Official Gazette dated 12/03/2021 and numbered 31421

NATURAL GAS FUTURES MARKET OPERATING PROCEDURES AND PRINCIPLES

INDEX

1. Objective, Scope and Legal Basis

1.1. Objective and Scope

1.1.1. The objective of this Procedures and Principles is to regulate the transactions of natural gas futures products in a reliable, transparent, efficient, stable, fair and competitive environment within Enerji Piyasaları İşletme Anonim Şirketi (EPİAŞ) and the matters left to be regulated in this Procedures and Principles, under the Organized Wholesale Natural Gas Sales Market Regulation published in the Official Gazette dated 31/03/2017 and numbered 30024.

1.1.2. This Procedures and Principles cover the rights and obligations of the market operator, the central settlement institution and market participants regarding the natural gas futures market, transactions carried out in the natural gas futures market, settlement, invoice and payment transactions, collateral and default management, and default guarantee calculation.

1.2. Legal Basis

1.2.1. These Procedures and Principles have been issued based on the Organized Wholesale Natural Gas Sales Market Regulation published in the Official Gazette dated 31/03/2017 and numbered 30024.

2. Definitions and Abbreviations

2.1. Other expressions and abbreviations that are used in this Procedures and Principles but not defined herein shall have the meanings and scope attributed to them in the relevant legislation. The expressions below shall have the following meanings:

a. Open position: Positions that are formed as a result of transactions carried out in the market or by the methods specified in the relevant legislation and that have not been closed by a reverse transaction, physical delivery or other method specified in this Procedures and Principles;

b. Opening price: The base price designated on the day each contract is first traded or at the time of re-opening if a contract is temporarily suspended, and the last daily indicator price announced on the trading days after the first trading day;

c. Base price: The price used in calculating the price range in which an ordercan be submitted for the first day of trading, or the price determined at the time of re-opening if a contract is temporarily suspended;

ç. BOTAŞ Transmission Network Operational Principles (NOP): The implementation principles prepared by the transmission company in accordance with the Natural Gas Market Transmission Network Operation Regulation published in the Official Gazette dated 26/10/2002 and numbered 24918, to regulate the relations between the transmission company and the shippers with respect to the transmission service;

d. Electronic bulletin table (EBT): Electronic notice board operated by the transmission company that is established for the parties operating in the market to follow the market movements;

e. Invoicing period: The period starting at 08:00 on the first day of a calendar month and ending at 08:00 on the first day of the next month;

f. Financial period: The period until the trade closing time of the contracts opened for transactions in the Natural Gas Futures Market (VGP);

g. Physical period: The period from the trade closing time until the fulfillment of the physical delivery obligation of contracts opened in the VGP;

ğ. Physical delivery period: The period in which the contracts opened for trading in the VGP have the obligation of physical delivery;

h. Gas day (G): A 24-hour period starting at 08:00 and ending at 08:00 the next day;

ı. Gas year: The period starting at 08:00 on the first calendar day of the relevant year and ending at 08:00 on the first calendar day of the next year;

i. Daily indicative price (GGF): The price designated by the market operator within the framework of the principles set forth under this Procedures and Principles for each contract opened for transactions;

j. Relevant legislation: Laws, regulations, Presidential decisions, communiqués, board resolutions and circulars on the natural gas market;

k. To be traded: Contracts opened for transactions by the market operator in different delivery periods being subject to trading in the market;

l. Trading day: The days when the markets are open for trading;

m. Finalized net position: Amounts calculated to be sent to the transmission company by the market participants, for each gas day for which the physical delivery period has started, by netting out all short and long positions that have been approved for trading in all existing VGP contracts;

n. Short position: A position that obliges the holder to deliver natural gas at a certain price and in a certain quantity when the contract delivery period comes with respect to transactions in the VGP;

o. Contract: A contract that obliges to receive or deliver natural gas at the matched price in a certain delivery period;

ö. Contract trade closing: End of the session on the last trading day of contracts.

p. Board: Energy Market Regulatory Board;

r. Authority: Energy Market Regulatory Authority;

s. Central counterparty: Enerji Piyasaları İşletme Anonim Şirketi (EPİAŞ);

ş. Central counterparty service: The central counterparty service whereby the completion of exchange by acting as the seller against the buyer and the buyer against the seller is undertaken;

t. Central settlement institution: The institution authorized as a central exchange institution in accordance with the Capital Markets Law dated 06/12/2012 and numbered 6362, to carry out the financial transactions determined by the relevant legislation, among the market participants;

u. Net position: Amounts calculated by netting out all short and long positions of the market participants that have been approved for trading in all existing VGP contracts;

ü. Organized Natural Gas Wholesale Market (OTSP): Markets where natural gas trading and balancing transactions are carried out by license holders benefiting from the natural gas system, natural gas markets requiring future physical delivery and the market regulated by the Board where other natural gas market transactions determined by the Board are carried out;

v. Market Operating Procedures and Principles (PUE): Procedures and principles regarding the operation of the organized natural gas wholesale market in line with the Regulation and applicable legislation.

y. Market operating fee (PIÜ): The fee collected from market participants in consideration of the services performed by the market operator;

z. Market operator: Enerji Piyasaları İşletme Anonim Şirketi (EPİAŞ);

aa. Market operator default management contribution: The amount that the market operator undertakes to pay from the market operating revenue cap in case of default in the natural gas futures market, where the market operator operates or carries out financial settlement transactions and serves as the central counterparty;

bb. Market participant: Legal entities that have the right to carry out transactions within the scope of this Procedures and Principles;

cc. Closing a position: Closing positions by making an equal amount of reverse transactions on the same contract or liquidation of positions as a result of transactions made within the scope of default management;

çç. Session: The time period when contracts are open for trading in the VGP;

dd. STP participation agreement: The agreement made between the market operator and the license holders participating to the STP, and prepared within the framework of the principles set forth under the Regulation;

ee. Continuous trade platform (STP): An electronically operated trading platform established by the market operator within the framework of the Regulation for all natural gas markets;

ff. Default: Failure to fulfill the obligations that must be fulfilled in due time due to the transactions carried out in the natural gas markets operated by the market operator or in which the financial settlement and other financial transactions are carried out by the market operator;

gg. Default guarantee account: An account held with the central settlement institution and the market operator, to be used in case the market participants do not fulfill their obligations within the scope of the natural gas futures market, excluding the collaterals and created with the contributions of the market participants;

ğğ. Order book: The STP screen on which the orders submitted for contracts by natural gas futures market participants are listed;

hh. Reverse transaction: Partial or complete liquidation of a position by taking a short position against a long position and a long position against a short position with respect to the same contract,;

ıı. Long position: A position that obliges the holder to receive natural gas at a certain price and in a certain quantity when the contract delivery period comes with respect to transactions in the VGP;

ii. Natural Gas Futures Market (VGP): The natural gas futures market, which imposes physical delivery obligations on market participants and is operated by the market operator within the scope of the Regulation;

jj. VGP participation agreement: The agreement made between the license holders participating in the STP and the market operator to carry out transactions in the VGP;

kk. VGP settlement: Calculation of the receivable and payable amounts arising out of transactions in the natural gas futures market and preparation of the relevant receivables/payables notifications;

ll. VGP annual participation fee: The participation fee that the market participants have to pay for each calendar year, designated by the Board;

mm. Natural Gas Futures Market OperatiNG Procedures and Principles (VGPUE): The procedures and principles regarding the operation of the natural gas futures market with physical delivery, in line with this Procedures and Principles and the relevant legislation and

nn. Regulation: Organized Wholesale Natural Gas Sales Market Regulation (OTSP).

3. General Provisions

3.1. General Principles Regarding the VGP

3.1.1. Transactions in the VGP shall be carried out on a delivery period basis.

3.1.2. All open contracts on the VGP shall be traded according to the continuous trade method during a session. Orders can be made until the closing time of the relevant contract, as long as the orders that are submitted do not match, they can be updated in accordance with these Procedures and Principles.

3.1.3. Prices that will be implemented on the VGP settlement shall be designated on the basis of gas days covering the delivery period and shall be designated for each match, considering the business tradings under the VGP.

3.1.4. Orders submitted by market participants shall be evaluated instantly and compared with the orders in the opposite direction, and they shall be matched if they comply with the matching rules.

3.1.5. The status of the orders can be seen by market participants through the STP screens simultaneously.

3.1.6. Orders submitted by market participants shall be evaluated with the principle of nondiscrimination among market participants.

3.1.7. Activities conducted in the VGP shall be carried out in accordance with principles of transparency and responsibility.

3.1.8. Matching orders create an obligation for the market participant to physically deliver natural gas to or from the transmission system within the delivery period.

3.1.9. When an open position is closed before the relevant contract is concluded, the physical delivery obligation of the market participant shall be eliminated.

3.1.10. In each transaction, the market operator is the counterparty to the relevant market participant.

4. Parties, Duty, Authority and Responsibilities

4.1. Responsibilities of Market Participants

4.1.1. Each market participant shall be obliged to appoint the market operator as an intermediary in accordance with the VGP Participation Agreement to ensure settlement of its market transactions.

4.1.2. Market participants shall be obliged to deliver or receive the finalized net position amounts resulting from their orders in the STP in accordance with the issues specified in the delivery conditions of the order.

4.1.3. Market participants shall be obliged to carry out their activities within the framework of the provisions of the Regulation and the relevant legislation, in a way that will not harm the OTSP and/or system operation and will not eliminate their obligations arising out of the relevant legislation.

4.1.4. Market participants shall be obliged to undertake the financial responsibilities required by relevant market operations and make all payments in due time and in exact amount pertaining to the payment notices and invoices delivered to them by the market operator.

4.1.5. Market participants shall be responsible for submitting the guarantee amount that they are obliged to submit in the name of the market operator in accordance with the relevant provisions set out in this Procedures and Principles.

4.2. Responsibilities of Market Operator

4.2.1. The market operator is EPİAŞ. The market operator shall carry out the operation, settlement and data publishing activities of the VGP without making discrimination among equal parties, and within the framework of the transparency and responsibility principles.

4.2.2. The market operator shall carry out the following activities regarding the VGP's operation:

a. Operating the VGP in accordance with the Regulation, this Procedures and Principles, and provisions of the relevant legislation;

b. Keeping the STP accessible by carrying out all kinds of maintenance and updating activities in order to fulfill the obligations set forth under the relevant legislation;

c. Adopting decisions regarding implementation on matters related to the operation of the VGP in accordance with the relevant legislation and fulfilling other duties imposed to it in other legislation;

ç. Reporting and publishing data in accordance with the provisions of this Procedures and Principles; and

d. Obtaining approval from the Board in order to develop new products and services envisaged to be offered at the STP and to offer all these products to the market participants at the STP.

4.2.3. The Market operator shall settle the operations that are conducted in the VPG towards each contract, as the central counterparty based on gas day for those contracts, on a monthly basis. The market operator shall conduct the activities of preparing invoices after monthly settlement operations are completed, along with the collection and payment processes through central settlement institution.

5. Provisions Regarding Registration of Market Participants

5.1. Application for Registration and Evaluation

5.1.1. In order to be able to trade in the VGP, it is obligatory to have market participant status in accordance with the PUE and NOP.

5.1.2. Market participants wishing to trade in the natural gas futures market shall sign the VGP participation agreement in addition to the STS and STP participation agreements. The VGP participation agreement shall be valid for the duration of the STP participation agreement.

5.1.3. The VGP registration application of a market participant shall not be approved until the initial margin and the fixed contribution to the default guarantee account are deposited.

5.2. Suspension of Market Participant's Access to the Market

5.2.1. In addition to Article 5.3 of the PUE, the market operator can suspend market participants' access to the market in the following circumstances:

a. When market participants request the market operator to suspend their access to the VGP contracts, it shall be suspended on the same day if they do not have an open position in the VGP; if they have open positions, it shall be suspended on the business day following the closing of open positions. If the relevant open positions are not closed by the relevant market participants, suspension shall not be carried out until the aforementioned positions are closed.

b. Access to the market of market participants shall be suspended when their STP participation agreements are terminated by the market operator, or when they do not renew their STSs as of January every year, or when they terminate their STS with their own will during a year, or when they lose this status for other reasons. Their open positions shall be closed by the market operator in accordance with Article 13.2.

c. If market participants are in default on the VGP and/or fail to comply with the terms of the VGP Participation Agreement, their status on the VGP shall be suspended. Their open positions shall be closed by the market operator in accordance with Article 13.2.

5.2.2. Suspension of a market participant's access to the VGP does not remove the debts and receivables that have accrued or will accrue to it, as well as collateral and default guarantee account contribution obligations.

5.3. Termination of Market Participant Status

5.3.1. If a market participant's access to the market is suspended in accordance with Article 5.2., provisions of Article 5.4 of the PUE shall be applied.

5.3.2. As long as the obligations of the Market Participant under the VGP remain to be valid, its market participant status cannot be terminated.

6. Contracts

6.1. Contracts

6.1.1. Contracts created by the market operator by designating their delivery periods shall be opened for transactions in theVGP.

6.1.2. Matters related to the contracts that will be opened for transactions in the VGP shall be announced by the market operator in the STP.

6.1.3. Within the framework of these Procedures and Principles, temporary changes can be made on issues related to the contracts, provided that the market participants are notified by the market operator.

