POWER FUTURES MARKET PROCEDURE

CHAPTER ONE
Objective and Scope, Basis

Purpose and scope

ARTICLE 1- (1) The purpose of this Procedure is to regulate the matters regarding the opening of contracts to trade, orders to be submitted to the contracts, prices, procedures for determination of the prices, position limits, collaterals, default management, default collateral account, market making and Price Determination and Default Management Commission (Commission), regarding the Power Futures Market (PFM) operated within Enerji Piyasaları İşletme Anonim Şirketi (EPİAŞ), which are indicated in the Power Futures Market Operation Procedures and Principles (PFM Procedures and Principles) to be specified in the Power Futures Market Procedure.

Basis

ARTICLE 2- (1) This Procedure has been prepared based on sub-paragraph (ııııı) of the first paragraph of Article 4 and sub-paragraph (k) of the first paragraph of Article 120 of the Electricity Market Balancing and Settlement Regulation published in the Official Gazette dated 14/04/2009 and numbered 27200 and Article 63 of the PFM Procedures and Principles published in the Official Gazette dated 02/02/2020 and numbered 31027.

Definitions

ARTICLE 3- (1) The following shall apply to the implementation of this Procedure:

a) Survey price entry period: The period during which market participants register a price via the MMS to the survey to be conducted in the event that the Market Operator decides on the survey method to determine the daily benchmark price or base price of contracts,

b) Remainder of the month contract: Contract, physical delivery of which starts on the second day after the current day of the relevant delivery month, and ends on the last calendar day of the same delivery month,

c) Monthly contract: Contract, physical delivery of which starts on the first calendar day of the relevant delivery month and ends on the last calendar day of the same month,

ç) Quarter contract: Contract, physical delivery of which starts on the first calendar day of the relevant quarter period and ends on the last calendar day,

d) DBP (Daily Benchmark Price) correction optimization algorithm: The mechanism that ensures DBP compatibility among different contracts in a way to achieve the lowest total weighted DBP deviation.

e) Current minimum sales offer volume (CMSOV): Order volumes remaining after the voluntary auction, order book transactions and compulsory auction processes from the minimum sales offer volumes determined for market participants who have not defaulted within the framework of closing of short positions, whose delivery period has started or will start on the next day, within the scope of default management,

f) Current minimum order volume (CMOV): Order volumes remaining after voluntary auction, order book transactions and compulsory auction processes from the minimum order volumes determined for market participants who have not defaulted within the framework of closing of open positions, whose delivery period has not started, within the scope of default management,

g) Auction order entry period: The period during which market participants can register an order via the MMS to the auction to be held, in case the Market Operator decides to use the auction method to determine the daily benchmark price or base price of contracts,

ğ) Auction matching and evaluation period: The 10-minute period in which the orders submitted by the market participants are matched starting from the best orders according to appropriateness of price, in case the Market Operator decides to use the auction method to determine the daily benchmark price or base price of contracts,

h) Minimum sales offer volume (MSOV): Minimum order volumes determined according to the presence rate in the contract or presence rate in a short position in the contract before voluntary and/or compulsory auction processes for market participants who have not defaulted, within the framework of closing of short positions, whose delivery period has started or will start one day later, within the scope of default management,

ı) Minimum order volume (MOV): Minimum order volumes determined according to presence rate in the market or contract before voluntary and/or compulsory auction processes for market participants who have not defaulted, within the framework of closing of open positions, whose delivery period has not started, within scope of default management,

i) Position distribution: The distribution of the remaining amounts of open positions held by defaulting market participants after voluntary auction, order book transactions and compulsory auction to the market participants who have not defaulted, according to their current minimum order volumes or current minimum sales offer volumes,

j) Synthetic matching: In the post-session period, the matching process by the Market Operator of the appropriate active orders among active orders submitted by different market participants for different contracts, that are not matched,

k) Synthetic matching optimization algorithm: In the post-session, the mechanism that evaluates the active orders submitted by different market participants for different contracts, that are not matched, in a way to ensure the highest total matching volume, and calculates the match prices in a way to ensure the lowest weighted price deviation sum over said matching volumes,

l) Default matching: The process of matching and closing of minimum amount of the amount of positions in the opposite direction in the contracts in the same bidding zone, delivery period and load type of different market participants in default,

m) Default auction: A voluntary and/or compulsory auction carried out for the purpose of closing the open positions held by defaulting market participants within the scope of default management,

n) Default auction order entry process: The 15-minute period starting from the auction start time, during which market participants can register an order in the default auction,

o) Annual contract: Contract, physical delivery of which starts on the first calendar day of each year and ends on the last calendar day of the same year.

(2) Concepts and abbreviations that are used in this Procedure but not defined herein shall have the meanings and scope attributed to them in the relevant legislation.

CHAPTER TWO
Opening, Termination and Staggering of Contracts

Contracts

ARTICLE 4- (1) The contracts that may be opened by the Market Operator as well as the opening and closing dates of the contracts are detailed as follows:

a) Annual contract shall be closed to trade five business days before the first day of the delivery period, and new annual contract shall be opened to trade so as to complete the number of contracts that can be opened to trade in the order book.

b) Quarter contract shall be closed to trade three business days before the first day of the delivery period, and new quarter contract shall be opened to trade so as to complete the number of contracts that can be opened to trade in the order book.

c) Monthly contract shall be closed to trade three business days before the first day of the delivery period and new monthly contract shall be opened to trade so as to complete the number of contracts that can be opened to trade in the order book.

ç) Remainder of the month contracts shall be opened to trade only on trading days. The first remainder of the month contract shall start on the second day of the relevant month and end on the last day. The contract created shall be closed at the end of the session on the day it is opened to trade, and the other remainder of the month contract starting from the day following the first physical delivery day of the closed contract and ending on the last day of the relevant month shall be opened to trade. Remainder of the month contract shall not be opened to trade on weekends and public holidays.

(2) A maximum of 4 annual, 8 quarter and 15 monthly contracts may be opened to trade simultaneously in the order book.

Staggering periods of contracts

ARTICLE 5- (1) Annual contracts shall be closed by the Market Operator five business days before the first day of the delivery period, following the announcement of the DBP on the same day, and the open positions in the relevant contract shall be transferred to 4 quarter contracts covering the same year.

(2) Quarter contracts shall be closed by the Market Operator three business days before the first day of the delivery period, following the announcement of the DBP on the same day, and the open positions in the relevant contract shall be transferred to 3 monthly contracts covering the same quarter.

(3) The positions of the market participants transferred to new contracts as a result of the staggering process and the positions in the opposite directions related to the same contract, if any, shall be netted.

Termination of trading of contracts

ARTICLE 6- (1) Contracts traded in the market may be terminated by the Market Operator if there has been no trading and open position in the relevant contract for at least one month.

CHAPTER THREE
Order Types, Characteristics and Limits, Matching Rules, Synthetic Matching

Order types, characteristics and limits

ARTICLE 7- (1) Only standard orders may be submitted by market participants in the PFM (Power Futures Market). A standard order is a purchase bid or sales offer with a specific price and volume information.

(2) The order types submitted in the PFM shall be classified as follows according to their characteristics:

a) Active order: Order that is not matched yet and waiting to be matched in the order book,

b) Passive order: Order that is not included in the order book, which may be activated by market participants,

c) Timed order: Order that is waiting to be matched in the order book for a period designated by market participants, provided that it does not exceed the contract closing time,

ç) Match what exists and remove (MWER): Orders that can fully or partially match with the orders existing in the order book at the time of its submission and the remaining volume of which is removed from the order book,

d) Match or remove all (MRA): Orders that can fully match with the orders existing in the order book at the time of its submission, and removed from the order book if they cannot fully match.

(3)[1] In the PFM, the maximum order size that can be submitted by the market participant at once via the MMS for each contract shall be 100 lots.

(4)[2] In the PFM, a maximum of 5 orders may be submitted per second in one session by each market participant.

Matching rules for purchase bids

ARTICLE 8- (1) In the buy side bids submitted for the relevant contract in accordance with the order notification conditions;

a) If the purchase bid price is higher than or equal to the best sales offer price, the volumes of the orders shall be compared;

1) If the purchase bid volume is equal to the best sales offer volume, it shall be fully matched. Matching shall be performed according to the pending sales offer price, which has already been entered in the order book.

