – code denoting a reference market

Q – quarter ∈ {Q1, Q2, Q3, Q4},

T – evaluation interval ∈ {0–4h, 4–8h, …, 20–24h}.

d – calculator of days in the quarter

aFRR – Automatic Frequency Restoration Reserve

upward – subscript denoting the upwards direction of ensuring balancing capacity;

downward – subscript denoting the downwards direction of ensuring balancing capacity

Note: the formulae for quarterly reference price are adjusted in quarters, with changes in time for the corresponding evaluation interval.

Average hourly reference prices (AHRP) for the entire previous year are also calculated on the basis of realized prices for the previous yar from the reference balancing market, for each of the types of balancing capacity (aFRR/mFRR), particularly per direction:

$$AHRP_{avg}^{aFRRupward}, AHRP_{avg}^{aFRRdownward}, AHRP_{avg}^{mFRRupward}, AHRP_{avg}^{mFRRdownward}.$$

$$AHRP_{avg}^{aFRRupward} = \frac{1}{24}\sum_{q=1}^{4}\sum_{t=1}^{6} QRP_{Q,T,q,t}^{aFRRupward}$$

$$AHRP_{avg}^{aFRRdownward} = \frac{1}{24}\sum_{q=1}^{4}\sum_{t=1}^{6} QRP_{Q,T,q,t}^{aFRRdownward}$$

$$AHRP_{avg}^{mFRRupward} = \frac{1}{24}\sum_{q=1}^{4}\sum_{t=1}^{6} QRP_{Q,T,q,t}^{mFRRupward}$$

$$AHRP_{avg}^{mFRRdownward} = \frac{1}{24}\sum_{q=1}^{4}\sum_{t=1}^{6} QRP_{Q,T,q,t}^{mFRRdownward}$$

where:

AHRP – average hourly reference price

QRP – quarterly reference price

avg – average data value

Q – quarter ∈ {Q1, Q2, Q3, Q4},

T – evaluation interval ∈ {0–4h, 4–8h, …, 20–24h}.

q – quarter calculator

t – evaluation interval calculator

mFRR – Manual Frequency Restoration Reserve

aFRR – Automatic Frequency Restoration Reserve

upward – subscript denoting the upwards direction of ensuring balancing capacity;

downward – subscript denoting the downwards direction of ensuring balancing capacity

For the purposes of containing opportunity cost to the level characteristic for Serbia, the average hourly opportunity cost (HOC) (or the appropriate type and direction of balancing capacity) is multiplied with the ratio of the quarterly reference price (QRP) per evaluation intervals (of the appropriate type and direction of balancing capacity) and average hourly reference price (AHRP) (of the appropriate type and direction of balancing capacity) in order to calculate maximum prices (MP) for each of the types and directions of balancing capacity for the appropriate evaluation interval and quarter:

$$\mathrm{MP}_{Q,T}^{aFRRupward} = HOC_{avg}^{aFRRupward} * QRP_{Q,T}^{aFRRupward} / AHRP_{avg}^{aFRRupward}$$

$$\mathrm{MP}_{Q,T}^{aFRRdownward} = HOC_{avg}^{aFRRdownward} * QRP_{Q,T}^{aFRRdownward} / AHRP_{avg}^{aFRRdownward}$$

$$\mathrm{MP}_{Q,T}^{mFRRupward} = HOC_{avg}^{mFRRupward} * QRP_{Q,T}^{mFRRupward} / AHRP_{avg}^{mFRRupward}$$

$$\mathrm{MP}_{Q,T}^{mFRRdownward} = HOC_{avg}^{mFRRdownward} * QRP_{Q,T}^{mFRRdownward} / AHRP_{avg}^{mFRRdownward}$$

where:

MP – maximum price for each of the types and directions of balancing capacity for appropriate evaluation interval and quarter

HOC – Hourly opportunity cost

avg – average data value

QRP – quarterly reference price

AHRP – average hourly reference price

mFRR – Manual Frequency Restoration Reserve

aFRR – Automatic Frequency Restoration Reserve

upward – subscript denoting the upwards direction of ensuring balancing capacity;

downward – subscript denoting the downwards direction of ensuring balancing capacity

Maximum prices (MP) for each of the types and directions of balancing capacity for the corresponding evaluation interval and quarter, are the maximum prices that the balancing service providers may offer at auctions, in particular for each of the evaluation intervals in the quarter, depending on the type and direction of balancing capacity for which the offer is submitted.

The maximum price for intervals longer than 4 hours shall be determined as the average price of the maximum prices for each of the types and directions of balancing capacity for the corresponding intervals that are longer than 4 hours for the appropriate type and direction of balancing capacity.

The transmission system operator shall publish the maximum prices during the opening of auctions.