6.1.4. Contracts shall be opened to transactions from the base price regulated under Article 10.2.

6.2. Delivery Period

6.2.1. Delivery period refers to the gas days that contain physical delivery obligations of the market participants who are a party to the relevant contract.

6.2.2. Contracts shall be separated on a delivery period basis.

6.2.3. The features of the monthly contracts shall be as stated below:

a. In monthly contracts, physical delivery shall start with the first gas day of the relevant delivery month and end on the last gas day of the same month.

b. In the VGP, Transactions concerning 12 consecutive monthly contracts can be conducted at the same time.

c. Each monthly contract shall be closed for transactions three business days before the first day of the delivery period, and a new monthly contract shall be opened for transactions in a way that completes the number of contracts that can be traded in the order book.

6.2.4. The features of quarterly contracts shall be as follows:

a. Each quarterly contract shall include the following physical delivery periods:

i. First quarter contract shall start at the first gas day of January and end at the last gas day of March.

ii. Second quarter contract shall start at the first gas day of April and end at the last gas day of June.

iii. Third quarter contract shall start at the first gas day of July and end at the last gas day of September.

iv. Fourth quarter contract shall start at the first gas day of October and end at the last gas day of December.

b. In the VGP, 4 consecutive quarterly contracts can be subject to transaction at the same time.

c. Each quarterly contract shall be closed to transactions three business days before the first day of the delivery period, and a new quarterly contract shall be opened to transactions in a way that the number of contracts that can be traded in the order book is completed.

6.2.5. The features of the yearly contracts shall be as follows:

a. For annual contracts, physical delivery shall begin on the January 1st gas day of each year and end on the December 31st gas day of the same year. In the VGP, one annual contract can be open to transactions.

b. Each annual contract shall be closed to transactions five business days before the first day of the delivery period, and a new yearly contract shall be opened to transactions in a way that the number of contracts that can be traded in the order book is completed.

6.3. Cascading Contracts

6.3.1. Cascading contracts is the process of transferring the open positions in annual contracts to quarterly contracts and the open positions in quarterly contracts to monthly contracts by terminating the annual and quarterly contracts that will be opened to transactions by the market operator within the periods specified in Article 6.3.2. Cascading can be carried out for the contracts with a delivery period longer than one month.

6.3.2. Cascading refers to:

a. The closing of annual contracts by the market operator five business days before the delivery period following the daily indicative price announcement on the same day, and transferring the open positions in the relevant contract to 4 quarterly contracts covering the same year.

b. The closing of the quarterly contracts by the market operator three business days before the delivery period following the daily indicative price announcement on the same day, and transferring the open positions in the relevant contract to 3 monthly contracts covering the same quarter.

6.3.3. The positions of market participants transferred to new contracts as a result of cascading and reverse positions regarding the same contracts, if any, shall be clarified.

6.4. Suspension of Contracts

6.4.1. The market operator may temporarily suspend the relevant contracts or session, in case of occurrence of at least one of the following situations:

a. Occurrence of important information, news and/or unusual developments that will affect the prices in the VGP.

b. Execution of transactions which may prevent reliable determination of daily indicator price by the market participants.

c. Emergence of technical problems preventing the healthy continuation of transactions.

ç. Execution of planned maintenance and infrastructure activities in platforms runned by the market operator.

d. The Authority shall be informed about the transactions carried out within the framework of this Article.

6.4.2. If the contracts are suspended by the market operator, it shall be announced to the market participants along with the justification.

6.4.3. If the contracts are or a session is suspended, all orders related to the relevant contract and/or contracts shall be suspended.

6.4.4. When one contract is suspended, the said contract can be reopened to transactions with the base price that was announced in accordance with the methods designated by the market operator.

7. Daily Workflow, Sessions

7.1. Daily Workflow Processes

7.1.1. In the VGP, the daily workflow consists of the processes of pre-session, session, post-session, announcement of daily reference price and end of day transactions.

7.1.2. Except for the occurrence of extraordinary situations on the part of the market operator set forth under Article 11.1 of the PUE, the starting and ending times of the sessions can be temporarily changed for the relevant day, on the condition that market participants are notified at least 2 business days in advance. If there is a temporary change made by the market operator in the starting and ending times of the sessions, changes can also be made in the processes of post-session, GGF announcement and end of day transactions and such changes shall be notified to market participants via the STP.

7.2. Pre-Session

7.2.1. In the natural gas futures market, pre-session is defined as the period between end of the day transactions of the day before and opening of the session, in trading days that contracts are traded. Although access to relevant STP screens is provided, active order entry and matching cannot be performed during the pre-session. In the pre-session, market participants can;

a. Access the relevant screens in the STP.

b. Inquire the status of collaterals, open positions and orders.

c. Cancel or deactivate the remaining orders from previous trading days.

ç. Submit their orders as passive to the order book to be sent out later.

d. Check the matches taken place, the orders made in previous sessions, transaction flows and cascading transactions of previous sessions.

7.2.2. Orders that are suspended in the post-session period shall be involved in the order book without losing their priority at the beginning of the session, in the event that they meet the conditions of order notification set forth in this Procedures and Principles.

7.3. Session

7.3.1. On the business days that the VGP is open to trade, the session shall begin at 13:00 and ends at 16:00. The VGP shall be closed to trade on weekends and public holidays and on business days with half-day public holidays.

7.3.2. During the session, the market participants can;

a. Make order entries.

b. Change the quantity and prices of active and passive orders.

c. Cancel or deactivate their active orders.

ç. Submit their passive orders to the order book by activating or cancelling them.

d. Make objections within the specified time. The objections can extend to the post-session period.

e. Check the matches performed, the orders made in previous sessions, transaction flows of the previous sessions and cascading transactions.

7.4. Post-Session

7.4.1. On the business days that the VGP is open to trade, the post-session begins at 16:00 and ends at 16:45.

a. In the post-session; all contracts shall be closed to trade for the relevant day.

b. New order entries and updating of existing orders shall not be allowed until the period of pre-session.

c. Unmatched orders shall be suspended.

ç. Market participants can check the matches performed, the orders made in previous sessions, transaction flows of the previous sessions and cascading transactions.

7.4.2. On each trading day, the daily reference price shall be calculated pursuant to procedures set forth in this Procedures and Principles.

7.4.3. Before the announcement of the daily reference price calculated for each contract, operations to eliminate the differences between daily reference prices shall be conducted by the market operator within the scope of Article 10.3, by taking into account the daily reference prices of other contracts that the relevant contracts are related with.

7.5. Announcement Process of Daily Reference Price

7.5.1. The daily reference price shall be announced on each trading day following the performance of the processes set forth under Article 7.4.3, by the end of the post-session. ,.

7.6. End of Day Transactions

7.6.1. Following the announcement of the daily reference price, the following end of day transactions shall be carried out by the market operator until 17:00:

a. Existing active orders outside the price change limits shall be cancelled.

b. Cascading transactions shall be conducted if it is the last trading day of annual or quarterly contracts.

c. The requirement of collateral that needs to be presented shall be calculated for each market participant and reported to the central settlement institution.

ç. Contracts that reach their last trading day shall be closed.

d. New contracts to be opened in the place of closed contracts shall be announced.

8. Orders

8.1. General Rules regarding Orders

8.1.1. The market participants can submit orders to the VGP on a delivery period basis.

8.1.2. The price and quantity set forth in orders shall be valid for each gas day within the delivery period of the relevant contract.

8.1.3. The prices in orders submitted to the VGP shall be TL 0.01 and its multiples, and the unit shall be TL/1000 Sm^3.

8.1.4. The quantities of orders shall be reported in Sm^3 with a minimum of 1,000 Sm^3 and its multiples as whole numbers.

8.1.5. [1]The maximum order size that can be submitted for each contract to the VGP via STP on a single occasion shall be 10,000,000 Sm^3.

8.1.6. In the VGP, a maximum of 120 offers per minute can be submitted by each market participant in a session.

8.1.7. Best price means the lowest price in sale offers and the highest price in purchase bids.

[1] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

8.1.8. The price in a purchase bid shall be the maximum price offered by the market operator to purchase the amount of natural gas that does not exceed the amount specified in the bid.

8.1.9. The price in a sales offer shall be the minimum price offered by the market operator to sell the amount of natural gas that does not exceed the amount specified in the offer.

8.1.10. The orders can be updated or cancelled by the relevant market operator as long as they are not matched. The last update of the order shall be taken into account, considering the time information. The reduction of quantities in existing orders shall not be considered as an update and the recorded time of the order entry shall not be changed.

8.2. Mandatory Elements of Orders

8.2.1. In the VGP, orders submitted to contracts shall include the following information:

a. The name of the market participant.

b. The delivery period in which the order is valid.

c. Order type.

ç. Direction of the order (purchase or sale).

d. Information of price and quantity.

e. The validity period of the order.

f. The status of the order (Active or Passive).

g. Other information to be requested by the market operator and announced to market participants via the STP.

8.3. Notification of Orders

8.3.1. Market participants shall notify the market operator of their orders in relation to any contact via the STP until the trade closing time of the relevant contract in the session.

8.3.2. In order for orders to be registered;

a. The price of the order being within the daily price change limits;

b. The quantity of the order not exceeding the maximum order quantity;

c. The total VGP collateral to be calculated for the relevant order being presented; and

ç. The position limits on the basis of market participants not being exceeded in orders that increase the net position

shall be checked and orders that meet these conditions shall be registered.

8.3.3. The notification of orders shall be carried out by assigning a registration number to the order and the orders being submitted to the STP with the precision of at least milliseconds.

8.3.4. The orders that have been registered to the STP can be viewed by market participants via the STP.

8.3.5. An unexpired order that has been registered to the STP shall be active as long as the period that the relevant contract is open to trade, unless it is not matched, cancelled, suspended and is within the daily price change limits.

8.3.6. Except for the occurrence of extraordinary conditions specified in Article 11.1 of the PUE, the processes regarding the notification of orders and notifications' awaiting in the order book can be changed by the market operator on the condition that market participants are notified at least 2 business days in advance.

8.4. Types of Orders

8.4.1. In the VGP orders shall be made either as active or passive.

a. Active order shall be the order that has not been matched, awaiting in the order book. It can be deactivated or cancelled by the market participants.

b. Passive order shall be the order that is submitted as passive and is not included in the order book. Passive orders can be activated or cancelled by market participants.

c. The order that has been cancelled cannot be activated or deactivated again.

8.4.2. Types of orders shall be classified as follows:

a. Standard order valid until the contract closing time (STD): The orders shall be matched in part or in whole according to the quantity and price specified by the market participant. The order for the unmatched part shall remain valid until the contract closing time.

b. Order valid until expiration (SUR): The orders shall be matched in part or in whole according to the quantity and price specified by the market participant within the period designated by the market participant. The order for the unmatched part shall remain valid until expiration.

c. Match and destroy order (OEYE): Orders shall be matched according to the quantity and price specified by the market participant with the appropriate and available orders existing in time of submission, without being included in the order book and the remaining part shall be destroyed.

ç. Match all or destroy order (TEYE): Orders shall be matched according to the quantity and price specified by the market participant with the appropriate and available orders existing in time of submission in the event that the entire order amount is met, otherwise the orders shall be deleted without being submitted to the order book.

9. Matches

9.1. Priority Rules for Matching Orders

9.1.1. Following the submission of orders by market participants in the VPG as active, the processes regarding matching the relevant orders shall be carried out as follows:

a. The orders shall be evaluated separately for each contract.

b. Among the orders that have the same delivery period and direction (direction of purchase or sale), the order with the best price shall have priority.

c. Among the equal-priced orders that have the same delivery period and direction (direction of purchase or sale), the order submitted earliest according to the system time shall have priority.

ç. For a purchase bid, the bid with the highest price and for the sale offer, the offer with the lowest price shall be displayed in the order books as the best orders.

d. In matches, the match price in the matching of an order offered in response to an existing order is the price of the order initially entered.

e. In the event that orders match, the relevant orders turn into positions for the parties. The market participant takes a long position in the match of purchase bids and a short position in the match of sales offers.

9.1.2. Market participants cannot make counter orders that can match with their own orders.

9.2. Matching Rules in Purchase Bids

9.2.1. Regarding bids submitted in the direction of purchase in accordance with the conditions of bid notification;

a. If the purchase bid price is greater than or equal to the price of the best sales offer, the quantities of offers shall be compared;

i. If the quantity of the purchase bid is equal to the quantity of the best sales offer complete match shall be performed.

1. The transaction shall be carried out according to the awaiting sales offer price that has been previously submitted to the order book.

2. Their status shall be updated as "matched" and the best order lists shall be updated by the removal of matching purchase-sales orders from the order book.

ii. If the purchase quantity is greater than the best sales offer quantity, partial match shall be performed.

1. The transaction shall be carried out according to the awaiting sales offer price that has been previously submitted to the order book.

2. Purchases shall be as many as the sales quantities. The status of the sales offer shall be updated as "matched" and the status of the purchase bid shall be updated as "partially matched" and the matching sales offer shall be removed from the order book.

3. A new match shall be tried for the remaining purchase amount, in the event that there is no match, the bid continues to wait in the order book as the best purchase bid. The best order lists shall be updated sequentially again.

iii. If the purchase quantity is smaller than the best sales offer quantity, complete match shall be performed.

1. The transaction shall be carried out according to the awaiting sales offer price that has been previously submitted to the order book.