2) If the purchase bid volume is higher than the volume of the best sales offer, it shall be partially matched in an amount corresponding to the sales offer volume. Matching shall be performed according to the pending sales offer price, which has already been entered in the order book. For the remaining volume of the partially matched purchase bid, it shall be checked whether there is a sales offer with a suitable price, and in the absence of a suitable sales offer, it shall continue to be kept in the order book as the best purchase bid. The best order lists shall be re-updated in order.

3) If the purchase bid volume is lower than the volume of the best sales offer, it shall be be fully matched in the amount of the purchase bid volume. Matching shall be performed according to the pending sales offer price, which has already been entered in the order book. The remaining volume of the partially matched sales offer shall continue to be kept in the order book, maintaining its order priority.

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[1] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.
[2] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

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

Matching rules for sales offers

ARTICLE 9- (1) In the sell side offers submitted for the relevant contract in accordance with the order notification conditions;

a) If the sales offer price is lower than or equal to the best purchase bid price, the volumes of the orders shall be compared;

1) If the sales offer volume is equal to the best purchase bid volume, it shall be fully matched. Matching shall be performed according to the pending purchase bid price, which has already been entered in the order book.

2) If the sales offer volume is higher than the best purchase bid volume, it shall be partially matched in an amount corresponding to the purchase bid volume. Matching shall be performed according to the pending purchase bid price, which has already been entered in the order book. The matched purchase bid shall be removed from the order book. For the remaining volume of the partially matched sales offer, it shall be checked whether there is a purchase bid with a suitable price, and in the absence of a suitable purchase bid, it shall continue to be kept in the order book as the best sales offer. The best order lists shall be re-updated in order.

3) If the sales offer volume is lower than the volume of the best purchase bid, it shall be fully matched in the amount of the sales offer volume. Matching shall be performed according to the pending purchase bid price, which has already been entered in the offer book. The remaining volume of the partially matched purchase bid shall continue to be kept in the order book, maintaining its order priority.

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

Synthetic matching

ARTICLE 10- (1) Synthetic matching refers to the process where the suitable active orders among the active orders submitted by different market participants for different contracts, which are not matched, are matched by the Market Operator in the post-session period.

(2) In order for synthetic matching to occur, the settlement periods determined by the bidding zone, delivery period and load type of the contract to which the purchase bids or sales offers are submitted, shall coincide exactly with the settlement periods determined by the bidding zone, delivery period and load type of the contract to which the orders in the opposite direction are submitted.

(3) Synthetic matching shall be carried out in two stages with the synthetic matching optimization algorithm.

a) In the first stage, orders shall be evaluated in a way to provide the highest total matching volume (the sum of the multiplication of the matching volume of each order matched as a result of synthetic matching and the number of settlement periods in the delivery period).

b) In the second stage, the matching prices shall be calculated in a way to provide the lowest weighted price deviation sum for the orders matched at the end of the first stage (sum of the square of the difference between the match price and order price of each order matched as a result of synthetic matching, multiplied by the matching volume and the number of settlement periods in the delivery period).

c) In both stages, the restrictions specified in the fourth paragraph shall be met.

(4) There restrictions required to be met in the synthetic matching process are as follows:

a) The total volume of matched sales offers for each bidding zone and settlement period shall be equal to the total volume of matched purchase bids.

b) The total amount of matched sales offers for each bidding zone and settlement period shall be equal to the total amount of matched purchase bids.

c) The match price of a matched sales offer may not be lower than the order price and may not be higher than the daily price change upper limit determined for the relevant contract.

ç) The match price of a matched purchase bid may not be higher than the order price and may not be lower than the daily price change lower limit determined for the relevant contract.

d) In the event that there are multiple purchase bids and/or sales offers submitted for the same bidding zone and covering the same settlement periods, which may be partially matched, the other orders shall not be matched until the order with the best price is fully matched.

e) The order registered first according to the system time shall be given priority in ranking among the orders with the same order price, in the same bidding zone, covering the same settlement periods and in the same direction, which can partially match.

(5) The determined match prices shall be rounded with a sensitivity of Kuruş and the matching volumes shall be rounded with a sensitivity of lots.

(6) Synthetic matches shall not be taken into account in the DBP calculation.

CHAPTER FOUR
DBP, Price Determination Procedures, DBP Correction Procedure, Position Limits

Daily benchmark price (DBP)

ARTICLE 11- (1) DBP shall be determined as follows:

a) The volume weighted average price of all the matches performed during the session shall be determined as the DBP.

b) In the event that the total matching volume within the session is less than 10 lots in annual contracts, less than 20 lots in quarter contracts, less than 50 lots in contracts with monthly and shorter delivery periods, the DBP shall be determined by summing up:

1) 75% of the volume weighted average price of the matches in the relevant contracts,

2) 25% of the arithmetic average of the prices of the best purchase bids and sale offers of 10 lots in annual contracts, 20 lots in quarter contracts, 50 lots or more in contracts with monthly and shorter delivery periods, which are active in the order book for at least 15 minutes at the closing of the session.

c) In case no matches take place within the session, the arithmetic average of the prices of the best purchase bids and sale offers of 10 lots in annual contracts, 20 lots in quarter contracts, 50 lots or more in contracts with monthly and shorter delivery periods, which are active in the order book for at least 15 minutes at the closing of the session, shall be determined as the DBP.

ç) In the event that the order volume requirement specified in sub-paragraph (c) cannot be met, the DBP shall be determined by the procedures specified in the fourth paragraph.

(2) Special transaction notifications, transactions performed within the scope of default management and synthetic matches shall not be taken into account in the DBP calculation.

(3) The calculated DBP shall be rounded to the nearest two-digit price step after the comma.

(4) If the daily benchmark price cannot be calculated as specified in the first paragraph or it is held by the Commission that the calculated price does not reflect the market correctly, the theoretical price determination method shall be applied primarily. If the calculation cannot be made by using the theoretical price determination method, the Commission shall decide on whether the DBP shall be determined by using the survey and auction methods individually or collectively.

Theoretical price method

ARTICLE 12- (1) In order to determine the base price or daily benchmark price of the relevant contract by the Market Operator, the theoretical price may be calculated by taking into account DBPs of other contracts that are open to trade for the relevant day.

(2) In the event that any of the DBPs of the contracts in the same delivery period and bidding zone but in different load types cannot be calculated or the base price is not determined, the missing DBP or the base price value shall be calculated in accordance with the equation below:

$$GGF_{t,baz,d} \times TDS_{t,baz} = GGF_{t,puant,d} \times TDS_{t,puant} + GGF_{t,puant\ dışı,d} \times TDS_{t,puant\ dışı}$$

(3) The expressions used in the formula in the second paragraph shall have the following meanings:

$GGF_{t,baz,d}$	: refers to the DBP or the base price (TL/MWh) of the contract with delivery period “t” and “base” load type on day “d”,
$TDS_{t,baz}$	: refers to the number of settlement periods in the delivery period of the contract with delivery period “t” and “base” load type,
$GGF_{t,puant,d}$	: refers to the DBP or the base price (TL/MWh) of the contract with delivery period “t” and “peak” load type on day “d”,
$TDS_{t,puant}$	: refers to the number of settlement periods in the delivery period of the contract with delivery period “t” and “peak” load type,
$GGF_{t,puant\ dışı,d}$	: refers to the DBP or the base price (TL/MWh) of the contract with delivery period “t” and “off-peak” load type on day “d”,
$TDS_{t,\ puant\ dışı}$	: refers to the number of settlement periods in the delivery period of the contract with delivery period “t” and “off-peak” load type.

(4) In the event that any of the DBPs of any contract in the same bidding zone and load type and the contracts that fully coincide with the least number of contracts cannot be calculated or their base price is not determined, the missing DBP or the base price value shall be calculated in accordance with the equation below:

$$GGF_{t,y,d} \times TDS_{t,y} = \sum_{s \in S_{t,y}} GGF_{s,y,d} \times TDS_{s,y}$$

(5) The expressions used in the formula in the fourth paragraph shall have the following meanings:

$GGF_{t,y,d}$	: refers to the DBP or the base price (TL/MWh) of the contract with delivery period “t” and load type “y” on day “d”,
$TDS_{t,y}$	: refers to the number of settlement periods in the delivery period of the contract with delivery period “t” and load type “y”,
$GGF_{s,y,d}$	: refers to the DBP or the base price (TL/MWh) of the contract with delivery period “s” and load type “y” on day “d”,
$TDS_{s,y}$	: refers to the number of settlement periods in the delivery period of the contract with delivery period “s” and load type “y”,
$S_{t,y}$	: refers to the set of contracts comprising the contract with delivery period “t” and load type “y” and the contracts that fully coincide with the least number of contracts.