2. Purchases shall be as many as the purchase quantities. The status of the purchase bid shall be updated as "matched" and the status of the sales offer shall be updated as "partially matched" and the partially matched sales offer shall remain in the order book with its remaining quantity updated.

b. If the purchase bid price is less than the best sales offer price, it shall be added to the best purchase bids list in the order book according to its price status.

9.3. Matching Rules in Sales Offers

9.3.1. Regarding offers submitted in the direction of sale in accordance with the conditions of order notification;

a. If the sales offer price is greater than or equal to the price of the best purchase bid, the quantities of orders shall be compared;

i. If the quantity of the sales offer is equal to the quantity of the best purchase bid complete match shall be performed.

1. The transaction shall be carried out according to the awaiting purchase bid price that has been previously submitted to the order book.

2. Their status shall be updated as "matched" and the best order lists shall be updated by the removal of matching purchase-sales orders from the order book.

ii. If the sales quantity is greater than the best purchase bid quantity, partial matchshall be performed.

1. The transaction shall be carried out according to the awaiting purchase bid price that has been previously submitted to the order book.

2. Sales shall be as many as the purchase quantities. The status of the purchase bid shall be updated as "matched" and the status of the sales offer shall be updated as "partially matched" and the matching purchase bid shall be removed from the order book.

3. A new match shall be tried for the remaining sales amount, in the event that there is no match, the offer continues to wait in the order book as the best sales offer. The best order lists shall be updated sequentially again.

iii. If the sales quantity is smaller than the best purchase bid quantity, complete match shall be performed.

1. The transaction shall be carried out according to the awaiting purchase bid price that has been previously submitted to the order book.

2. Sales shall be as many as the sales quantities. The status of the sales offer shall be updated as "matched" and the status of the purchase bid shall be updated as "partially matched" and the partially matched purchase bid shall remain in the order book with its remaining quantity updated.

b. If the sales offer price is greater than the best purchase bid price, it shall be added to the best sales offers list in the order book according to its price status.

9.4. Business Transaction Approval

9.4.1. Matching orders shall be removed from the order of best priced orders and the market operator shall notify the relevant market participants momentarily via the STP that their orders have been confirmed by matching. In the event of partial match, the remaining unmatched quantity shall maintain its position in the order book as long as the order is valid. With this notification, market participants can see their finalized match via the STP without any information regarding the identity of the counterparty.

9.4.2. The business transaction approval shall contain at least the following information;

a. The name of the market participant, order code and match code;

b. The contract that the matching has been performed for;

c. Matching time;

ç. Matching price and quantity; and

d. Other information to be announced to the market participants via the STP, if deemed necessary by the market operator.

9.5. Cancellation of Orders and Transactions

9.5.1. In case of presence of at least one of the situations below, upon the request of at least one market participant party to the transaction or ex officio, the pending orders or executed transactions can be cancelled in part or in whole by the market operator:

a. Orders and transactions, in case of errors arising out of computer, software or other technological infrastructure failures, originating from the market operator.

b. Orders and transactions, in case of presence of other material elements that will stop the transactions of market participants and/or contracts.

c. Orders and transactions that are determined to be market disruptive or conducted to gain unfair advantage.

ç. Existing orders in the event of non-fulfillment of financial obligations towards the market operator.

d. Orders outside the daily price change limits set in relation to contracts.

9.5.2. Information regarding the cancellation shall be announced to the relevant market participants via the STP.

9.5.3. Prices shall be formed within the framework of supply and demand. In the case that the orders which may prevent this situation are detected by the market operator, the Authority shall be notified of the situation and its concrete reasons after the necessary measures are taken.

9.6. Business Transaction Objection Process

9.6.1. Market participants shall be given 15 minutes of time after the notification so that they can object if there are errors in notifications related to approval of business transactions. However, such objections can be made until 5 minutes after the end of the session period at the latest. Objections shall only be accepted if they are made in due time and if the mistake originates from the market operator. In the event that the objection is made in due time and is rightful, the market operator shall send the corrected notifications within 20 minutes following the closing of the session to the relevant market participants.

9.6.2. Unless the objection that has been made is not found rightful by the market operator, it does not discharge the obligations of the relevant market participant. In the event that the market operator does not find an objection rightful; the market operator shall notify this to the relevant market participant with its justifications. The market participant who has not made an objection within the allowed time shall be deemed to have accepted the business transaction approval with the entirety of its content. Business transaction approvals shall become a contract within the scope of contract obligation following the expiry of the objection period.

9.6.3. In the event that there are multiple objections to a contract, the market operator can suspend the relevant contract by evaluating the objections and announcing it to the market participants.

9.6.4. The amount to be collected per objection that is not found rightful by the market operator shall be designated by a Board Decision and shall be added to the market operation fee of the market operator.

10. Prices

10.1. Opening Price

10.1.1. Opening Price shall be the price that is used to perform the daily price change limit control for the orders that are submitted and for collateral accounts at the session beginning of contracts.

10.1.2. The “opening price” of the contracts shall be based on the prices stated below:

a. The “base price” designated for the first day of the relevant contract.

b. The last “GGF” announced on the trading days after the first trading day of the relevant contract.

c. The “base price” that is re-designated when a contract is temporarily suspended and reopened.

10.2. Base Price

10.2.1. Base price shall be the price designated to be used in calculating the price range for the first day that the contract is opened to trade or calculating the price range to order and collateral amount that market participants need to provide if the contract is reopened to trade after being temporarily suspended.

10.2.2. When a contract is opened to trade for the first time, the base price shall be designated by following the steps below, in the following order, until the end of the last business day before the contract is opened.

a. If there is a GGF value for a contract that includes the delivery period of the contract for which the base price will be calculated, and there is a GGF value for the other periods covered by this contract, the base price shall be calculated by using the equation in Article 10.4.1, taking into account the number of days in the delivery period of the relevant contracts.

b. If calculation cannot be made in accordance with Article 10.4.2, base price shall be designated via the formula specified in Article 10.4.2.

10.2.3. When a contract is suspended from transaction temporarily, the base price shall be designated by following the steps below, in the following order:

a. A calculation shall be made in accordance with Article 10.4.

b. The up-to-date GGF shall be designated as the base price.

10.3. Daily Indicative Price (GGF)

10.3.1. For each contract, the GGF shall be used to calculate the amount of collateral that market participants need to provide for the positions they hold after session ends and to determine the price range that the relevant contract can be traded on the following day.

10.3.2. For each contract the GGF shall be designated by following the steps below, in the following order:

a. In case all matches made for the relevant contract during the session are 10,000 Sm^3 and above, the quantity weighted average price of the relevant matches shall be designated as the GGF.

b. In case the total match amount within the session is between 5,000 Sm^3 (including 5,000 Sm^3) and 10,000 Sm^3, and there is a purchase and sales offer in the order book for at least 300 seconds,

i. 75% of the quantity weighted average price of matches; and

ii. 25% of the arithmetic average of the prices of the best purchase and sales offers that meet the relevant time criteria shall be added together to calculate the GGF.

c. In case the total amount of matches in the session is between 5,000 Sm^3 (including 5,000 Sm^3) and 10,000 Sm^3, and there is a purchase bid in the order book for at least 300 seconds and this bid price is higher than the quantity weighted average price of the matches,

i. 75% of the quantity weighted average price of matches; and

ii. 25% of the best purchase bid price that meet the relevant time criteria

shall be added together to calculate the GGF. If the purchase bid price in the order book is lower than the quantity weighted average price of the matches, the said bid shall not be taken into account in the GGF calculation.

ç. If the total amount of matches in the session is between 5,000 Sm^3 (including 5,000 Sm^3) and 10,000 Sm^3, and there are purchase bids in the order book for at least 300 seconds and this bid price is lower than the quantity weighted average price of the matches,

i. 75% of the quantity weighted average price of matches; and

ii. 25% of the best sales offer price that meet the relevant time criteria

shall be added together to calculate the GGF. If the sales offer price in the order book is higher than the quantity weighted average price of the matches, the said offer shall not be taken into account in the GGF calculation.

d. In case the total match amount is between 5,000 Sm^3 (including 5,000 Sm^3) and 10,000 Sm^3, and there is no order that meets the time and price criteria specified in subparagraphs (c) and (ç) in the order book, the quantity weighted average price of the relevant pairings shall be designated as the GGF.

e. In case the total match amount is between 0 Sm^3 and 5,000 Sm^3 in the session and there is a purchase and sales offer in the order book for at least 300 seconds,

i. 50% of the quantity weighted average price of the matches; and

ii. 50% of the arithmetic average of the prices of the best purchase and sales offers that meet the relevant time criteria

shall be added together to calculate the GGF.

f. In case the total amount of the match is between 0 Sm^3 and 5,000 Sm^3 while there is a purchase bid in the order book for at least 300 seconds and the price of this bid is higher than the quantity weighted average price of the matches,

i. 50% of the quantity weighted average price of the matches; and

ii. 50% of the price of the best purchase bid that meets the relevant time criterion

shall be added together to calculate the GGF. If the purchase bid price in the order book is lower than the quantity weighted average price of the matches, the said bid shall not be taken into account in the GGF calculation.

g. If the total amount of matches is between 0 Sm^3 and 5,000 Sm^3, and there is a sales offer in the order book for at least 300 seconds and this offer price is lower than the quantity weighted average price of the matches,

i. 50% of the quantity weighted average price of the matches; and

ii. 50% of the price of the best purchase bid that meets the relevant time criterion shall be added together to calculate the GGF. If the sales offer price in the order book is higher than the quantity weighted average price of the matches, the said offer shall not be taken into account in the GGF calculation.

ğ. In case the total match amount is between 0 Sm^3 and 5,000 Sm^3, and there is no order meeting the time and price criteria specified in sub paragraphs (f) and (g) in the order book, the quantity weighted average price of the relevant pairings shall be designated as the GGF.

h. If no match occurred within the session, the arithmetic average of the prices of the best purchase and sales offers that were present in the order book at least for 300 seconds shall be designated as the GGF.

ı. If no match occurred during the session and there is only one-way order in the order book, considering the best purchase/sales orders that remained active in the order book for at least 600 seconds; the GGF shall be designated as follows:

i. If the price of the best purchase directed bid which meets the relevant time criterion is higher than the most recent GGF, this price shall be designated as the GGF.

ii. If the price of the best sales directed offer which meets the relevant time criterion is lower than the most recent GGF, this price shall be designated as the GGF.

i. The theoretical pricing method specified in Article 10.4.1 shall be used.

j. The most recent GGF for the contract shall be designated as the GGF.

k. If no offer that meets the conditions in the GGF determination steps is entered on the first day of contract being open to trade, the first day's GGF shall be equal to the base price.

10.3.3. The GGF of a contract shall be equal to the weighted average of the GGFs of other contracts covering the same gas days as the relevant contract. When calculating the weighted average, the gas days of the relevant contracts shall be taken into account.

10.3.4. In cases where the equality in Article 10.3.3 is not achieved, in order to eliminate the differences between the prices so that the GGFs of the relevant contracts are compatible with the equality, the GGF correction process shall be performed as follows:

a. The GGF correction process shall be carried out in such a way that the total GGF change rates are minimum, taking into account the gas days of the contracts for which the correction process is applied.

b. GGF correction shall be done with the GGF correction optimization algorithm to obtain the lowest weighted GGF deviation sum, on the condition that the equations in Article 10.3.3 met. Total weighted GGF deviation is the sum of squared number of the difference between GGF of each contract before GGF correction and corrected GGF and product of number of settlement periods in the delivery time and coefficient of GGF exchange cost.

c. The GGF correction process shall primarily be applied to the GGFs designated by sub paragraphs (i), (j), (k) of Article 10.3.2.

ç. GGF coefficient of exchange cost shall be applied to the steps in Article 10.3.2 as follows:

i. 1,000,000 for the GGFs designated as per sub paragraph (a).

ii. 100,000 for the GGFs designated as per sub paragraphs (b) or (c) or (ç) or (d).

iii. 10,000 for the GGFs designated as per sub paragraphs (e) or (f) or (g) or (ğ).

iv. 1,000 for the GGFs designated as per sub paragraphs (h) or (ı).

v. 1 for GGFs designated as per sub paragraphs (i) or (j) or (k).

10.3.5. Calculated GGF shall be rounded to the nearest price increment.

10.4. Theoretical Price Method

10.4.1. If the GGF cannot be calculated for a contract, the theoretical price of the contract shall be calculated by taking into account the GGFs of other contracts, if any, covering the same gas days as the relevant contract.

If any of the GGFs of the contracts that fully overlap with each other cannot be calculated, the missing GGF value shall be calculated according to the equation below.

$$\mathrm{GGF_{t,d}} \times \mathrm{KGS_t} = \sum_{\mathrm{s} \in \mathrm{S_t}} \mathrm{GGF_{s,d}} \times \mathrm{KGS_s}$$

The expressions used in the above formula shall have the following meanings:

$GGF_{t,d}$: refers to the GGF or the base price (TL/1000Sm^3) on day "d" of the contract with the delivery period "t";

KGS_t : refers to the number of gas days in the delivery period of the contract with the delivery period "t";

KGS_s : refers to the number of gas days in the delivery period of the contract with the delivery period "s";

$GGF_{s,d}$: refers to the GGF or the base price (TL/1000Sm^3) on the day "d" of the contract with the delivery period "s"; and

S_t : refers to the set of contracts that fully overlap with the minimum number of contracts and the contract with delivery period "t".

10.4.2. [2]The base price for monthly contracts shall be designated by using the formula below.

$$\mathrm{BF_i} = \mathrm{RF_i} \times (0{,}7 \times \mathrm{BÇ_i} + 0{,}2 \times \mathrm{TTFÇ_i} + 0{,}1 \times \mathrm{HHÇ_i}) \times \mathrm{KÇ_i}$$

The expressions used in the above formula shall have the following meanings:

BF_i : refers to the base price calculated for the monthly contract "i";

RF_i : refers to the arithmetic average of the GRFs declared in the STP for the gas days for the reference period;

$BÇ_i$: refers to the ratio of the Brent oil price for the month "i" for which the base price is calculated, to the Brent oil price to which the period in which the reference price is formed is related;

$TTFÇ_i$: refers to the ratio of the most recent settlement price announced for the TTF trade point for the month "i" for which the base price is calculated, to the arithmetic average of the settlement prices of the last transaction month of the contract traded for the TTF trade point pertaining to the reference period;

[2] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

$HHÇ_i$: refers to the ratio of the most recent settlement price announced for the HenryHub trade point for the month "i" for which the base price is calculated, to the arithmetic average of the settlement prices of the last transaction month of the contract traded for the HenryHub trade point pertaining to the reference period;

$KÇ_i$: refers to the ratio of the most recent settlement price as of the calculation date of the USDTRY contract traded on the Borsa Istanbul Futures and Options Market (VİOP) for the month "i" for which the base price is calculated, to the arithmetic average of the USDTRY buying rate announced by the Central Bank of the Republic of Turkey in the period when the reference price is formed; and

Reference period: refers to the nearest month before the day in which the base price is calculated.

10.4.3. The Brent Oil price used in the calculation of the Brent Multiplier shall be designated by considering the following steps.

a. Each contract for which the base price is calculated shall be related to the Brent Petrol contract in the nearest month, which was/will be traded in the three quarters preceding the delivery obligation period.

b. In each month of the relevant three quarters, the arithmetic average of the contracts traded in the nearest months shall be calculated.

c. In each month of the relevant three quarters, the most recent settlement price of the contracts as of the calculation day of the contracts that will be traded in the nearest months shall be received.

ç. The 9-month data specified in sub paragraphs (b) and (c) shall be calculated by weighting according to the number of days in the relevant months and taking the average.

10.4.4. In case there is no USDTRY contract traded on VİOP for the period covered by the contract that is subject to calculation, the exchange rate of the contract shall be designated by taking into account the median value of the price change rates among the contracts traded monthly on VİOP on the calculation date.

10.4.5. The base price for quarterly and annual contracts shall be calculated by taking the weighted average of the base prices designated according to Article 10.4.2 for monthly contracts within the physical period of the relevant contract, taking into account the number of days in the relevant months.

10.4.6. Brent Petrol and TTF contract data used in calculations shall be obtained from Intercontinental Exchange (ICE) platform, Henry Hub contract data used in calculations shall be obtained from Chicago Mercantile Exchange (CME) Group platform.

10.5. Daily Price Change Limits

10.5.1. Daily price change limit shall be designated by the market operator and announced via the STP.

10.5.2. The daily price change limit shall be the daily price change for the open contracts, designated over the opening price.

10.5.3. The daily price change rate is 5% of the opening price in the direction of increase or decrease.

10.5.4. In case of occurrence of extraordinary circumstances as set forth under Article 11.1 of the PUE, the daily price change rate may be changed by the market operator on a session and/or contract basis before or during the session, in accordance with the relevant provisions.

The said change shall be announced to the market participants. If deemed necessary within the framework of market conditions, the conditions stated in this Article may be applied to the market participants, provided that they are notified at least 2 business days in advance.

11. Position Limits

11.1. Market Position Limit

11.1.1. In the VGP, the "market position limit" shall be used as a criterion for evaluating the positions of market participants based on their trading volume.

11.1.2. The market position limit shall be the sum of any short or long open positions in the market for all contracts.

11.1.3. Calculation of the market position limit shall consist of the following steps;

a. The amount at which an open position can be created, equal to one fourth of the 5% more than the average consumption amount of the Turkish natural gas market in the past 3 years, shall be calculated as the market position limit for each year.

b. While determining monthly market position limits, annual market position limits shall be taken into account. Daily position limits shall be calculated for each month by being profiled according to the monthly consumption amounts of the most recent 3 years in the Natural Gas Market Annual Sector Report of EMRA.

c. Each year, until the end of November, the Market Position Limits for the following 2 years shall be calculated and announced in the STP.

11.2. Position Limits of Participants

11.2.1. The position limit of market participants who will trade for the first time in the natural gas market operated by the market operator and where the imbalances are settled; It shall be 500,000 Sm^3/day.

11.2.2. [3]Position limits to be calculated for market participants currently trading in the natural gas market operated by the market operator and where imbalances are reconciled shall be calculated according to the formulas below;

$$\mathrm{PL_p} = \mathrm{maximum}(500{,}000; \mathrm{PPL} \times \mathrm{PLO_p})$$

$$\mathrm{PLO_p} = \frac{\mathrm{M_p}}{\mathrm{TM}}$$

$$\mathrm{TM} = \sum_{p=1}^{n} \mathrm{M_p}$$

$$\mathrm{M_p} = \mathrm{FG_p} + \mathrm{STPAM_p} + \mathrm{TG_p} + \mathrm{VGPAM_p} + \mathrm{FÇ_p} + \mathrm{STPSM_p} + \mathrm{TÇ_p} + \mathrm{VGPSM_p} + \left(\left|\mathrm{UDNG_p} - \mathrm{UDNÇ_p}\right|\right)$$

The expressions used in the formula shall have the following meanings;

---

[3] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

Mp : Value to be used in the market position limit calculation of the market participant “p” (Sm^3);

PLp : position limit of the market participant “p”;

PPL : Total market position limit designated in accordance with Article 11.1;

PLOp : position limit ratio of market participant “p”;

TM : Sum of the values to be used in the position limit for market participants (Sm^3);

n : Number of active market participants in the STP operated under the PUE on the day of the calculation;

FGp : Physical Entry amount of market participant "p" in the relevant period;

UDNGp : market participant "p"s UDN Entry amount in the relevant period;

STPAMp : purchase amount of the market participant "p" in the STP in the relevant period under the PUE;

TGp : Transfer Entry amount of market participant "p" in the relevant period;

VGPAMp : purchase amount of the market participant "p" in the VGP in the relevant period;

FÇp : Physical Exit amount of the market participant "p" in the relevant period;

UDNCp : market participant "p"s UDN Exit amount in the relevant period;

STPSMP : amount of sales made by the market participant "p" in the STP in the relevant period within the scope of PUE;

TÇp : market participant "p"s Transfer Exit amount in the relevant period; and

VGPSMp : Amount of sales made by market participant "p" in the VGP in the relevant period.

11.2.3. Regarding the calculation of the participant position limit within the scope of Article 11.2.2, the settlement basis values realized within the last twelve months, when the settlement notification of the market participants before the day of the calculation is finalized, shall be taken into account.

11.2.4. Market participants, whose position limit is designated, can hold short and/or long positions.

11.2.5. Market participants who reach the position limit shall not be allowed to increase their net position.

11.2.6. The position limit of market participants shall be updated following the calculation specified in paragraph (c) of Article 11.1.3. In the period before the said update, the position limit increase amount calculated pursuant to Article 11.2.9 shall be zero. The participant shall continue its transactions with the position limit resulting from the calculation.

11.2.7. [4]Market participants who reach the participant position limit can submit their requests to the market operator to increase their position limits, along with their justifications. The market operator shall resolve such requests within 24 hours. The default guarantee account contribution of the market participant whose demands are accepted shall be recalculated. The

[4] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

total position limits of the market participants who complete the default guarantee account contribution shall be increased within 3 business days following the acceptance of their request.

11.2.8. Market participants can apply to the market operator to reduce their position limits. The position limits of the market participants whose demands are accepted shall be reduced. In the event that the default guarantee account contributions of the market participants to be demanded decrease, the excess amount, if any, shall be released as a result of the calculation of the next default guarantee account size.

11.2.9. The contribution margin required to be deposited for the default guarantee account in response to the amount desired to be increased in the position limit increase applications shall be calculated as follows:

$$PLAK_{p,d} = \left(TPL_{p,d} - PL_{p,d}\right) \times \frac{\sum_{p=1}^{n} TGH_{d,p}}{\sum_{p=1}^{n} PL_{p,d}}$$

The expressions used in the formula shall have the following meanings;

PLAKp : The contribution amount that market participant “p” must submit for the position limit increase on the “d” day;

TPLp,d : The position limit requested by market participant “p” on day “d”;

PLp,d : The most recent position limit calculated within the scope of Article 11.2.6;

TGHd,p : The default guarantee account contribution amount calculated for market participant “p” on day “d”; and

n : The number of active market participants as of the day of the account.

11.2.10. A participant's position limit cannot be greater than the sum of the other participants' position limits.

11.3. Netting of positions

11.3.1. In order to determine the net positions of the market participants, the positions shall be cleared for each contract by the market operator.

11.3.2. As a result of matching of the long and/or short position of the market participant, which includes a certain delivery period, with the reverse offer in the same delivery period, the position held by the market participant shall be netted over the amount (Sm^3).

11.3.3. The clarification of the positions held by the market participants for each contract shall be made according to the formula below;

$$NPM_{p,d,i} = \sum_{u=1}^{m} PM_{p,d,i,u} - \sum_{k=1}^{n} PM_{p,d,i,k}$$

a. If NPMp,d,i > 0, the net long position amount of market participant "p" for contract "i" on day "d" shall be NPMp,d,i.

b. If NPMp,d,i < 0, the net short position amount of market participant “p” for contract “i” on day“d” shall be NPMp,d,i.

NS. If NPMp,d,i = 0, the net position amount of market participant “p” for contract “i” on day “d” shall be zero.

The expressions used in the formula shall have the following meanings;

NPMp,d,i : Net position amount of market participant “p” regarding contract “i” on day “d”;

PMp,d,i,u : Long position amount “u” of market participant “p” regarding contract “i” on day “d”;

PMp,d,i,k : Short position amount “k” of market participant “p” regarding contract “i”on day “d”;

m : Number of long positions related to contract “i”; and

n : Number of short positions related to contract “i”.

11.3.4. Long and short positions of market participants shall be netted by the minimum of the relevant position amounts.

11.4. Calculation and Notification of Finalized Net Positions

11.4.1. The market operator shall calculate the finalized net position of each participant for each gas day with the transactions approved for trade.

11.4.2. [5]The finalized net positions calculated for each gas day within the physical delivery period shall be notified to the transmission company as the Transport Amount Notification (TMB) for the G-day by the market operator on behalf of the market participant, until 16:00 G-1.

11.4.3. The finalized net positions for each market participant shall be calculated by subtracting the approved orders from the approved sale offers of the relevant participant. In case the result for the relevant gas day is positive, the sales-side values shall be recorded in the EBT as TMB at the participant's VGP UDN Exit point, and if it is negative, the absolute value of the result shall be recorded at the participant's VGP UDN Entry point.

11.4.4. The market operator shall become a counterparty to the market participant for the finalized net position amounts recorded in the EBT.

11.4.5. For finalized net positions, market participants shall be subject to the relevant obligations specified in the NOP.

12. Collaterals

12.1. Principles Regarding Collaterals

12.1.1. Collateral shall be taken from market participants trading in the VGP operated by the market operator.

12.1.2. The collateral taken shall be used to manage the risks undertaken by the market operator as a central counterparty, to secure the receivables of other market participants and to close open positions by the market operator within the scope of default management in cases where the market participants fail to fulfill their obligations with respect to the natural gas markets operated by the market operator.

[5] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

12.1.3. The initial collateral and the collateral required by the market operator for the financial period and the physical period constitute the total VGP collateral.

12.1.4. Collateral transactions shall be carried out by the market operator through the central settlement institution. The duties and responsibilities of the central settlement institution shall be determined by virtue of the central settlement institution agreement between the market operator and the central settlement institution.

12.1.5. The central settlement institution shall, on behalf of the market operator, pledge the collateral amount it has been submitted on a market participant basis with respect to market activities in favor of the market operator.

12.2. Initial Collateral

12.2.1. Initial collateral shall be taken from market participants to enter the market following their execution of the VGP Participation Agreement. The initial collateral amount taken from the market participants shall be independent of the transactions they shall make in the said market.

12.2.2. The initial collateral required to be offered by market participants is TL 150,000.

12.3. Financial Period Collateral

12.3.1. Financial period collateral shall be taken from the market participants according to the position they hold during the financial period in the VGP and new order entries.

12.3.2. Financial period collateral submitted by market participants for the positions they hold, excluding the net loss amounts, shall not be taken into account in the total collateral calculation starting from the transition to the physical period for the relevant contract. The net loss amounts for each contract shall be used in the collateral calculations until the invoice payment of the related contract.

12.3.3. Contract collateral, net loss account, market adjustment collateral and full spread position collateral discount calculations shall be used in the determination of the financial period collateral.