Survey method

ARTICLE 13[3] - (1) The Market Operator may impose a restriction on the market participants' participation in the survey method depending on their past trade volumes, and this situation shall be announced to the market participants via the MMS.

(2) The market participants to participate in the survey shall enter a price for the relevant contract and/or contracts within the following periods:

a) It shall be announced to the market participants after the session that the survey method will be applied in order to determine the DBP of the contract for which the daily benchmark price cannot be calculated due to insufficient number of transactions being performed in the market. Market participants shall be requsted to register a price for the DBP via the MMS within the "survey price entry period" of 15 minutes. Prices registered by the market participants may be updated or canceled within the survey price entry period.

b) It shall be announced to the market participants until the second to last business day before the first trading day of the contract that the survey method will be applied in order to determine the base price of a contract to be traded for the first time. Market participants shall be requested to register a price for the base price via the MMS at the times announced by the Market Operator between 12:00 - 17:00 hours until the last business day before the first trading day of the contract.

c) In the event that the price change limits are insufficient during the session regarding a contract, it shall be announced to the market participants during the session that the survey method will be applied in order to determine the new base price, and the price registration periods shall also announced to the market participants.

(3) In the event that the number of market participants registering a price into the system for the relevant contracts and/or contracts in regard to which the survey method will be applied within the periods specified in the second paragraph is less than three, then the survey shall be rendered void, and new processes may be specified by the Market Operator to determine the DBP and/or base price of the relevant contract and/or contracts.

(4) As a result of the prices registered by the market participants;

a) All prices registered into the system shall be ranked in an increasing order.

b) The ranked prices shall be divided into two subsets containing equal number of prices. The median of the first subset (M1) and the median of the second subset (M3) shall be calculated.

c) The upper and lower limits to be used to determine the prices that will not be taken into account in the calculation of the survey price shall be determined in accordance with the formulas below:

$$A = M3 - M1$$

$$\text{Upper Limit} = M3 + 1.5 \times A$$

$$\text{Lower Limit} = M1 - 1.5 \times A$$

ç) Prices that are higher than the upper limit value and lower than the lower limit value shall be determined as outliers and shall not be included in the calculation and the arithmetic average of the remaining prices shall be determined as the survey price.

(5) The price determined as a result of the survey shall be announced by the Market Operator as the DBP or the base price.

[3] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

Auction method

ARTICLE 14[4] - (1) It is essential that the orders to be submitted to the auction meet the order notification conditions set out in the PFM Procedures and Principles, excluding the daily price change limits.

(2) In the auction method, an order may be registered for the relevant contract and/or contracts within the following periods:

a) It shall be announced to the market participants after the session that the auction method will be applied in order to determine the DBP of the contract for which the daily benchmark price cannot be calculated due to insufficient number of transactions being performed in the market. Market participants shall be requested to register an order for the DBP via the MMS within the "auction order entry period" of 15 minutes. Orders registered by the market participants may be updated or canceled within the auction order entry period.

b) It shall be announced to the market participants until the second to last business day before the first trading day of the contract and/or contracts that the auction method will be applied in order to determine the base price of a contract to be traded for the first time. Market participants shall be requested to register an order for the base price via the MMS at the times announced by the Market Operator between 12:00 - 17:00 hours until the last business day before the first trading day of the contract and/or contracts.

c) In the event that the price change limits are insufficient during the session regarding a contract, it shall be announced to the market participants during the session that the auction method will be applied in order to determine the new base price, and the auction processes shall also be announced to the market participants.

(3) The price of purchase bids registered by the market participants for the relevant contract shall be ranked in a decreasing order, and the sales offers shall be ranked in an increasing order. The order registered first according to the system time shall be given priority in ranking among the orders with the same price and in the same direction submitted for the relevant contract.

(4) Orders submitted by market participants shall be matched within an "auction matching and evaluation period" of 10 minutes, starting from the best orders according to appropriateness of price.

(5) The volume weighted average of the prices of the matched orders shall be announced as the base price or the DBP of the relevant contract, if deemed appropriate after evaluation by the Commission.

(6) If the price formed as a result of the auction is approved by the Commission, the relevant matches shall be notified to the market participants. Market participants may make an appeal regarding their matches that took place within the periods specified in the PFM Procedures and Principles.

(7) The matches that take place shall turn into positions and generate liability on the part of the market participants.

Evaluation of the survey or auction price

ARTICLE 15- (1) If it is held by the Commission that the survey or auction price determined within the scope of Articles 13 and 14 does not reflect the market reality:

a) The DBP of the previous day shall be announced as the DBP,

b) The price determined by the Commission in a way not to exceed up to 20% of the arithmetic average of the final market clearing prices pertaining to the previous (month, quarter,

[4]Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

year) period that coincides with the start and end dates of the delivery period of the relevant contract in the increasing or decreasing direction shall be announced as the base price.

(2) If it is held by the Commission that the survey or the auction price determined for the first day of trading of the contract does not reflect the market reality, the price to be determined by the method specified in sub-paragraph (b) of the first paragraph shall be announced as the DBP.

DBP correction transaction

ARTICLE 16- (1) It is essential that the DBP of a contract is equal to the contract size weighted average of the DBPs of the contracts covering the delivery period of said contract, in the same bidding zone and load type, but in different delivery periods.

(2) It is essential that the DBP of a contract is equal to the contract size weighted average of the DBPs of the contracts in the same bidding zone and delivery period but in different load types.

(3) DBP correction transaction refers to the transaction performed in order to eliminate the differences between prices, in cases where the equations in the first and second paragraphs are not met, in a way that the DBPs of the relevant contracts become in line with the equations specified in the first and second paragraphs.

(4)[5] DBP correction transaction shall be performed with the DBP correction optimization algorithm in a way to obtain the lowest weighted DBP deviation sum, provided that the equations in the first and second paragraphs are met. The weighted DBP deviation sum refers to the sum of the square of the difference between the DBP and the corrected DBP of each contract after the DBP correction transaction, and the multiplication of the number of settlement periods in the delivery period and the DBP change cost coefficient.

(5)[6] The DBP change cost coefficient shall be applied as follows:

a) 1 for the DBPs determined by market transactions, auction method and theoretical price method.

b) 10 for the DBPs determined in accordance with the survey method, Commission decision and by determining the DBP of the previous day as the DBP.

Calculation of participant position limits

ARTICLE 17[7] -

(1) The position limits for the market participants shall be calculated in accordance with the formulas below;

$$PL_p = PPL_t \times PLO_p$$

$$PLO_p = \frac{P\dot{I}M_p}{TP\dot{I}M}$$

$$TP\dot{I}M = \sum_{p=1}^{n} P\dot{I}M_p$$

$$P\dot{I}M_p = G\ddot{O}PAM_p + G\dot{I}PAM_p + \dot{I}AAM_p + UEVM_p + VEPAM_p + KEYATM_p + EDMN_p$$

[5]Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.
[6]Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.
[7] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

(2) The expressions used in the formula in the first paragraph shall have the following meanings;

PL_p	: refers to the position limit of market participant “p”,
PPL_t	: refers to the total market position limit determined in accordance with PFM Procedures and Principles,
PLO_p	: refers to the position limit rate of market participant “p”,
PİM_p	: refers to the total buy-side transactions and the settlement supply volume (MWh) of market participant “p” in the relevant markets,
TPİM	: refers to the total buy-side transactions and the settlement supply volume (MWh) of all participants in the relevant markets,
n	: refers to the number of active market participants on the day of calculation,
GÖPAM_p	: refers to the day-ahead market purchase volume (MWh) of market participant “p”,
GİPAM_p	: refers to the intraday market purchase volume (MWh) of market participant “p”,
İAAM_p	: refers to the purchase volume (MWh) within the scope of the bilateral agreement notification of market participant “p”,
$UEVM_p$	: refers to the settlement supply volume (MWh) of market participant “p”,
$VEPAM_p$	: refers to the PFM purchase volume (MWh) of market participant “p”,
$KEYATM_p$	: refers to the finalized DownReg instruction volume (MWh) of market participant “p” in the balancing power market,
$EDMN_p$	: refers to the absolute value of the negative energy imbalance volume (MWh) of market participant “p”.

(3) Position limit of the market participants whose position limit cannot be calculated due to its registration as a legal entity being completed recently or the PLOp value being insufficient in accordance with the formulas in the first paragraph:

a) the hourly net open position amount for supply license holder market participants shall be 50 lots;

b) the hourly net open position amount for generation license holder market participants shall be the energy volume corresponding to one-fourth of the total installed capacity value of the units in the enterprise.