12.3.4. Financial period collateral shall be calculated according to the following formula:

$$\mathrm{FNDT}_{p,d} = \sum_{i=1}^{n} \left(\mathrm{KT}_{p,d} + \left| \mathrm{NZ}_{p,d,i} \right| + \mathrm{TPgGT}_{p,d} - \mathrm{TYPT\dot{I}}_{p,d} \right) \quad (1)$$

The expressions used in the formula shall have the following meanings:

$\mathrm{FNDT}_{p,d}$: The total financial period collateral (TL) that the market participant “p” has to submit on the day “d”;

$\mathrm{KT}_{p,d}$: The contract collateral (TL) calculated for the current open positions and orders of the market participant “p” on the day “d”;

$\mathrm{NZ}_{p,d,I}$: The net loss (TL) of market participant “p” calculated as a result of netting on the day “d” pertaining to the contract “i”;

$\mathrm{TPgGT}_{p,d}$: The total market adjustment collateral amount (TL) calculated for the current open positions of the market participant “p” on the day “d”;

$\mathrm{TYPT\dot{I}}_{p,d}$: The full spread position collateral discount amount (TL) of the market participant “p”, calculated on the day “d”;

n : The number of contracts in which market participants hold positions.

12.4. Contract Collateral

12.4.1. Contract collateral is the collateral amount required by the market participant to hold a long or short position in the VGP.

12.4.2. The contract collateral shall be calculated according to the following formulas:

$$KT_{p,d,i} = AF_{d,i} \times [(1 + A_i)^2 - 1] \times KGS_i \times M_{p,i} \qquad (2)$$

The expressions used in the formula shall have the following meanings:

$KT_{p,d,i}$: The contract collateral of the market participant “p” for the contract “i” calculated on the day “d”;

$AF_{d,I}$: The current opening price of the contract “i” for day “d”;

A_i : The daily price change rate determined in accordance with Article 10.5.3 of the contract “i”;

$M_{p,i}$: The amount to be used in the collateral calculation according to the order and/or position of the market participant “p” for the contract “i”;

KGS_i : The number of gas days covering the delivery period of the contract “i”.

12.4.3. The M value, set out in the contract collateral formula for market participants, shall be calculated in accordance with the following conditions, taking into account the net position amounts, order and order directions:

a. If the direction of the new order is the same as the direction of the current net position resulting from the matches, M shall be increased by the order amount.

b. If the direction of the new order is opposes the calculated current net position amount, firstly, the order and net position amounts shall be netted. If the M resulting from the netting is greater than the M calculated before the entry of the new order, the netting result shall be taken into account. Otherwise, the M value prior to the entry of the new order shall be taken into account.

12.4.4. In order to register an order, it shall be verified that the contract collateral adjusted over the order amount and the total collateral to be offered are submitted with regard to the following:

a. The net loss amount that may occur as a result of netting the relevant order with the reverse current net position for the same contract,

b. The invalidation by the relevant order of the application of the full spread position collateral reduction.

12.5. Net Loss Account

12.5.1. The net loss shall be calculated over the matching prices of the market participants as a result of the netting of the positions for the relevant contracts.

12.5.2. The net loss account shall be made according to the following formulas:

$$NKZ_{p,d,i} = \min\left(M_{p,u}, M_{p,k}\right) \times \left(EF_{p,i,k} - EF_{p,i,u}\right) \times KGS_i \qquad (3)$$

a. If $NKZ_{p,d,i} > 0$; then $NZ_{p,d,i} = 0$ $\quad NK_{p,d,i} = NKZ_{p,d,i}$

b. If $NKZ_{p,d,i} < 0$; then $NZ_{p,d,i} = NKZ_{p,d,i}$

The expressions used in the formula above shall have the following meanings:

$NKZ_{p,d,I}$: Net profit or loss calculated as a result of netting on the day "d" pertaining to the contract "i" of the market participant "p";

$M_{p,u}$: The position amount of the long position holder market participant "p" in the contract "i";

$M_{p,k}$: The position amount of the short position holder market participant "p" in the contract "i";

$EF_{p,i,k}$: Matching price (TL/1000 Sm3) for the contract "i" of the short position holder market participant "p";

$EF_{p,i,u}$: Matching price (TL/1000 Sm3) for the contract "i" of the short position holder market participant "p";

KGS_i : The number of gas days covering the delivery period of the contract "i";

NZp,d,I : Net loss calculated as a result of netting on the day "d" pertaining to the contract "i" of the "market participant "p";

$NK_{p,d,i}$: Net profit calculated as a result of netting on the day "d" pertaining to the monthly contract "i" of the market participant "p".

12.5.3. The net profit/loss account shall be updated after each match. Updated net loss amounts shall be used in collateral calculations until the invoice payment.

12.5.4. When calculating the net profit/loss amount, the matches shall be included in the calculation according to the matching order.

12.6. Market Adjustment Collateral

12.6.1. Market adjustment collateral is the collateral amount calculated for the daily changes in the GGFs of the contracts which include the positions held by the market participants.

12.6.2. The market adjustment collateral of the market participants holding a net short position in the relevant contract shall be calculated according to the formula below:

$$PgGT_{p,d,k} = \sum_{i=1}^{n} [(GGF_{d,i} - EF_{d,i,k}) \times KGS_i \times M_{p,i,k}] \quad (4a)$$

The expressions used in the formula above shall have the following meanings;

PgGTp,d,k : The market adjustment collateral calculated for the short positions held by the market participant "p" on the day "d";

GGFd,I : GGF pertaining to the contract "i" announced at the end of the day "d";

$EF_{d,i,k}$: The weighted average of the matching prices of the net short positions held in the contract "i" on the day "d";

$M_{p,i,k}$: The net short position amount of the market participant "p" in the contract "i";

KGS_i : The number of gas days covering the delivery period of the contract "i";

n : The number of contracts for which the collateral calculation is made.

12.6.3. Market adjustment collateral amounts for market participants holding a net long position in the relevant contract shall be calculated according to the formula below:

$$PgGT_{p,d,u} = \sum_{i=1}^{n} [(EF_{d,i,u} - GGF_{d,i}) \times KGS_i \times M_{p,i,u}] \ (4b)$$

The expressions used in the formula shall have the following meanings:

PgGTp,d,u : The market adjustment collateral calculated for the long positions held by the market participant "p" on the day "d";

EFd,i,u : The weighted average of the matching prices of the net long positions held in the contract "i" on the day "d";

GGFd,I : GGF pertaining to the contract "i" announced at the end of the day "d";

Mp,i,u : The net long position amount of the market participant "p" in the contract "i";

KGS_i : The number of gas days covering the delivery period of the contract "i";

n : The number of contracts for which the collateral calculation is made.

12.6.4. The market adjustment collateral amounts for all long and short positions held by the market participant shall be collected by the market operator at the end of the day and the total market adjustment collateral amount shall be calculated according to the formula below:

$$TPgGT_{p,d} = PgGT_{p,d,k} + PgGT_{p,d,u} \ (4c)$$

The expressions used in the formula shall have the following meanings;

$TPgGT_{p,d}$: The market adjustment collateral amount calculated on the day "d" for the short and long positions held by the market participant "p";

$PgGT_{p,d,u}$: The market adjustment collateral amount calculated on the day "d" for the long positions held by the market participant "p";

$PgGT_{p,d,k}$: The market adjustment collateral amount calculated on the day "d" for the short positions held by the market participant "p".

12.7. Full Spread Position Collateral Discount

12.7.1. If the gas days determined for the delivery period covered by the long positions of the market participants and the gas days determined for the delivery period covered by the short positions exactly match, a full spread position occurs.

12.7.2. The amounts of the opposite positions that constitute a full spread position shall be compared and the full spread position shall be created by the minimum of the relevant position amounts.

12.7.3. For reverse positions that constitute a full spread position, netting shall not be made until cascading, if any, takes place and these positions remain as open positions in the VGP if they are not closed.

12.7.4. The GGFs of the relevant contracts shall be adjusted according to the market for positions that create a full spread position, and the calculated value shall be taken into account in the market participant's total VGP collateral calculation.

12.7.5. The collateral reduction amount for the positions that constitute a full spread position shall be calculated according to the formula below;

$$\mathrm{TYPT\dot{I}}_{p,d} = \min\left(M_{p,i,u}, M_{p,l,k}\right) \text{ x } \left[\left(\sum_{i=1}^{n} AF_{d,i,k} \times KGS_i \times [(1 + A_i)^2 - 1]\right) + \left(\sum_{l=1}^{m} AF_{d,l,u} \times KGS_l \times [(1 + A_l)^2 - 1]\right)\right]$$

The expressions used in the formulas above shall have the following meanings:

$\mathrm{TYPT\dot{I}}_{p,d}$: The collateral discount amount calculated for the full spread position of the market participant “p” on the day “d”;

$M_{p,i,u}$: The long position amount held by the market participant “p” in the contract “i”;

$M_{p,l,k}$: The short position amount held by the market participant “p” in the contract “l”;

$AF_{d,i,k}$: The opening price (TL/1000 Sm3) of the contract “i” on the day “d”;

$AF_{d,l,u}$: The opening price (TL/1000 Sm3) of the contract “l” on the day “d”;

A_i : The daily price change rate of the contract “i” determined in accordance with Article 10.5.3;

A_l : The daily price change rate of the contract “l” determined in accordance with Article 10.5.3;

KGS_i : The number of gas days covering the delivery period of the contract “i”;

KGS_l : The number of gas days covering the delivery period of the contract “l”;

r : The full spread position collateral reduction coefficient determined as 0.99;

n : The number of contracts in which the market participant “p” holds a short position;

m : The number of contracts in which the market participant “p” holds a long position.

12.7.6. If the market participant closes any of the positions constituting the full spread position with a reverse transaction, the full spread position collateral reduction shall not applied for the closed part of the relevant position. The market operator shall recalculate the collateral amount that market participants are obliged to submit for open positions with reduced full spread position collateral.

12.8. Physical Period Collateral

12.8.1. The physical term collateral shall be calculated by the market operator for market participants who have an open position in the VGP at the end of the session on the third business day prior to the start of the relevant delivery period, against the risks that may arise during the delivery period in which they trade. Physical term coverage shall not be calculated from the third day following end of the delivery period. Physical period deposit is non-refundable until invoice payment is made.

12.8.2. The physical period collateral shall be determined with regard to the net position amount and the weighted average price of the matches that make up the net position.

12.8.3. [6]The physical period collateral of the market participant holding a long position shall be calculated according to the following formula:

$$\mathrm{FZDTU}_{\mathrm{p,d,i}} = \mathrm{maks}\left[\left(\left(\sum_{\mathrm{j=1}}^{\mathrm{n}} \mathrm{EF}_{\mathrm{p,i,j,u}} \times \mathrm{KGS}_{\mathrm{i}} \times \mathrm{M}_{\mathrm{p,j,u}}\right) - \mathrm{NKZ}_{\mathrm{p,d,i}}\right); 0\right] \times (1 + \mathrm{GKO}_{\mathrm{d}}) \quad (6a)$$

The expressions used in the formula above shall have the following meanings:

$\mathrm{FZDTU}_{p,d,i}$: The physical period collateral calculated on the day "d" for the contract "i" of the long position holder market participant "p";

$\mathrm{EF}_{p,i,j,u}$: The matching price for the position "j" in the contract "i" of the long position holder market participant "p";

$\mathrm{M}_{p,j,u}$: The matching amount of the position "j" in the contract "i" of the long position holder market participant "p";

KGS_{i} : The number of gas days covering the delivery period of the contract "i";

$\mathrm{NK}_{p,d,i}$: Net profit of market participant "p" calculated as a result of netting on day "d" pertaining to the contract "i";

n : The number of matches in which the market participant "p" holds a long position.

GKO_{d} : The current VAT rate applicable within the scope of relevant legislation on day "d".

12.8.4. [7]The physical period collateral of the market participant holding a short position is calculated according to the following formula:

$$\mathrm{FZDTK}_{\mathrm{p,d,i}} = \left(\mathrm{maks}\left(\mathrm{FBT}_{\mathrm{p,d,i}} - \mathrm{FAT}_{\mathrm{p,d,i}} - \mathrm{NKZ}_{\mathrm{p,d,i}}\right); 0\right) \quad (6b)$$

$$\mathrm{FBT}_{\mathrm{p,d,i}} = \sum_{\mathrm{j=1}}^{\mathrm{n}} maks\left[\mathrm{DGAF}_{\mathrm{t}} \times 1{,}1 - \mathrm{EF}_{\mathrm{p,i,j,k}}; 0\right] \times \min[\mathrm{KGS}_{\mathrm{i}}, (\mathrm{KGS}_{\mathrm{i}} + 3 - \mathrm{z})] \times \mathrm{M}_{\mathrm{p,i,j,k}} \quad (6c)$$

$$\mathrm{FAT}_{\mathrm{p,d,i}} = \sum_{\mathrm{j=1}}^{\mathrm{n}} \mathrm{EF}_{\mathrm{p,i,j,k}} \times \mathrm{M}_{\mathrm{p,i,j,k}} \times \mathrm{z} \quad (6ç)$$

The expressions used in the formula above shall have the following meanings:

$\mathrm{FZDTK}_{p,d,i}$: The physical period collateral calculated on the day "d" for the contract "i" of the short position holder market participant "p";

[6] Amended pursuant to the EMRA Decision published in the Official Gazette dated 26 August 2023 and numbered 32291.
[7] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

$FBT_{p,d,i}$: The debt amount that is likely to occur in the physical period calculated on the day "d" for the contract "i" of the short position holder market participant “p”;

$FAT_{p,d,i}$: The amount of receivables to be reflected in the invoice for the days in which delivery has taken place of the short position holder market participant “p” for the contract “i”;

$NKZ_{p,d,i}$: Net profit or loss of market participant “p” calculated as a result of netting on day “d” pertaining to the contract “i”;

$DGAF_t$: The highest DGAF that has occurred in the last 10 days before the day "d" for which the collateral calculation has been made;

$EF_{p,i,j,k}$: The matching price for the position “j” in the contract “i” of the short position holder market participant “p”;

KGS_i : The number of gas days covering the delivery period of the contract “i”;

z : The number of days in which the delivery has been completed;

$M_{p,i,j,k}$: The matching amount of the position “j” in the contract “i” of the short position holder market participant “p”;

n : The number of contracts in which the market participant “p” holds a short position.

12.8.5. If the relevant market participant has unpaid advance and/or invoice debts in accordance with the PUE and these Procedures and Principles, the "z" value used in the calculation of the physical period collateral, which represents the number of days in which delivery has taken place, shall be considered as 0 (zero).

12.8.6. The physical period collateral shall be calculated according to the formula below for a market participant holding a long and/or short position;

$$\mathrm{FZDT}_{p,d} = \mathrm{FZDTU}_{p,d,i} + \mathrm{FZDTK}_{p,d,i} \quad (6d)$$

The expressions used in the formula above shall have the following meanings;

$FZDT_{p,d}$: The physical period collateral (TL) of the market participant “p” calculated on the day “d”;

$FZDTU_{p,d,i}$: The physical period collateral of the long position holder market participant “p”, calculated on the day “d” for the contract “i”;

$FZDTK_{p,d,i}$: The physical period collateral of the short position holder market participant “p”, calculated on the day “d” for the contract “i”.

12.9. Calculation of Total VGP Coverage

12.9.1. The total VGP collateral that market participants must offer on any given day shall be calculated as follows:

$$\mathrm{TVGPT}_{p,d} = \left[\mathrm{BT}_{p,d} + \max\left(\mathrm{FNDT}_{p,d} + \mathrm{FZDT}_{p,d}, 0\right)\right] \times \mathrm{t} \quad (7)$$

The expressions used in the formula above shall have the following meanings;

$TVGPT_{p,d}$: Total VGP collateral (TL) that the market participant “p” is required to submit on the day “d”;

$BT_{p,d}$: The initial collateral (TL) that the market participant "p" is required to submit on the day "d";

$FNDT_{p,d}$: The financial period collateral (TL) that the market participant "p" is required to submit on the day "d";

$FZDT_{p,d}$: The physical period collateral (TL) that the market participant "p" is required to submit on the day "d";

t : The risk coefficient determined by the market operator according to the past default situations of the market participants.

12.9.2. In the VGP, the default value of the risk coefficient (t), to be used in calculating the total VGP collateral amount that must be submitted by the market participant, is 1.

12.9.3. In the calculation of the total collateral made within the framework of the end-of-day transactions, the risk coefficient (t) shall be applied as 1.05 for market participants who have failed to meet the total VGP collateral amount required to be kept during the control made at the time of collateral control in the last 180 days for 5 to 9 days, including the current day. For market participants who have failed to meet the above total for 10 or more days during the said control, the aforementioned coefficient shall be applied as 1.1.

12.9.4. The risk coefficient determined for each market participant within the framework of end-of-day trading shall also be valid throughout the session period on the first trading day following the calculation day. On the first trading day following the calculation, the risk coefficient shall be re-determined in the calculation of the total VGP collateral made within the framework of the end-of-day transactions.

12.10. Collateral Transactions and Collateral Transaction Control Processes

12.10.1. The market operator shall inform the market participants of the total VGP collateral amount that they have to submit in order to trade in the open sessions on VGP.

12.10.2. The market operator shall check the total VGP collateral amounts submitted by the participants 30 minutes before the start of each session. Market participants who have not submitted the total VGP collateral amount they have been notified by the market operator cannot trade in the VGP sessions.

12.10.3. The collateral amount in the accounts of the market participants shall be blocked to the extent of the total VGP collateral amount notified by the market operator. The amount above the blocked collateral amount shall be considered as the free collateral amount.

12.10.4. Financial period collateral calculations shall be taken as basis for transactions realized in the VGP during the session. The financial period collateral account shall be updated following the matching of the current orders within the session.

12.10.5. In order for market participants to submit orders in the VGP, an amount equal to the difference between the financial period collateral amount, which is instantly recalculated before each order with regard to the order amount, price and direction, and the last calculated financial period collateral amount, must be in the collateral account as the free collateral amount. The amount equal to the difference between the two accounts shall be blocked in the market participant's collateral account with the submission of the order.

12.10.6. In the event that the matching orders have a reducing effect on the financial period collateral amount, the blocked collateral amount shall also be reduced at the same rate,

12.10.7. The market operator shall inform the market participants and the central settlement institution on a market participant basis by making the necessary calculations regarding the collateral amounts to be submitted on a market participant basis until 17:00 every business day. In the event that the total collateral amount offered by a market participant regarding VGP activities does not meet the total VGP collateral amount to be submitted, a "margin call" shall made to the relevant market participant by the central settlement institution.

12.10.8. [8]For collateral checks to be made 30 minutes before the start of each session, market participants shall submit their electronic letters of guarantee to the market operator 60 minutes prior to the session start time, and the collaterals apart from the electronic letter of guarantee to the central settlement institution until the collateral control time.

12.10.9. [9]Every business day, the market operator shall notify the central settlement institution of the information on the electronic letter of guarantee amounts submitted to it 30 minutes before the electronic collateral control time on a market participant basis, 30 minutes before the session start time at the latest.

12.10.10. The central settlement institution shall notify the market operator on a market participant basis with the updated information on the amount of collateral offered by the market participants between 12:00 and 17:00 every business day.

12.10.11. If the amount of collateral offered by a market participant falls below the required amount, the central settlement institution shall make a margin call to the relevant market participant following the completion of the day-end transactions within the scope of VGP activities.

12.10.12. In order to continue the relevant market activities, a market participant to whom margin call is made shall submit the collateral amount it has been requested to submit at minimum to the central settlement bank and/or market operator before the next collateral control, depending on the nature of the collateral.

12.10.13. In accordance with these Procedures and Principles, market participants who do not comply with the margin call shall be deemed to be in default in the controls performed as a result of the collateral notifications, and the default management provisions shall become applicable.

12.11. Assets that Can be Accepted as Collateral

12.11.1. [10]The securities that can be accepted as collateral in the VGP are as follows:

a. Turkish Lira;

b. Foreign currency (USD or EUR);

c. Final electronic letters of guarantee issued for an indefinite term in TL or in foreign currency (US Dollars or EUR) by banks operating in Turkey and subject to banking regulations;

ç. Final electronic letters of guarantee that are issued for an indefinite term in TL or foreign currency (USD or EUR) by banks subject to banking regulations on counter guarantee of foreign banks that are permitted to operate in Turkey according to banking regulations or by a bank or similar credit institutions that operate outside of Turkey;

d. Bearer government debt securities issued by the Undersecretariat of Treasury;

e. Republic of Turkey Eurobonds issued by the Ministry of Treasury and Finance.

---

[8] Amended pursuant to the EMRA Decision published in the Official Gazette dated 11 November 2023 and numbered 32366.
[9] Amended pursuant to the EMRA Decision published in the Official Gazette dated 11 November 2023 and numbered 32366.
[10] Amended pursuant to the EMRA Decision published in the Official Gazette dated 11 November 2023 and numbered 32366.

12.11.2. [11]The following shall be taken as reference in the process of calculating the TL equivalents of the collaterals: (a) the CBRT's buying rate published at 15:30 one business day before the day on which the calculation is to be made by the CBRT for foreign currency denominated cash collaterals and foreign currency denominated electronic guarantee letters, (b) the indicative prices published by the CBRT in the Official Gazette on the day of the calculation for government bonds and treasury bills, and (c) the prices determined by the central settlement institution for Eurobonds issued by the Ministry of Treasury and Finance of Republic of Turkey.

12.11.3. Market participants can provide the required collateral with only one or more of the assets that can be accepted as collateral specified in the first paragraph. The submitted collaterals may be partially or completely replaced by other assets accepted as collateral.

12.11.4. If the market operator becomes aware of any precautionary injunction decisions taken by the legal authorities regarding the assets offered as collateral by the market participant, or other situations that prevent the performance of the relevant securities, the said assets shall not be taken into account in the total collateral calculation of the relevant market participant.

12.11.5. [12]Valuation coefficient shall be applied to the assets accepted as collateral other than electronic letters of guarantee in TL and TL in cash and to foreign currency denominated electronic letters of guarantee. The valuation coefficient to be applied within the scope of these Procedures and Principles shall be announced to the market participants through STP after being designated by the market operator upon the proposal of the central settlement institution, taking into account the valuation coefficients applied in similar markets.

12.11.6. Interest shall be charged by the central settlement institution on the cash collaterals offered by market participants in TL. The procedures and principles regarding the accrual of interest are under the legal responsibility of the central settlement institution, and the said process shall be carried out by the central settlement institution. The interest amount shall be transferred to the relevant market participant's account on the business day following the deduction of the fund management fee, bank and insurance transaction tax and statutory liabilities.

12.11.7. All costs related to the collaterals shall be paid by the relevant market participant.

12.12. Return of Collaterals

12.12.1. If the total collateral amount submitted by the market participant is greater than the total collateral amount that the market participant is required to submit, the excess collateral amount shall be returned to the market participant by the central settlement institution and/or the market operator upon the request of the market participant, provided that the said collateral is eligible for partial return.

12.12.2. All unblocked collateral withdrawals to be made by the market participant can be made between 09:30 and 12:00 on complete business days.

12.12.3. The market participant's physical period collateral and net loss amount for a delivery period shall be subtracted from the total VGP collateral account at the end of the invoice due date.

12.12.4. Blockage, if any, on the unused portion of the total VGP collateral shall be lifted as a result of closing the positions of the defaulting market participant within the scope of

---

[11] Amended pursuant to the EMRA Decision published in the Official Gazette dated 11 November 2023 and numbered 32366.

[12] Amended pursuant to the EMRA Decision published in the Official Gazette dated 11 November 2023 and numbered 32366.

default management, provided that there is no existing margin call, the invoices issued for the delivery periods have been paid, and there are no advances and/or invoice debts related to the markets operated by the market operator or markets where financial settlement and other financial transactions take place.

12.12.5. Blockage, if any, on the unused portion of the total VGP collateral shall be lifted for the market participants whose participation status in the VGP has expired, provided that there is no existing margin call, the invoices issued for the delivery periods have been paid, and there are no advances and/or invoice debts related to the markets operated by the market operator or markets where financial settlement and other financial transactions take place.

13. Default

13.1. Events of Default

13.1.1. In the VGP, market participants are considered to be in default in the following cases without the need for any prior warning:

a. The market participants who fail to fulfill their obligations regarding the total VGP collateral amount calculated for the relevant day in the control performed at the collateral control time on each business day shall be in default.

b. The market participants who do not meet the current TL denominated cash and/or total default collateral account contribution amount that they are required to submit in the controls carried out at the collateral control time for three consecutive business days shall be in default.

c. Market participants who fail to fulfill their payment obligations for VGP invoices within the specified periods shall be in default.

13.1.2. A market participant that defaults on VGP shall be deemed to have defaulted in all natural gas markets operated by the market operator. Market participants who remain in default due to the fact that the payments for the invoices issued in accordance with the PUE provisions cannot be covered with the amounts in the participant's current account and/or the collateral account, or due to the suspension of their participant status resulting from their failure to fulfill their collateral obligations shall also be considered to be in default in the VGP.

13.1.3. The status of a market participant who defaults on an invoice in the organized natural gas wholesale market operated by the market operator shall be suspended within the scope of these Procedures and Principles and PUE. As of the collateral control, all unmatched orders in the organized natural gas wholesale market, if any, operated by the market operator shall be deleted and the entry of new orders shall not be allowed. A notification shall be made to the transmission company as soon as possible, which shall include the size and term of the contract subject to default, in order prevent the transmission company from making TMB and/or TMDB to increase the imbalance in the EBT.

13.1.4. In case the TL cash amount in the current account of the market participant is sufficient to cover the total VGP collateral amount and/or the insufficient portion of the default guarantee account contribution, the relevant amount shall automatically be paid from the TL cash amount in the current account of the market participant and the market participant shall not go into default on VGP collateral or default guarantee account contribution. The portion of the receivables of a market participant who does not deposit the amount requested to be deposited after the total VGP collateral amount notification, arising from the transactions made in STP, which is equal to the necessary collateral amount, shall be transferred to the collateral account. The remaining part of the receivables arising from the transactions made in STP, if any, shall be paid to the participant.

13.1.5. If a market participant to whom a total VGP margin call is made fails to provide sufficient collateral and/or if a market participant in default completes the said collateral without repaying the debt in default, the participant cannot continue its VGP activities.