(4) As for the calculation of the participant position limit within the scope of the first paragraph, the settlement values realized within the last twelve months the settlement notification of the market participants which has been finalized before the day of calculation shall be taken into account.

(5) The amount of the participant position limit corresponding to each delivery period shall be calculated by the Market Operator in accordance with the determined market position limits and announced via the MMS.

(6) In case open position amount of 3000 lots occur on a contract basis, if the ratio of the open position amount held by a market participant in the buy or sell side to the total open position amount in the relevant contract exceeds 20%, it shall not be allowed to perform position increasing transactions temporarily although the relevant market participant's own position limit has not been reached yet. If deemed necessary, the amounts and rates specified in this paragraph may be changed by the Market Operator, provided that they are announced in the MMS.

CHAPTER FIVE
Collateral Amounts, Coefficients to be Used in Collateral Calculation

Entrance collateral amount

ARTICLE 18- (1) The amount of the PFM entrance collateral amount required to be submitted by the market participants shall be TL 300,000.00 (three hundred thousand).

Physical delivery collateral coefficients

ARTICLE 19- (1) The physical delivery collateral coefficient (Y_d) to be used in the calculation of the physical delivery collateral amount to be calculated for market participants holding short positions in the PFM shall be applied as shown in the table below:

Table 1

Y_d coefficient application period	Y_d coefficient
December	0,25
April	0,15
September	0,15
Other Months	0,10

(2) The (g) coefficient to be applied in the calculation of the physical delivery collateral for market participants holding a short position shall be 1. The (g) coefficient may be changed by the Market Operator in view of the market conditions.

Full spread position collateral discount coefficient

ARTICLE 20- (1) The full spread position collateral discount coefficient (r) to be used in the calculation regarding the collateral discount amount for positions that constitute a full spread position shall be 0,90. The coefficient (r) may be changed by the Market Operator in view of the market conditions.

Intra-market spread position collateral discount

ARTICLE 21- (1) Until a sufficient data set of at least two years is formed in the PFM, the intra-market spread position collateral discount shall be applied as "0".

Total collateral risk coefficient

ARTICLE 22- (1) In the PFM, the default value of the risk coefficient (t) to be used in the calculation regarding the total PFM collateral amount required to be submitted by the market participant shall be 1.

(2) In the total collateral calculation made within the framework of end-of-day procedures, the risk coefficient (t) shall be applied as 1.05 for the market participants whose number of days during which their current collateral amount does not meet the total required power futures market collateral amount at the collateral review conducted at 12:00 in accordance with Article 48 of the PFM Procedures and Principles within the last 180 days, including the current day, is 3, 4 and 5. In said review, the aforementioned coefficient shall be applied as 1,1 for the market participants whose number of days are 6 or more.

(3) The risk coefficient determined for each market participant within the framework of end-of-day procedures shall also be valid during the session on the first trading day following the day of calculation. The risk coefficient shall be re-determined in the total power futures market collateral calculation made within the framework of end-of-day procedures on the first trading day following the calculation.

CHAPTER SIX
Management of Open Positions in case of Default

Default matching

ARTICLE 23- (1) Default matching refers to the procedure of closing by matching the amount of positions in the opposite direction in the amount of the minimum of the individual sums thereof with each other in the contracts in the same bidding zone, delivery period and load type pertaining to different market participants in default.

(2) Market participants who are in default shall be identified, and all open positions held by the relevant market participants and the open positions held by each market participant shall be determined.

Default matching in open positions in contracts whose delivery period has not started

ARTICLE 24- (1) In the event that default matching is possible for the contracts in the same bidding zone, delivery period and load type pertaining to different market participants who are in default;

a) Open positions shall be closed according to the date of the last transaction made by each market participant in the relevant contract. The closing procedure of the relevant open positions by writing the position in the opposite direction, shall start from the position whose last trading date is earlier.

b) The up-to-date DBP price for each relevant contract at the time of default matching and/or if there is a new base price determined during the day, said base price shall be used as the match price.

(2) The total amount of the positions in the opposite direction in the relevant contract written to each market participant may not exceed the amount of positions in the relevant contract subject to default matching. Until the amount of open position held by the previous market participant is closed in the order determined for the relevant contract, closing of the position held by the other market participant shall not proceed.

(3) The collateral calculations of the relevant market participants shall be updated as a result of default matching.

Default matching in open positions in contracts whose delivery period has started or will start on the next day

ARTICLE 25- (1) On the day of the default, the delivery obligations shall be determined regarding the open positions held by different market participants in default for the day following the day of the default in order to be managed in the day-ahead market and in the remainder of the month contract to be opened to trade on the day of the default.

(2) In the event that default matching of the positions in the opposite direction in the contracts in the same bidding zone, delivery period and load type pertaining to different market participants is possible within the scope of the default matching of the positions pertaining to remainder of the month contract;

a) Before default occurs, open positions shall be closed by writing the positions in the opposite direction for the relevant contracts to the relevant participants according to the last trading time of each market participant in the relevant contract.

b) The up-to-date collateral reference price (TRF) of each relevant contract determined in accordance with the PFM Procedures and Principles at the time of default matching shall be used as the match price.

(3) In the event that the default matching is possible while closing the determined positions to be managed on the delivery day following the date of the default;

a) Before default occurs, as for open positions held by different market participants to enter in the matching, open positions shall be closed by way of writing positions in the opposite direction to the relevant market participants for the relevant contracts according to the last trading time of each market participant in the relevant contract.

b) The match price of the positions matched in terms of quantity shall be the simple arithmetic average of the calculated final market clearing price (MCP) on the day of the default matching of the hours that coincide with the load type of the relevant position.

(4) In the event that default matching on an hourly basis is possible for the contracts in the same bidding zone and delivery period but in different load types pertaining to different market participants;

a) If at least one of the positions pertaining to base load and peak and off-peak contracts is in the opposite direction, the positions in the same load type as their current position, which are in the opposite direction, shall be written to the relevant market participants in the amount of the minimum of the relevant position amounts.

b) If the amount of open positions in the contracts subject to the relevant matching consist of the open positions held by multiple market participants and only a part of the open positions in the relevant contract can form a matching, the open positions held by different market participants shall be closed by writing positions in the opposite direction for the relevant contracts to the relevant participants according to the last trading time of each market participant in the relevant contract before default occurs.

c) The match price of the positions matched in terms of quantity shall be the arithmetic average of the calculated MCP on the day of default matching of the hours that coincide with the load type of the relevant position.

(5) The total amount of positions in the opposite direction in the relevant contract written to each market participant may not exceed the amount of positions in the relevant contract subject to default matching. Until the amount of open position held by the previous market participant is closed in the order determined for the relevant contract, closing of the position held by the other market participant shall not proceed.

(6) The collateral calculations of the relevant market participants shall be updated as a result of default matching.

Management of the open positions to remain after default matching in the day-ahead and intraday markets

ARTICLE 26- (1) As for the physical delivery liabilities to arise due to the open positions that cannot be closed pursuant to the procedures specified in Article 25, the Market Operator shall, on behalf of the relevant market participants, within the following periods;

a) As for the net delivery obligations remaining on a settlement period basis between 12:00-12:30 hours in the day-ahead market, orders independent of price shall be submitted in the opposite direction to the positions held by the relevant market participants.

b) If necessary, order shall be submitted to the intraday market at 18:00 as follows;

1) In case of failure to submit an order to the day-ahead market due to a technical problem, for all of the net delivery obligations remaining on a settlement period basis,

2) If the order submitted to the day-ahead market does not fully match, for the net delivery obligations that do not match for the relevant settlement period, in the same direction as the orders submitted to the day-ahead market, taking into account the MCPs for the relevant settlement periods.

(2) The matched volumes as a result of the orders submitted by the Market Operator to the day-ahead market and/or intraday market on behalf of the relevant market participants shall

be reflected to the relevant market participants according to their position amounts. However, as a result of non-existence of a full match in the day-ahead market and/or entry of orders in the intraday market on behalf of multiple participants in the same period of time and in the same direction, the matched volumes shall be reflected starting from the market participant whose last trading time in the relevant contract is earlier. Until matches are reflected in the amount of the position amount of the previous market participant in the specified order, reflection of matches to the other market participant shall not proceed.