13.2. Default Management

13.2.1. The market operator shall use the following methods to close the long and/or short positions of the defaulting market participants whose delivery period has not yet come:

(a) In case of default by different market participants holding long and short positions, whose delivery period has not yet come and who have the same delivery period, the long and short position amounts shall be netted by the market operator on a gas day basis, taking into account the last GGF determined on the day of netting as of the date of the default regarding the relevant contract. The netted positions shall be included in the settlement notifications of the relevant market participants.

(b) The market operator shall submit a standard type purchase bid or sale offer (opposite to the current position) to the offer book at 14:30 on trading days on behalf of the market participant for the net position resulting from the netting process specified in subparagraph (a). In terms of order price, the lowest price that can be submitted according to the price change limit of the relevant day shall be submitted for sales offers and the highest price shall be submitted for purchase bids. The amounts related to the defaulted positions shall be announced by the market operator via STP before the orders are submitted.

(c) Orders submitted pursuant to subparagraph (b) shall be made inactive after the session. The relevant order shall be activated on the following trading day, after its price is updated in accordance with the procedure in subparagraph (b). The transaction in item (b) shall be repeated in every trading day until the position of the defaulting participant in the financial period is closed.

(ç) The collateral amount required from the defaulting participant shall be calculated within the scope of the end-of-day transactions every day, taking into account the remaining positions, the losses incurred and the risk coefficient determined according to the default.

(d) In the event that the defaulting participant submits the collateral amounts specified in the margin call made to it within the scope of subparagraph (ç), the process of submitting an order on behalf of the participant by the market operator within the scope of subparagraph (b) shall terminate. The participant shall continue its activities in the market with its remaining positions.

13.2.2. Long or short positions held by the defaulting market participants, whose delivery period has started or shall start one day later, shall be transferred to the transmission company. The position shall be closed by the transmission company by making transactions in the amounts corresponding to the relevant positions within the framework of the PUE and NOP provisions.

13.2.3. Debt and receivables arising from the positions of the defaulting participant, which are managed within the scope of Articles 13.2.1 and 13.2.2, shall be reflected in the collateral calculations of the relevant market participant and on the physical period invoices of their positions. The amounts to be reflected in the collateral and invoice calculations shall be calculated with regard to the following:

a. In case the orders submitted pursuant to clause (b) of Article 13.2.1 match, the matching prices;

b. In accordance with Article 13.2.2, the prices of the transactions made by the transmission company within the framework of PUE and NOP provisions for the prices of the amounts defaulted by the relevant market participant in the physical period.

13.2.4. [13]With respect to the market participants who have defaulted on the future natural gas market collateral and/or on their default guarantee account contribution, recourse shall be made respectively to the following while closing long and/or short positions to be used when the invoicing period comes, whose delivery period has not yet come and/or whose the delivery period has begun:

a. The amount in the current account;

b. Cash amount in TL above the total collateral amount or the default guarantee account contribution amount to be submitted within the scope of these Procedures and Principles and PUE;

c. Total natural gas futures market collateral;

ç The default guarantee account contribution of the defaulting market participant,

d. Market operator default management contribution;

e. Default guarantee account contributions of other market participants;

f. The amount of the guarantee offered under the PUE;

g. The amount of contributions recollected following the margin call for the default guarantee account.

13.2.5. If the default guarantee account contributions of other market participants are used while the positions of the defaulting market participant are being closed by the market operator within the scope of default management, the said amounts shall be included in the settlement notifications of the relevant market participants who are not in default. If the defaulting market participant does not pay the amount it is obliged to pay in due time, default interest shall be charged for the relevant amounts. Default interest rate is the interest rate determined in accordance with Article 51 of the Law on Collection Procedure of Public Receivables dated 21/7/1953 and numbered 6183. In case the said amount is collected, the collected amounts shall be primarily refunded to the default guarantee account contributions of the market participants at the rate they are used and the remaining amount, if any, to the market operator's default management contribution.

14. Settlement

14.1. Settlement Calculation

14.1.1. Settlement calculations for VGP matches shall be made according to the following formulas:

$$\mathrm{VGPST}_{p,k} = \sum_{i=1}^{m}\left(\sum_{j=1}^{n} \mathrm{EF}_{p,i,j,k} \times \mathrm{VGPSM}_{p,i,j,k}\right) \qquad (8a)$$

[13] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

$$\mathrm{VGPAT}_{p,u} = \sum_{i=1}^{e}\left(\sum_{j=1}^{s} \mathrm{EF}_{p,i,j,u} \times \mathrm{VGPAM}_{p,i,j,u}\right) \qquad (8b)$$

$$\mathrm{VGPSM}_{p,i,j,k} = \mathrm{KGS}_i \times \mathrm{M}_{p,i,j,k} \qquad (8c)$$

$$\mathrm{VGPAM}_{p,i,j,u} = \mathrm{KGS}_i \times \mathrm{M}_{p,i,j,u} \qquad (8ç)$$

The expressions used in the formula above shall have the following meanings;

$VGPST_{p,k}$: The sale price calculated for the contracts in which the market participant “p” holds a short position;

$VGPAT_{p,u}$: The purchase price calculated for the contracts in which the market participant “p” holds a long position;

$EF_{p,i,j,k}$: The matching price (TL/1000 Sm3) for the position “j” of the contract “i”, in which the market participant “p” holds a short position;

$EF_{p,i,j,u}$: The matching price (TL/1000 Sm3) for the position “j” of the contract “i”, in which the market participant “p” holds a long position;

$VGPSM_{p,i,j,k}$: The match volume (1000 Sm3) for the position “j” of the contract “i”, in which the market participant “p” holds a short position;

$VGPAM_{p,i,j,u}$: The match volume (1000 Sm3) for the position “j” of the contract “i”, in which the market participant “p” holds a long position;

$M_{p,i,j,u}$: The amount of the position “j” of the contract “i”, in which the market participant “p” holds a long position;

$M_{p,i,j,k}$: The amount of the “j” position of the contract “i”, in which the market participant “p” holds a short position;

KGS_i : The number of gas days covering the delivery period of the contract “i”;

m : The number of contracts in which the market participant “p” holds a short position;

n : The number of positions in which the market participant “p” holds a short position;

e : The number of contracts in which the market participant “p” holds a long position;

s : The number of positions in which the market participant “p” holds a long position.

14.2. VGP Operating Fee

14.2.1. The market operating fee (PIÜ) to be charged to each market participant shall consist of the annual VGP participation fee, the VGP transaction fee and the rejected objection fees.

14.2.2. Market participants who sign a VGP Participation Agreement to trade in the VGP shall be charged an annual VGP registration fee.

14.2.3. PİÜ shall be included in the invoice for the first delivery period of the relevant contract.

14.2.4. The VGP operation fee shall be charged per Sm3 (TL/Sm3) for transactions made in the VGP.

14.2.5. Matters in relation to the designation of PIÜ and its collection from market participants shall be regulated through Board Decisions.

15. Notifications, Invoicing and Payments

15.1. VGP Invoice-Based Settlement Notifications

15.1.1. The VGP pre-settlement notification containing the amounts to be paid by the market operator to the market operator or to be paid by the market operator to the market participants as a result of the settlement calculations shall be announced to the relevant market participants via STP on the tenth day of the month following the billing period at the latest, and if this day coincides with an official holiday, the first business day following the official holiday.

15.1.2. In order for market participants' objections to material errors detected in the VGP pre-settlement notifications to be evaluated within the scope of the transactions for the relevant billing period, objections to VGP pre-settlement notifications must be made by 16:00 on the first business day following the publication of the notifications. On the first business day following the objection date, the relevant objections shall be evaluated by the market operator until 16:00 and the settlement notification based on the VGP invoice shall be published on the subsequent business day. If the objections cannot be finalized until 16:00, the process explained in Article 15.2 shall be followed. If the objection is not found to be valid, the market participant shall be informed.

15.1.3. The settlement notification, which forms the basis of the invoice announced by the market operator to market participants, shall include the following items:

a. The natural gas amount and the receivables breakdown regarding the sales of the market participant in the VGP;

b. The natural gas amount and the debt breakdown regarding the purchases of the market participant in the VGP;

c. Default fees related to invoice payments;

ç. Market operation fee to be charged to the market participant;

d. Default guarantee account contribution;

e. Default guarantee account default interest;

f. Retrospective Correction Item (GDDK);

g. Statutory taxes and fees.

15.2. Invoicing, Invoice Objections and Correction Procedures

15.2.1. The market operator shall issue the invoices according to the amounts included in the applicable invoice-based settlement notification and send them to the market participants engaged in the relevant market activity, within 7 (seven) days from the day the VGP invoice-based settlement notification is announced to the relevant market participants via STP. The publication date of the VGP invoice-based settlement notification by the market operator in the STP shall be accepted as the invoice notification date for market participants.

15.2.2. The market operator shall notify the central settlement institution of the debt/receivable information pertaining to the invoices issued regarding the relevant market activities of the participants on the publication date of the VGP invoice-based settlement notification.

15.2.3. The market participants to be paid shall send the invoice they have issued in accordance with the amounts specified in the invoice-based settlement notification to the market operator within 7 (seven) days from the notification date in accordance with the provisions of the Tax Procedure Law Numbered 213.

15.2.4. With respect to the transactions carried out by the transmission company in the physical period pursuant to Article 13.2.2, due to the default of the market participants, an invoice shall be mutually issued by the transmission company and the market operator in the invoicing period of the relevant contracts.

15.2.5. If the amounts formed according to the invoice-based settlement notification are below the accrual waiver limit published by the Ministry of Finance every year pursuant to the Tax Procedure Law Numbered 213, the amounts incurred may not be included in the invoice until this limit is reached. The total of the settlement amounts in question during the year shall be included in the invoice issued for the month during which the accrual waiver limit is reached. If this limit is not reached during the year, an invoice shall be issued for the total amount at the end of the year. The accrual waiver limit shall be announced to the market participants by the market operator every year.

15.2.6. Market participants can object to settlement notifications based on VGP invoices or invoices created for an invoicing period. Objections shall be made in writing to the market operator within 8 (eight) days from the date of notification of the invoice. The grounds for objection must be specified in the objection applications.

15.2.7. Objections by market participants to settlement notices or invoices based on VGP invoice does not release them from their payment obligations.

15.2.8. Claims regarding errors shall be finalized by the market operator within 10 (ten) business days following the objection and the outcome of the objection shall be notified to the market participant in writing or via STP with their reasoning. If the objection is found to be justified or if the market operator detects an error without an objection, the necessary correction shall be made. The payment to be made to or by market participants shall be included as a Retrospective Correction Item (RCI) in the invoice after the date of notification of the correction in writing or via STP.

15.2.9. Objection results shall be notified to the market participant in writing or via STP. If the objection is found to be justified and/or if the market operator detects an error without an objection, the necessary correction shall be made. In the event that it is determined that a correction is required, the payments to be made by the market participants and/or to be made to the market participants shall be included as a retrospective correction item in the third settlement notification at the latest after the result of the objection is notified by the market operator to the market participant in writing or via STP.

15.2.10. The Board is authorized to settle the disputes between applicants whose request for access to the market is rejected and the market operator or between market participants whose access to the market is suspended and the market operator and other practices of the market operator regarding any partial or total suspension of market access. Board Decisions may be appealed through the judiciary.

15.2.11. Disputes between the market operator and market participants shall be reviewed by the Authority upon the application of the market operator or market participants.

15.2.12. Matters with respect to the resolution of disputes that may arise between market participants and market operators shall be included in the STP participation agreement and VGP Participation Agreement.

15.3. Payments and Collection

15.3.1. The invoice regarding the settlement issued by the market operator to the market participant and the receivables and debts included in the invoice issued by the relevant market participant to the market operator shall be notified to the central settlement institution. Net receivable or net debt amounts shall be determined by the central settlement institution by automatically offsetting receivables and debts.

15.3.2. Net debt amounts shall be paid by the market participants through intermediary banks to the account of the market operator at the central settlement institution, on the fourth business day following the invoice notification date at the latest.

15.3.3. [14]Pursuant to the net debts of all market participants trading in all natural gas markets operated by the market operator, the invoice payments made to their current accounts at the central settlement institution shall be deducted from their debts in the following order:

a. Market operating fees to be paid to the market operator;

b. VGP debt amount and VAT debt amount;

c. Invoice transaction debt amount;

ç. Invoice imbalance debt amount.

15.3.4. [15]Net receivable amounts shall be paid by the market operator on the fifth business day following the invoice notification date at the latest, according to the ratio of all amounts collected from the market participants for the relevant invoice period to the net receivable amounts, to the creditor market participants from the account of the market operator at the central settlement institution, using intermediary banks, by deducting the unpaid debts of the market participant regarding the markets operated by the market operator.

15.3.5. [16]Market participants shall work with a single intermediary bank regarding the invoice payments to be made to them by the central settlement institution, and may work with multiple banks regarding the payments they will make to the central settlement institution. Market participants shall carry out the processes of notifying and changing the intermediary bank they work with regarding the invoice payments to be made to them by the central settlement institution, through the central settlement institution systems.

15.3.6. In the event of any unexpected malfunction of computer, software or technological infrastructure utilized by the central settlement institution and intermediary banks for collaterals and invoice payments and it is understood that the processes to be completed in accordance with the provisions of these Procedures and Principles cannot be completed within the specified period, the intermediary bank shall immediately inform the central settlement institution and the central settlement institution shall inform the market operator. In this case,

---

[14] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.
[15] Amended pursuant to the EMRA Decision published in the Official Gazette dated 26 August 2023 and numbered 32291. The effective date of this provision is 1 April 2024.
[16] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

the market operator shall set new deadlines for the completion of the processes and inform the market participants about these changes.

15.3.7. The sanctions to be applied to the parties in case the central settlement institution, intermediary banks and market operator fail to fulfill their obligations regarding collateral and payment transactions due to the reasons specified in 15.3.6 shall be set out in the agreements made between the relevant parties.

15.3.8. The central settlement institution notifies the market participants on a monthly basis of the service fees to be paid by the participants regarding the collateral management and cash clearing service it provides. The service fees shall be notified to the market participants by the central settlement institution shall be paid to the central settlement institution within 3 (three) business days following the notification date of this fee.

15.4. Failure to Pay Invoices

15.4.1. If the market participant does not pay the debt arising from the invoice within four business days following the invoice notification date, default interest shall be applied to the amount payable. The default interest rate is the interest rate determined in accordance with Article 51 of the Law on Collection Procedure of Public Receivables numbered 6183. The monthly total of the default interest amounts calculated daily by the central settlement institution shall be form the basis for the invoice. The fees related to the default interest shall be specified in the settlement notice of the relevant month as a late payment increase item and shall be reflected on the relevant market participant's invoice at the end of each month.

15.4.2. The market participant's debt shall automatically be covered from the TL cash amount in his free current account and/or the TL cash collateral exceeding the total required collateral amount and/or the TL cash surplus of the default guarantee account contribution and the market participant shall not default on the invoice in case the TL cash amount in the market participant's free current account and the TL cash collateral surplus exceeding the total required collateral amount and/or the TL cash surplus of the default guarantee account contribution amount is at a level to meet the market participant's debt regarding the relevant invoice notification.

15.4.3. If the market operator does not pay the invoice amount to be paid to the market participants within five business days following the invoice notification date, default interest shall be charged to the amount payable. The default interest rate is the interest rate determined in accordance with Article 51 of the Law on Collection Procedure of Public Receivables numbered 6183. The fees related to the default interest shall be specified in the settlement notice of the relevant month as a late payment increase item and shall be allocated on the invoice issued to the market operator at the end of each month.

15.4.4. [17]In case the market participant fails to pay the said invoice amount within four business days following the invoice notification date, it shall be deemed that the market participant has defaulted on the invoice without the need for a further warning. The activities of the market participant in case of invoice default in all natural gas markets operated by the market operator shall be suspended. In addition, in accordance with the provisions of NOP, the market operator shall notify the transmission company and related parties in order to take action against the relevant market participant. Regarding the market participant who has defaulted on the invoice, in order to collect the invoice debt, without prejudice to the legal remedies, recourse shall be made respectively to the following:

[17] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

a. The amount in its current account, the amount above the total VGP collateral amount to be submitted within the scope of these Procedures and Principles, and the amount above the required default guarantee account contribution amount;

b. The cash collateral amount above the collateral required to be submitted by the defaulting market participant within the scope of the PUE;

c. The total amount of collateral offered in accordance with these Procedures and Principles;

ç. The default guarantee account contribution of the defaulting market participant;

d. The default management contribution of the market operator;

e. The default guarantee account contributions of other market participants;

f. The guarantee amount offered under the PUE;

g. The amount of contributions recollected following the margin call for the default guarantee account.

15.4.5. In case of any unexpected failure of the computer, software or technological infrastructure used by the market operator and the central settlement institution within the periods specified in these Procedures and Principles regarding the obligations pertaining to payments and guarantees, and if the failures related to the central settlement institution are reported to the market operator with valid justifications, default interest shall not be charged to the market operator and the market participant.

15.4.6. The minimum default base and default interest to be charged to market participants shall be announced by the market operator via STP. Default interest shall not be charged to the amounts below the minimum default base.

16. Default Guarantee Account

16.1. Default Guarantee Account

16.1.1. A default guarantee account shall be created with the contributions of the participants, to be used to cover the portion of the losses exceeding the guarantees of the relevant participants, which may arise in the case of default by the participants in the futures natural gas market.

16.1.2. Participants shall be required to contribute to the default guarantee account.

16.1.3. Default guarantee account contributions of the participants shall consist of deposited default guarantee account contributions and additional default guarantee account contributions to be deposited upon request.

16.1.4. In case the default guarantee account is utilized in accordance with the provisions of these Procedures and Principles, the participants may be asked to deposit additional contributions, provided that such contributions shall not exceed the deposited default guarantee account contribution amounts.

16.1.5. The additional default guarantee account contribution amount may be requested to be deposited once in a lump sum or multiple times in tranches.

16.1.6. In case of default by any participant, no recourse may be made to the default guarantee account contributions of other participants, regardless of the order specified in Articles 13.2.4 and 15.4.4.

16.1.7. In case of deactivation of the participation status, the contribution made to the default guarantee account by the relevant participant shall be refunded in accordance with the provisions of Article 16.5.

16.1.8. Assets in the default guarantee account cannot be used for any other purpose.

16.1.9. The default guarantee account shall be represented and managed by the market operator.

16.2. Default Guarantee Account Size and Contribution Amount of Participants

16.2.1. The size of the default guarantee account cannot be less than 5% of the position size of the participant with the second largest open position in the last 180 trading days in case of default of the relevant participant.

16.2.2. [18]The resource requirement consists of the part of the participants excluding the part of their risk that can be covered by their total collateral. The market operator may set the minimum default guarantee account obligation higher than the liability as calculated in Article 16.2.1.

16.2.3. The default guarantee account size shall be calculated daily, and shall be updated at least once a month. The Market Operator may, if deemed necessary, update the default guarantee account contribution amounts over the daily calculated size.

16.2.4. The contribution of the participants to the default guarantee account consists of fixed and variable contributions. Fixed contributions shall be deposited into the accounts of the central settlement institution at the time of registration, while the variable contributions shall be deposited within three business days following the margin call for the default guarantee account.

16.2.5. The deposited default guarantee account contribution by a participant cannot be less than the fixed contribution amount. The fixed contribution amount required to be deposited by the participants is TL 100,000. This amount can be updated by the market operator with regard to the market conditions.

16.2.6. The variable contribution amount shall be found by multiplying the ratio calculated by dividing the total collateral amount that the participant must keep in the market, calculated by the market operator within the scope of the end-of-day transactions 180 days before the calculation date by the total collateral amount of all participants in the market in the relevant period, by the minimum default guarantee account size corresponding to the relevant period. The amounts determined shall be announced via STP.

16.2.7. A market participant who has submitted an additional contribution in line with a position limit increase request shall also continue to offer the said additional contribution amount in addition to the variable and fixed default guarantee account contributions after the default guarantee account is updated.

16.2.8. Default guarantee account contribution obligations shall be calculated and updated on the last business day of each month at the latest.

16.2.9. The default guarantee account contribution calculations of the participants can be made by the market operator prior to the first business day of the month, with regard to the risk status and market conditions of the relevant participants.

---

[18] Amended pursuant to the EMRA Decision published in the Official Gazette dated 18 September 2021 and numbered 31602.

16.2.10. The adequacy of the default guarantee account contribution amounts to be submitted on a market participant basis shall be reviewed by the Market Operator 30 minutes before the start of each session.

16.2.11. If the default guarantee account contribution amount submitted by a market participant regarding VGP activities does not meet the total default guarantee account contribution amount required to be submitted, a margin call for the default guarantee account contribution shall be made to the relevant market participant by the central settlement institution.

16.3. Assets that can be accepted as Default Guarantee Account Contributions

16.3.1. Market participants can meet their default guarantee account contribution obligations in Turkish Liras, foreign currency (US Dollar and Euro) and bearer Government Debt Securities issued by the Ministry of Treasury and Finance of Republic of Turkey.

16.3.2. Calculation of TL equivalents of collaterals shall be made in accordance with the provisions of Article 12.11.2. Conversion of the assets accepted as default guarantee account contributions of the participants, determination and announcement of the valuation coefficient shall be made in accordance with the provisions of Article 12.11.5. As a result of the end-of-day valuation, a margin call shall be made to the accounts without sufficient contributions.

16.3.3. At least 50% of the total required contribution amount must be in Turkish Lira and in cash.

16.4. Utilization Principles of the Default Guarantee Account

16.4.1. In cases where the default guarantee account is used, market participants shall not be allowed to withdraw their own contributions from the default guarantee account until the loss arising from the default is remedied.

16.4.2. Resort to contributions shall commence with cash assets in TL. When resorting to contributions, the highest level of cash bond capability shall be taken as a basis, starting from the most liquid asset. Cash amounts that have been converted into cash from non-cash contributions in the default guarantee account but not used shall be refunded proportionally to market participants whose non-cash contributions are used.

16.4.3. When resorting to contributions of non-defaulting participants, the shares of the relevant participants in the default guarantee account shall be taken as basis.

16.4.4. Participants shall be obliged to re-deposit their deposited default guarantee account contribution amounts that have been used within the framework of default management within 3 business days following the default guarantee account contribution margin call.

16.4.5. When the default amount to be covered from the default guarantee account is deemed likely to exceed 50% of the size of the default guarantee account, the participants may be requested to deposit additional contributions.

16.4.6. If the additional default guarantee account contributions requested from the participants due to default are partially or completely used, the members shall be requested to cover their default guarantee account obligations up to the calculated amount.

16.4.7. Interest shall accrue to the cash TL amounts in the default guarantee account of the participants opened at the central settlement institution, and at the time of distribution, tax and other legal liabilities and Takasbank commissions shall be deducted from the gross interest amounts obtained as a result of the interest. The remaining amounts shall be transferred to the participant's default guarantee account. The procedures and principles regarding the accrual of interest shall be determined by the central settlement institution and announced to the members.

16.5. Refund of Default Guarantee Account Contributions

16.5.1. Contributions other than the fixed default guarantee account contribution in the default guarantee account of the participants whose market participant status has expired, and all related profits and rights shall be refunded to the participant in question after deducting the payable debts, taxes and other legal obligations, taking into account the following:

a. Obligations arising from the transactions carried out in the markets operated by the market operator,

b. Payment obligations that the market operator may face due to defaults that may occur in the period until the termination process of market participant status is completed.

16.5.2. As a result of the transfer of a participant to another participant with all of its assets and liabilities, the default guarantee account contribution refund shall be made after the first default guarantee account contribution calculation following the date of notification to the market operator of the completion of the transfer process. Calculation of the default guarantee account contribution margin shall be made over the total position sizes corresponding to the calculation period of each of the two merging participants.

16.5.3. The fixed default guarantee account contribution of the market participant who wishes to terminate its status shall be refunded by the market operator with regard to the delivery period of all open positions in the market and the time period specified in Article 16.2.6 for the calculation of the default guarantee account contribution, provided that there are no debts within the scope of these Procedures and Principles and PUE.

16.5.4. In case cash is included in the default guarantee account contribution of the participant whose status as a market participant has ended, the cash in question shall be refunded after deducting the tax and other statutory obligations payable from the interest bearing cash amount.

16.6. Default Management Contribution of the Market Operator

16.6.1. The default management contribution commitment amount of the market operator shall be designated by EPİAŞ.

16.6.2. In the event that the default management contribution amount of the market operator is used within the framework of the default management provisions, the market operator shall not make a recommitment in the same year for the amounts in question.

16.6.3. The amounts deposited by the defaulting market participant to its current account, its own default guarantee account contribution and/or VGP collateral account, and the amounts used from the market operator's default management contribution and/or the default guarantee account contribution of other market participants and the amounts collected from the relevant defaulting market participant, shall be deposited in the following order, to the extent that they have been used for abovementioned default:

a. Proportionally to the relevant accounts of other market participants, the default guarantee account contributions of which have been used,

b. The remaining amount, if any, to the market operator's default management contribution amount.

Any remaining amounts shall be transferred to the default guarantee account contribution and/or collateral account of the of the defaulting market participant.

16.6.4. Default interest shall be charged to the participant who causes the default management contribution of the market operator to be used for these amounts. The default interest rate is the interest rate determined in accordance with Article 51 of the Law on Collection Procedure of Public Receivables numbered 6183.

17. Miscellaneous Provisions

17.1. Transfer and Pledge of Receivables

17.1.1. A Market Participant may transfer or pledge its rights and receivables from EPİAŞ only in accordance with the conditions previously determined and announced by the market operator pursuant to the applicable legislation and subject to the approval of the market operator.

17.2. Virtual Application and VGP Launch

17.2.1. After the completion of the test works in relation to VGP at STP, VGP will become operational on 30/6/2021 at 08:00, with the launch of the virtual application.

17.2.2. After the completion of the virtual application, market transactions that shall result in payment obligations including delivery, invoicing and PİÜ for VGP shall commence by 1/10/2021.

PROVISIONAL ARTICLE 1[19]

Existing letters of guarantee shall be replaced by electronic letters of guarantee until 01/01/2024. Letters of guarantees that have not been replaced will not be taken into account in collateral calculations.

17.3. Enforcement

17.3.1. These Procedures and Principles shall enter into force on its publication date.

17.4. Execution

17.4.1. The provisions of these Procedures and Principles shall be executed by the President of the Energy Market Regulatory Authority.

[19] Inserted pursuant to the EMRA Decision published in the Official Gazette dated 11 November 2023 and numbered 32366.