Determination of the minimum order volume for open positions whose delivery period has not started yet

ARTICLE 27- (1) Open position rate in the relevant contracts for open positions in the same direction, whose delivery period of which has not started yet, and which could not be fully closed as a result of default matching shall be calculated as follows:

$$TAPO_i = \frac{L_i}{L_{t,i}}$$

(2) The expressions used in the formulas in the first paragraph shall have the following meanings:

$TAPO_i$	: refers to the rate of open positions in default in contract "i",
L_i	: refers to the number of lots of the open positions in contract "i" of market participants in default ,
$L_{t,i}$	: refers to the total number of lots of the short and long open positions in contract "i" of market participants who are not in default.

(3) In the event that the rate of open positions in default determined within the scope of the first paragraph is higher than or equal to the rate determined by the Commission, the minimum order volume of the market participants prior to voluntary auction, order book transactions and/or compulsory auction shall be calculated as follows:

a) Presence rate in the market for each market participant shall be calculated in accordance with the formula below:

$$PBO_p = \frac{\sum_{i=1}^{n} KB_i \times L_{p,i}}{\sum_{p=1}^{m} \sum_{i=1}^{n} KB_i \times L_{p,i}}$$

$$KB_i = TDS_i \times 0{,}1$$

b) The expressions used in the formulas in sub-paragraph (a) shall have the following meanings:

PBO_p	: refers to the presence rate in the market of market participant "p" who is not in default,
KB_i	: refers to the contract size of contract "i",
$L_{p,i}$	: refers to the number of lots of the net position in contract "i" of market participant "p" who is not in default,
TDS_i	: refers to the number of hours in the delivery period of contract "i",
n	: refers to the number of contracts traded in the market,
m	: refers to the number of market participants holding an open position in the market.

c) Minimum order volume for each market participant shall be calculated in accordance with the formula below, the value found shall be rounded up to the nearest integer:

$$MTM_{p,i} = L_i \times PBO_p$$

ç) The expressions used in the formula in sub-paragraph (c) shall have the following meanings:

$MTM_{p,i}$: refers to the minimum order volume for contract "i" calculated for market participant "p" who is not in default,

L_i : refers to the number of lots of the open positions in default in contract "i",

PBO_p : refers to the presence rate in the market of market participant "p" who is not in default.

(4) In the event that the rate of open positions in default determined within the scope of the first paragraph is lower than the rate determined by the Commission, the minimum order volume of the market participants prior to voluntary auction, order book transactions and/or compulsory auction shall be calculated as follows:

a) Presence rate in the relevant contract for each market participant shall be calculated in accordance with the formula below:

$$KBO_{p,i} = \frac{L_{p,i}}{L_{t,i}}$$

b) The expressions used in the formula in sub-paragraph (a) shall have the following meanings:

$KBO_{p,i}$: refers to the presence rate in contract "i" of market participant "p" who is not in default

$L_{p,i}$: refers to the number of lots of the net position in contract "i" of market participant "p" who is not in default,

$L_{t,i}$: refers to the total number of lots of short and long open positions in contract "i" of market participants who are not in default

c) Minimum order volume for each market participant shall be calculated in accordance with the formula below and the value found shall be rounded up to the nearest integer:

$$MTM_{p,i} = L_i \times KBO_{p,i}$$

ç) The expressions used in the formulas in sub-paragraph (c) shall have the following meanings:

$MTM_{p,i}$: refers to the minimum order volume for contract "i" calculated for market participant "p" who is not in default,

L_i : refers to the number of lots of the open positions in default in contract "i",

$KBO_{p,i}$: refers to the presence rate in contract "i" of market participant "p" who is not in default

(5) Following the calculation of minimum order volumes, voluntary and/or compulsory auction processes shall be carried out. Market participants shall not be required to submit an order in the minimum order volume determined for them when submitting an order to a voluntary and/or compulsory auction.

Minimum order volume for short positions, whose delivery period has started or will start one day later

ARTICLE 28- (1) As for short positions, which could not be closed and whose delivery period has started or will start one day later, the short position ratio in the remainder of the month contract, which starts from the second day following the day of the default, shall be calculated as follows:

$$TKPO_i = \frac{KL_i}{KL_{t,i}}$$

(2) The expressions used in the formulas in the first paragraph shall have the following meanings:

$TKPO_i$	: refers to the ratio of short positions in default in contract "i",
KL_i	: refers to the total number of lots of short positions in contract "i" of market participants in default,
$KL_{t,i}$	: refers to the total number of lots of net short positions in contract "i" of market participants who are not in default.

(3) In the event that the rate of short positions in default determined within the scope of the first paragraph is higher than or equal to the rate determined by the Commission, the minimum order volume of the market participants prior to voluntary auction, order book transactions and/or compulsory auction shall be calculated as follows:

a) Presence rate in the relevant contract for each market participant shall be calculated in accordance with the formula below:

$$TKBO_{p,i} = \frac{L_{p,i}}{\sum_{p=1}^{m} L_{p,i}}$$

b) The expressions used in the formulas in sub-paragraph (a) shall have the following meanings:

$TKBO_{p,i}$	: refers to the presence rate in contract "i" in the delivery period of market participant "p" who is not in default,
$L_{p,i}$	: refers to the number of lots of short or long net positions in contract "i" in the delivery period of market participant "p" who is not in default,
m	: refers to the number of market participants holding open positions in contract "i".

c) Minimum sales offer volume for each market participant shall be calculated in accordance with the formula below, the value found shall be rounded up to the nearest integer:

$$MSTM_{p,i} = KL_i \times TKBO_{p,i}$$

ç) The expressions used in the formula in sub-paragraph (c) shall have the following meanings:

$MSTM_{p,i}$	: refers to minimum sales offer volume for contract "i" calculated for market participant "p" who is not in default,
KL_i	: refers to the number of lots of the short positions in default in contract "i",
$TKBO_{p,i}$	: refers to the presence rate in contract "i" in the delivery period of market participant "p" who is not in default.

(4) In the event that the rate of short positions in default determined within the scope of the first paragraph is lower than the rate determined by the Commission, the minimum sales offer volume of the market participants prior to voluntary auction, order book transactions and/or compulsory auction shall be calculated as follows:

a) Presence rate in a short position in the relevant contract for each market participant shall be calculated in accordance with the formula below:

$$TKKPBO_{p,i} = \frac{KL_{p,i}}{KL_{t,i}}$$

b) The expressions used in the formula in sub-paragraph (a) shall have the following meanings:

$TKKPBO_{p,i}$: refers to the presence rate in a short position in contract “i” of market participant “p” who is not in default,
$KL_{p,i}$: refers to the number of lots of net short positions in contract “i” of market participant “p” who is not in default,
$KL_{t,i}$: refers to the total number of lots of net short positions in contract “i” of the market participants who are not in default.

c) Minimum sales offer volume for each market participant shall be calculated in accordance with the formula below and the value found shall be rounded up to the nearest integer:

$$MSTM_{p,i} = KL_i \times TKKPBO_{p,i}$$

ç) The expressions used in the formula in sub-paragraph (c) shall have the following meanings:

$MSTM_{p,i}$: refers to minimum sales offer volume for contract “i” calculated for market participant “p” who is not in default,
KL_i : refers to the number of lots of the short positions in default in contract “i”,
$TKKPBO_{p,i}$: refers to the presence rate in a short position in contract “i” of market participant “p” who is not in default.

(5) Following the calculation of minimum order volumes, voluntary and/or compulsory auction processes shall be carried out. Market participants shall not be required to submit an order in the minimum order volume determined for them when submitting an order to a voluntary and/or compulsory auction.

Default auction and order book transactions

ARTICLE 29- (1) As for the default auction, the start time, the type of the auction, the process of the auction, the contract for which the auction will be made, the amount and direction of the positions subject to the auction shall be announced to the market participants by the Market Operator via the MMS.

(2) The orders to be submitted by the market participants to the relevant contract:

a) shall be entered in the same direction as the announced position direction for 15 minutes from the start time of the auction, and orders may be updated within the same time.

b) shall comply with the order notification conditions specified in the PFM Procedures and Principles.

c) shall only be standard offers, the other characteristics of the standard orders shall not be used.

ç) shall be no higher in size than the amount of positions subject to auction.

d) shall be ranked in order best price. The order recorded first according to the system time shall be given priority in ranking among the equally priced orders in the same direction.

(3) At the end of the default auction order entry process, the Market Operator shall register orders on behalf of the relevant market participants in default. The Market Operator shall register a price, that is below the up-to-date DBP of the relevant contract to which the order will be submitted and/or the new base price determined within the day, if available, in the

amount of the daily price change rate in sell-side offers and above the same in buy-side bids. As for remainder of the month contracts, a price shall be registered that is below the up-to-date TRF in the amount of the daily price change rate of the contract regarding the relevant month in sell-side offers and above the same in buy-side bids. The size of the order submitted by the Market Operator shall be no higher than the amount of the positions in the relevant contract subject to auction.

(4) If there is a price compatibility among the orders submitted by the Market Operator for the relevant contract and the orders submitted by the market participants, the matching shall be performed starting from the best orders. Volumes matched shall turn into positions held by the market participants.

(5) The parts of the orders submitted by the Market Operator that did not match shall be opened to trade in the order book for 15 minutes under the conditions specified in the third paragraph. The volume of the order submitted to the order book by the Market Operator may not be higher than the volume remaining from the voluntary auction. Orders submitted by the Market Operator shall only be standard orders, the "timed" characteristic of standard offers shall be used only.

(6) Compulsory auction process shall be applied for voluntary auction and order book transactions as well as for the amount of open positions that cannot be closed.

(7) If necessary, the Commission may change the processes specified within the scope of this Article.

(8) Appeal may be made regarding the matches performed as a result of voluntary auction, order book transactions and/or compulsory auction processes, within the period specified in the PFM Procedures and Principles.

Distribution of open positions, whose delivery period has not started yet

ARTICLE 30- (1) The current number of lots of the open position in default in each contract that could not be closed as a result of voluntary auction, compulsory auction, order book transactions shall be calculated in accordance with the formula below:

$$GL_{t,i} = L_i - \sum_{p=1}^{m} G\dot{I}EM_{p,i} - \sum_{p=1}^{n} Z\dot{I}EM_{p,i} - \sum_{p=1}^{v} TDEM_{p,i}$$

(2) The expressions used in the formula in the first paragraph shall have the following meanings:

$GL_{t,i}$	: refers to the current number of lots of the open positions in default in contract "i"
L_i	: refers to the current number of lots of the open positions in contract "i"of the market participants in default
$G\dot{I}EM_{p,i}$	: refers to the matching volume of market participant "p" in the voluntary auction of contract "i",
$Z\dot{I}EM_{p,i}$	: refers to the matching volume of market participant "p" in the compulsory auction of contract "i",
$TDEM_{p,i}$	: refers to the matching volume of market participant "p" within the scope of the order book transactions of contract "i",
m	: refers to the number of market participants with a matching volume as a result of voluntary auction,
n	: refers to the number of market participants with a matching volume as a result of compulsory auction,

v : refers to the number of market participants with a matching volume as a result of order book transactions.

(3) For each market participant with a minimum order volume higher than zero, the "Current Minimum Initial Order Volume" shall be calculated in accordance with the formula below:

$$GMTM_{p,i,ilk} = MTM_{p,i} - G\dot{I}EM_{p,i} - Z\dot{I}EM_{p,i} - TDEM_{p,i}$$

(4) The expressions used in the formula in the third paragraph shall have the following meanings:

$GMTM_{p,i,ilk}$: refers to the calculated current minimum initial order volume of contract “i” calculated for market participant “p” to whom position distribution can be applied,

$MTM_{p,i}$: refers to the minimum order volume of contract “i” calculated for market participant “p” to whom position distribution can be applied,

$G\dot{I}EM_{p,i}$: refers to the matching volume of market participant "p" in the voluntary default auction of contract “i”,

$Z\dot{I}EM_{p,i}$: refers to the matching volume of market participant "p" in the compulsory default auction of contract “i”,

$TDEM_{p,i}$: refers to the matching volume of market participant “p” with the order submitted to the existing order book for contract “i” within the scope of default management.

(5) It shall be determined whether there are participants whose license has been canceled and/or terminated among market participants whose current minimum initial order volumes are higher than zero.

(6) In the event that there are market participants whose licenses are canceled and/or terminated and the current minimum initial order volumes of these market participants are higher than zero, the "Current Minimum Final Order Volume" for each market participant shall be calculated in accordance with the formula below, by adding the current minimum initial order volumes determined for said market participants proportionally, starting from the market participant with the highest minimum order volume among other market participants, the value found shall be rounded up to the nearest integer:

$$GMTM_{p,i,son} = GMTM_{p,i,ilk} + \frac{MTM_{p,i}}{MTM_i} \times \sum_{lp=1}^{n} GMTM_{lp,i,ilk}$$

(7) The expressions used in the formula in the sixth paragraph shall have the following meanings:

$GMTM_{p,i,son}$: refers to the current final minimum order volume of contract “i” calculated for market participant “p” to whom position distribution can be applied,

$MTM_{p,i}$: refers to the minimum order volume of contract “i” calculated for market participant “p” to whom position distribution can be applied,

MTM_i : refers to the total minimum order volume of contract “i” calculated for market participants to whom position distribution can be applied (except for the participant whose license is cancelled),

$GMTM_{p,i,ilk}$: refers to the current initially calculated minimum order volume of contract “i” calculated for market participant “p” to whom position distribution can be applied,

$GMTM_{lp,i,ilk}$: refers to the current initially calculated minimum order volume of contract “i” calculated for market participant “p” whose license is cancelled n : refers to the number of market participants whose licenses are cancelled or terminated

(8) In the event that there are market participants with equal minimum order volumes, the addition shall be made starting from the market participant who is the largest according to the presence rates in the market of the relevant market participants, if the presence rates in the market in the relevant contract are calculated, and according to the presence rate in the contract of the relevant market participants, if the presence rates in the contract are calculated.

(9) The market participants who did not submit an order to the compulsory auction of the relevant contract and whose current minimum initial order volume is higher than zero shall be determined and the positions shall be distributed according to the procedure specified in the twelfth paragraph.

(10) In the event that the number of open positions cannot be cleared off despite distribution of positions to the market participants who did not submit an order in the compulsory auction process of the relevant contract, the market participants, the volume of the orders submitted by whom to the compulsory auction of the relevant contract is lower than the minimum order volume calculated for them, shall be determined and the positions shall be distributed according to the procedure specified in the twelfth paragraph.

(11) In the event that the number of open positions cannot be cleared off despite distribution of positions to the market participants who did not submit and order in the compulsory auction process of the relevant contract and the volume of the orders submitted by whom to the compulsory auction of the relevant contract is lower than the minimum order volume calculated for them, the market participants whose current minimum final order volume is higher than zero shall be determined and the positions shall be distributed according to the procedure specified in the twelfth paragraph, regardless of whether they have submitted an order to the compulsory auction of the relevant contract.

(12) Starting from the market participant with the highest current minimum final order volume (according to the presence rate in the market or the presence rate in the contract in the event that there are market participants whose current minimum final order volumes are equal), a position of 1 “lot” in the relevant contract shall be distributed to each market participant in order, until the current minimum final order volume of the relevant market participant is reached. If all of the current number of lots of the open positions in default in the relevant contract are distributed to the relevant market participants, the position distribution process shall be ceased. Positions to be distributed to each relevant market participant shall not be higher than the current minimum final order volume calculated for the relevant contract.

(13) The up-to-date DBP price of each relevant contract at the time the position distribution is made and/or the new base price, if there is a new base price determined during the day, shall be used as the match price of the positions distributed by the Market Operator.

Distribution of short positions, whose delivery period has started or will start one day later

ARTICLE 31- (1) The current number of lots of the short position in default in each contract that could not be closed as a result of voluntary auction, compulsory auction, order book transactions shall be calculated in accordance with the formula below:

$$GKL_{t,i} = KL_i - \sum_{p=1}^{m} G\dot{I}EM_{p,i} - \sum_{p=1}^{n} Z\dot{I}EM_{p,i} - \sum_{p=1}^{v} TDEM_{p,i}$$

(2) The expressions used in the formula in the first paragraph shall have the following meanings:

$GKL_{t,i}$: refers to the current number of lots of the short positions in default in contract "i"

KL_i : refers to the total number of lots of the short positions in contract "i" of the market participants in default

$GİEM_{p,i}$: refers to the matching volume of market participant "p" in the voluntary auction of contract "i",

$ZİEM_{p,i}$: refers to the matching volume of market participant "p" in the compulsory auction of contract "i",

$TDEM_{p,i}$: refers to the matching volume of market participant "p" within the scope of the order book transactions of contract "i",

m : refers to the number of market participants with a matching volume as a result of voluntary auction,

n : refers to the number of market participants with a matching volume as a result of compulsory auction,

v : refers to the number of market participants with a matching volume as a result of order book transactions.

(3) For each market participant with a minimum sales offer volume higher than zero, the "Current Minimum Initial Sales Offer Volume" shall be calculated in accordance with to the following formula:

$$GMSTM_{p,i,ilk} = MTSM_{p,i} - GİEM_{p,i} - ZİEM_{p,i} - TDEM_{p,i}$$

(4) The expressions used in the formula in the third paragraph shall have the following meanings:

$GMTSM_{p,i,ilk}$: refers to the calculated current minimum initial sales offer volume of contract "i" calculated for market participant "p" to whom position distribution can be applied,

$MTSM_{p,i}$: refers to the minimum sales offer volume of contract "i" calculated for market participant "p" to whom position distribution can be applied,

$GİEM_{p,i}$: refers to the matching volume of market participant "p" in the voluntary default auction of contract "i",

$ZİEM_{p,i}$: refers to the matching volume of market participant "p" in the compulsory default auction of contract "i",

$TDEM_{p,i}$: refers to the matching volume of market participant "p" with the order submitted to the existing order book for contract "i" within the scope of default management.

(5) It shall be determined whether there are participants whose license has been canceled and/or terminated among the market participants whose current minimum initial sales offer volume is higher than zero.

(6) In the event that there are market participants whose licenses are canceled and/or terminated and the current minimum initial sales offer volumes of these market participants are higher than zero, the "Current Minimum Final Sales Offer Volume" for each market participant shall be calculated in accordance with the formula below, by adding the current minimum initial sales offer volumes determined for said market participants proportionally, starting from the market participant with the highest minimum sales offer volume among other market participants, the value found shall be rounded up to the nearest integer:

$$GMSTM_{p,i,son} = GMSTM_{p,i,ilk} + \frac{MSTM_{p,i}}{MSTM_i} \times \sum_{lp=1}^{n} GMSTM_{lp,i,ilk}$$

(7) The expressions used in the formula in the sixth paragraph shall have the following meanings:

$GMSTM_{p,i,son}$: refers to the current final minimum sales offer volume of contract "i" calculated for market participant "p" to whom position distribution can be applied,

$MSTM_{p,i}$: refers to the minimum sales offer volume of contract "i" calculated for market participant "p" to whom position distribution can be applied,

$MSTM_i$: refers to the total minimum sales offer volume of contract "i" calculated for the market participants to whom position distribution can be applied (except for the participant whose license is cancelled),

$GMSTM_{p,i,ilk}$: refers to the current initially calculated minimum order volume of contract "i" calculated for market participant "p" to whom position distribution can be applied,

$GMSTM_{lp,i,ilk}$: refers to the current initially calculated minimum sales offer volume of contract "i" calculated for market participant "p" to whose license is cancelled,

n : refers to the number of market participants whose licenses are cancelled or terminated

(8) In the event that there are market participants with equal minimum sales offer volumes, the addition shall be made starting from the market participant who is the largest according to the presence rates in the relevant contract of the relevant market participants, if the presence rates in the relevant contract are calculated, and according to the presence rate in a short position in the relevant contract of the relevant market participants, if the presence rates in a short position in the relevant contract are calculated.

(9) The market participants who did not submit an order to the compulsory auction of the relevant contract or who does not have a match despite having submitted an order and whose current minimum initial sales offer volume is higher than zero shall be determined and the positions shall be distributed according to the procedure specified in the twelfth paragraph.

(10) In the event that the number of open positions cannot be cleared off despite distribution of positions to the market participants who did not submit an order in the compulsory auction process of the relevant contract or who does not have a match despite having submitted an order, the market participants, the volume of the matches of whom in the compulsory auction of the relevant contract is lower than the minimum sales offer volume calculated for them, shall be determined and the positions shall be distributed according to the procedure specified in the twelfth paragraph.

(11) In the event that the number of open positions cannot be cleared off despite distribution of positions to the market participants who did not submit and order in the compulsory auction process of the relevant contract or who does not have a match despite having submitted an order, and the volume of the matches of whom in the compulsory auction of the relevant contract is lower than the minimum sales offer volume calculated for them, the market participants whose current minimum final sales offer volume is higher than zero shall be determined and the positions shall be distributed according to the procedure specified in the twelfth paragraph, regardless of whether they have submitted an order to the compulsory auction of the relevant contract.

(12) Starting from the market participant with the highest current minimum final sales offer volume (according to the presence rate in the relevant contract or the presence rate in a short position in the relevant contract in the event that there are market participants whose

current minimum final order volumes are equal), a position of 1 “lot” in the relevant contract shall be distributed to each market participant in order, until the current minimum final order volume of the relevant market participant is reached. If all of the current number of lots of the open positions in default in the relevant contract are distributed to the relevant market participants, the position distribution process shall be ceased. Positions to be distributed to each relevant market participant shall not be higher than the current minimum final sales offer volume calculated for the relevant contract.

(13) The up-to-date TRF of each relevant contract at the time the position distirbution is made shall be used as the match price of the positions distributed by the Market Operator.

CHAPTER SEVEN
Default Collateral Account Size and Contribution Share Amounts, Market Operator’s Default Management Contribution

Default collateral account size and contribution share amounts

ARTICLE 32- (1) Default collateral account size shall not be less than the greater of the resource need that to arise in case of joint default of the market participant with the largest open position in the last 90 trading days and the market participant with the second and third largest open positions in the last 90 trading days. The resource need shall consist of the part of the market participants’ risks other than the part that can be covered by collaterals. 99.9% confidence level shall be used to estimate the risk by statistical methods. The Market Operator may designate the minimum default collateral account size higher than the statistically calculated size, in view of the market conditions, collateral concentrations and the adequacy level of default management resources.

(2) The default collateral account size shall be calculated daily and updated at least once a month. The Market Operator may update the default collateral account contribution share amounts over the daily calculated size, if it deems necessary.

(3) The contribution to be made by the market participants to the default collateral account shall consist of variable contribution shares, calculated in proportion to the fixed contribution shares and position limits. The fixed contribution share amounts required to be deposited by the market participants shall be TL 300,000.00.

(4) The contribution share amounts that each market participant is required to submit shall be calculated in accordance with the formulas below:

$$TGH_{d,p} = STGH_{d,p} + DTGH_{d,p}$$

$$DTGH_d = TGH_d - \sum_{p=1}^{n} STGH_{d,p}$$

$$DTGH_{d,p} = \frac{DTGH_d}{\sum_{p=1}^{n} PL_{d,p}} \times PL_{d,p}$$

(5) The expressions used in the formulas in the fourth paragraph shall have the following meanings:

$TGH_{d,p}$: refers to the default collateral account contribution share amount calculated for market participant “p” on day “d”,

$STGH_{d,p}$: refers to the fixed default collateral account contribution share amount to be reimbursed to market participant “p” on day “d”,

$DTGH_{d,p}$	: refers to the variable default collateral account contribution share amount to be reimbursed to each market participant in the calculation made on day "d",
$DTGH_d$	: refers to the total variable TGH contribution shares amount required to be calculated on day "d",
TGH_d	: refers to the total default collateral account amount calculated on day "d",
n	: refers to the number of market participants who are active as of the calculation day,
$PL_{d,p}$	: refers to the position limit of market participant "p" on day "d"

(6) The default collateral account contribution share required to be submitted by a market participant shall not be lower than the fixed contribution share amount.

(7) A late payment fee shall be imposed on participants who cause the contribution share of other market participants to be cashed, for the said amounts, within the framework of the provisions of the Law on the Procedure for Collection of Public Receivables No. 6183. In case of collection of said amounts, the collected amounts shall first be reflected to the market participants. In case said amounts are collected, the collected amounts shall first be reimbursed to the market participants, to the extent that collection was made from the default collateral account contribution shares of market participants, and the remaining amount, if any, shall be reimbursed to the Market Operator default management contribution amount.

(8) The amount collected from other participants in order to cover the debt in default of the market participants in default shall be invoiced under the name of "Default Collateral Account item".

(9) In the event that a market participant in default pays to cover their own debt in default, the amount collected from other participants shall be proportionally invoiced to the participants under the name of "Default Collateral Account return item".

(10) Accrual of interest shall be procured for the cash amounts in TL in the default collateral account of the participants opened at the central settlement institution and taxes and other statutory liabilities and Takasbank commission shall be deducted during the distribution from the gross amount of interest obtained as a result of procurement of accrual of interest. The remaining amounts shall be transferred to the default collateral account of the participant. The procedures and principles regarding procurement of accrual of interest shall be designated by the central settlement institution and announced to the market participants.

Default management contribution of the Market Operator

ARTICLE 33- (1) In case recourse has been made to the Market Operator's default management contribution submitted by the Market Operator for a calendar year within the framework of Article 59 of PFM Procedures and Principles or it is blocked due to default, no further commitments shall be made for said used amounts within the same year.

(2)[8] The Market Operator's default management contribution shall be updated by EPİAŞ for each calendar year.

(3) In the event that the amounts deposited by the market participant in default into their current account, default collateral account contribution share and/or collateral account within the scope of PFM Procedures and Principles and the amounts used from the Market Operator's default management contribution and/or the default collateral account contribution of other market participants are collected from the relevant market participant in default, these amounts shall be transferred in the following order in the amount of the amounts used due to said default:

a) shall be transferred proportionally to the relevant accounts of the other market participants, to whose default collateral account contributions recourse has been made,

[8] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

b) to the remaining amount, if any, shall be transferred to the Market Operator default management contribution amount,

Any further remaining amount, if any, shall be transferred to the default collateral account contribution share and/or collateral account of the market participant in default.

(4) A late payment fee shall be imposed on participants who cause the Market Operator default management contribution to be cashed, for the said amounts, within the framework of the provisions of the Law on the Procedure for Collection of Public Receivables No. 6183.

CHAPTER EIGHT
Market Making

General principles of market making

ARTICLE 34- (1) Market makers refer to market participants, who are authorized by the Market Operator pursuant to the criteria set forth in the PFM Procedures and Principles in order to ensure the honest, regular and effective operation of the market as well as to encourage the formation of a liquid and continuous market in the contracts they are responsible for, and whose performances within this field are evaluated periodically.

(2) Contracts in which market making will be applied or ceased to be applied shall be determined by the Market Operator.

(3) The Market Operator may determine different market making systems on a contract, bidding zone, load type and delivery period basis, in view of the following variables regarding the liabilities of the market makers, the number of days left until the start of the delivery period:

a) the minimum volume of purchase bids-sale offers,

b) the maximum amount and/or rate of the difference between the purchase bid and sale offer prices,

c) the presence rate in the market as market maker

(4) A market participant may be market maker in multiple contracts and there may be multiple market makers in a contract. The Market Operator may restrict the number of market makers on a contract, bidding zone, load type and delivery period basis.

(5) The paid-in capital of the market participants applying for market making shall be at least TL 10 million.

Market making application conditions and documents required for the application

ARTICLE 35- (1) Those who apply to the Market Operator for market making shall meet the following minimum requirements:

a) To meet the financial criteria specified in this Procedure.

b)[9] To sign the Market Making Agreement prepared by the Market Operator, which covers the general liabilities of the market makers.

(2) Market makers who meet the minimum requirements shall submit the following documents to the Market Operator during their application.

a) Market Making Application Letter.

b)[10] Market Making Agreement.

c) Temporary and/or annual corporate tax declaration attachment submitted to the Revenue Administration.

ç) Other documents to be announced by the Market Operator via the MMS.

Market making operation principles

ARTICLE 36- (1) The elements of market making are as follows:

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[9] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

[10] Amended pursuant to the Board of Directors decision dated 6 May 2021 and numbered 21.

a) Minimum purchase bid-sale offer volumes: minimum order volume, as expressed in lot terms, required to be submitted in the buy and sell side in the volumes determined in the contracts for which the market maker is responsible.

b) Maximum purchase-sale price range: difference in percentage between the prices of the best purchase bid and best sale offer that the market maker shall submit in the contracts for which it is responsible.

c) Presence rate in the market as market maker: the ratio of the time period in which the market maker fulfills its liability specified in sub-paragraphs (a) and (b) simultaneously in the contracts for which it is responsible, to the time period during which the relevant contract is open to trade within the period in which the calculation is made.

ç) Number of days left until the delivery period: the conditions specified in sub-paragraphs (a), (b) and (c) may be changed according to the number of days left until the start of the physical delivery period of the relevant contracts.

d) Contracts for which the market maker is responsible: the contracts for which the market maker is responsible subject to performance criteria.

(2) Market making practice may be adopted for monthly, quarter and annual contracts.

(3) As a result of applications made within the scope of market making, the market makers may commence their activities as a market maker as of the beginning of the month following the Market Operator's approval. It is essential that the market making activities commence within three months following the Market Operator's approval. Those who do not *de facto* commence the market making activity at the end of the said period may be removed from market making for the relevant contracts.

(4) The minimum value of the presence rate in the market as market maker shall be determined by the Market Operator on a contract basis and announced on the website, in view of the minimum purchase bid-sale offer volumes, maximum purchase-sale price range, the number of days left until the delivery period.

Rights and obligations of market makers

ARTICLE 37- (1) Market makers shall fulfill the performance conditions specified in Article 38 by the Market Operator. Said conditions may be differentiated on a contract, bidding zone, load type and delivery period basis.

(2) If deemed necessary, the market making conditions may be changed by the Market Operator, provided that it is announced via the MMS.

(3) Rights provided to market makers shall be determined by the Market Operator and may be differentiated on a contract, bidding zone, load type and delivery period basis.

Evaluation of market makers

ARTICLE 38- (1) It shall be examined on a monthly basis whether the market makers meet their obligations within the scope of market making and written warnings may be issued to the relevant market makers when necessary. As a result of the performance evaluation, the market makers who fail to fulfill their obligations may be granted a time period to fulfill their obligations or their rights may be taken away.

(2) The performance of the market makers shall be evaluated separately for each contract according to the presence rate in the market in the contracts, the market making of which is undertaken in the relevant month. Market makers, who fulfill their obligation as to presence rate in the market for contracts of which they are a market maker, shall be subject to a discount on the market operating fee in the relevant contracts pro rata to the presence rate in the market calculated for the transactions performed in the relevant contracts.

Market making application period

ARTICLE 39- (1) Market making shall be practiced indefinitely. Market making practice may be terminated by the Market Operator by announcing it via the MMS at least 3 months in advance.

Temporary or permanent resignation from market making, revocation of powers

ARTICLE 40- (1) In case of failure to fulfill the market making conditions or obligations, the market making power may be revoked by the Market Operator, either *ex officio* or upon the application of the market maker, temporarily or permanently by the Market Operator.

(2) Market makers shall notify the Market Operator in writing of their request to resign from their relevant duty permanently or temporarily.

(3) It is essential that the period between the resignation request date of the market makers and their resignation date is not less than 3 months.

CHAPTER NINE
Price Determination and Default Management Commission, Final Provisions

Price determination and default management Commission

ARTICLE 41- (1) A Price Determination and Default Management Commission consisting of the Market Operations Director, Finance and Support Services Director, Legal Advisor Electricity Market Manager and Electricity Market Registration and Settlement Manager shall be established within the Market Operator as the decision-making body with respect to the following matters:

a) The procedures for determining the DBP and the base price,

b) The procedures for closing part or all of the positions within the scope of default management and specification of the default management procedures,

c) Other matters to be resolved by the Commission as per the PFM Procedures and Principles and this Procedure. The President of the Commission shall be the Market Operations Director. The General Manager may appoint members to the Commission, provided that the number of the members does not exceed 7.

Working principles and procedures of the Commission

ARTICLE 42- (1) The Price Determination and Default Management Commission shall convene with simple majority of the total number of members upon the call of the President.

(2) The Commission shall take its decisions with simple majority of the total number of members. Abstaining votes may not be cast in meetings.

(3) The secretariat of the Commission shall be carried out by the Electricity Market Directorate.

Enforcement

ARTICLE 43[11]- (1) This Procedure shall enter into force on 01/06/2021.

Execution

ARTICLE 44- (1) The provisions of this Procedure shall be executed by the General Manager of EPİAŞ.

[11] Amended pursuant to the Board of Directors decision dated 23 November 2020 and numbered 51.

<table>
<tr><th colspan="3">Board of Directors Resolution Implementing the Procedure</th></tr>
<tr><th colspan="2">Dated</th><th>Numbered</th></tr>
<tr><td colspan="2">29/06/2020</td><td>31</td></tr>
<tr><th colspan="3">Board of Directors Resolutions Amending the Procedure</th></tr>
<tr><th colspan="2">Dated</th><th>Numbered</th></tr>
<tr><td>1-</td><td>23/11/2020</td><td>51</td></tr>
<tr><td>2-</td><td>06/05/2021</td><td>21</td></tr>
</table>