

PROCEDURE OF CASH SETTLEMENT AND COLLATERAL MANAGEMENT SERVICES TO BE CARRIED OUT İSTANBUL TAKAS VE SAKLAMA BANKASI A.Ş. IN THE NATURAL GAS FUTURES MARKET OF ENERGY MARKETS MANAGEMENT INC. AND THE PRINCIPLES REGARDING THIS SERVICE

CHAPTER ONE

General Provisions

Purpose

ARTICLE 1 - (1) The purpose of this Procedure is to regulate the principles and procedures regarding the cash settlement and collateral management services that İstanbul Takas ve Saklama Bankası A.Ş. will provide as the Central Settlement Institution at the Natural Gas Futures Market.

Scope

ARTICLE 2 - (1) This Procedure covers the issues related to membership, clearing and settlement, default, collateral, income, and other issues regarding cash settlement and collateral management services that İstanbul Takas ve Saklama Bankası A.Ş. will provide as the Central Settlement Institution at the Natural Gas Futures Market.

Basis

ARTICLE 3 - (1) This Procedure has been prepared on the basis of article 77 of the Capital Markets Law No. 6362, the General Regulation on Establishment and Operating Principles of Central Clearing and Settlement Institutions, the Natural Gas Organized Wholesale Market Regulation, the Natural Gas Futures Market Operating Principles and Procedures, and the Central Settlement Institution Agreement for the Natural Gas Futures Market Cash Settlement and Collateral Management Services signed between Enerji Piyasalari İşletme A.Ş. and İstanbul Takas ve Saklama Bankası A.Ş.

Definitions and abbreviations

ARTICLE 4 - (1) The following terms used in this Procedure shall mean the following;

a) **Intermediary Bank:** The bank from which market participants request transfer of market receivables and drawable collateral amounts,

- b) GDDS: Government domestic debt securities,
- c) **EFT:** Electronic Fund Transfer system that enables sending payments in terms of Turkish Liras,

c) **E-Letter of Guaratee**: means Bank letter of guarantee created electronically with secure electronic signature or mobile signature with electronic signature feature in accordance with the standards and rules determined by EPİAŞ(g) ESTS: means the Electronic Securities Transfer System;

- d) ESTS: Electronic Securities Transfer System,
- e) **EPİAŞ:** Enerji Piyasaları İşletme A.Ş.
- f) **EUR:** Currency of the European Union;

g) **Eurobond:** Long-term bonds with coupon payments that are issued in international markets in terms of foreign exchanges,

ğ) General Manager: General Manager of İstanbul Takas ve Saklama Bankası A.Ş.

h) **Central Settlement Institution:** Takasbank which is authorized as the central settlement institution according to the Capital Markets Law no. 6362and is used for carrying out financial operations between market participants that will be determined in Natural Gas Organized Wholesale Market Regulation;





1) **Central Settlement Institution Participation Agreement:** The agreement which is prepared by the Market Operator and to be signed between market participants and the Central Settlement Institution in relation to collateral management and cash settlement services

i) **Cash Settlement:** All of processes that enable the fund transfer by Takasbank between parties by means of fulfilling settlement obligations by market participants arising in relation to transactions executed in the Market, within the time period and conditions determined by Takasbank, by means obtaining Energy Markets Management Inc.'s option

j) Market: Natural Gas Futures Market (NFM) operated by EPİAŞ;

k) **Market Participant**: Legal Entities which have license defined in the; Natural Gas Organized Wholesale Market Balancing and Settlement Regulation

1) **Market Operator:** Energi Piyasaları İşletme A.Ş. that has established and operates the Continuous Trading Platform and is the holder of market operation license;

m) **Procedure:** The Procedure on Cash Settlement and Collateral Management Service to be provided by İstanbul Takas ve Saklama Bankası A.Ş. the Natural Gas Futures Market of Energy Exchange Istanbul and the Principles regarding this Service;

n) Free Account: Free current accounts at Takasbank in TL (11) and foreign exchange (11YP)

o) System: Takasbank system;

ö) **Continuous Trading Platform (CTP):** the trading platform established and electronically operated by the Market Operator for the Natural Gas organized wholesale market under the Regulation;

p) **SWIFT (Society for Worldwide Interbank Financial Telecommunication):** International financial telecommunication network and messaging infrastructure;

- r) **Day T** The day when gross debt/credit information is sent by EPİAŞ;
- s) Takasbank: İstanbul Takas ve Saklama Bankası A.Ş. which is authorized as Central Settlement
- s) **CBRT:** Central Bank of the Turkish Republic;

t) **Default Guarantee Account (DGA) Contribution Margin:** Contribution margin of market participants that are kept at Central Settlement Institution and/or Market Operator part from the collaterals in order to be used in case market participants do not fulfil their financial obligations;

u) **USD:** Currency of the USA;

ü) **Member:** Market participant that has the authority to perform a transaction in Natural Gas Futures Market;

v) NFM Collateral: collateral given for Natural Gas Futures Market;

y) **Principles and Procedures for Operating Natural Gas Futures Market:** Principles and procedures regarding the rights and obligations of the Market Operator, Central Settlement Institution and Market participants about the Natural Gas Futures Market, the transactions executed in the Natural Gas Futures Market, the registration and settlement operations, and the collateral and default management and the default guarantee account;

z) Board of Directors: The Board of Directors of Takasbank;

aa) Regulation: Natural Gas Organized Wholesale Market Regulation.

CHAPTER TWO

Principles regarding Membership and Accounts

Membership conditions

ARTICLE 5 - (1) The following membership conditions must be met to receive settlement and collateral management services at the Market.





a) Authorization to trade in the Market was not revoked due to contradictions to the relevant legislation;

b) The contract, commitment letter and agreements with their contents determined by Takasbank must have been signed and submitted;

c) The necessary measures must have been taken for establishment and continued operation of the technical infrastructure determined and announced by Takasbank to the members in order to execute the transactions at Takasbank;

ç) The cash and collateral account must have been timely and accurately opened with Takasbank in its own name for the purpose of execution of transactions related with collaterals and payments.

Membership application and admission

ARTICLE 6 - (1) The institutions that will apply for membership are required to submit their application requests addressed to Takasbank General Directorate in writing, together with the attached information and documents as listed below, verifying the fulfilment of the requirements for membership.

a) Takasbank and NFM Central Settlement Institution - Participant Agreement;

b) NFM Participant Member User Declaration;

c) Natural Gas Market Participants Joint Liability Commitment Letter;

c) Any other information and documents requested by the Member Services and Support Team (Static IP Forms, Corporate mail commitment letter, documents related to account opening, etc.)

(2) Following completion of membership procedures, Market Participants shall execute their settlement and collateral operations by logging into Takasbank's NFM application via internet using their user codes, keys, passwords, and SMS passwords defined for them by the Member Services and Support Team.

(3) In order to commence its operations with Takasbank, the institution whose membership application is accepted must authorize the personnel that will execute transactions on behalf of the member over Takasbank system following the receipt of the notice of acceptance of its membership application.

General obligations of members

ARTICLE 7 - (1) Members are required to comply with the following requirements.

a) To abide by the system times and periods specified by Takasbank and to act in accordance with all rules and principles laid down in the Procedure and the other related legislation in relation to Market clearing and settlement transactions;

b) To timely pay and fulfil the fee, commission and similar obligations required by Takasbank;

c) To furnish any and all information and documents that may be requested on issues deemed necessary by Takasbank in relation to their business and transactions falling within the scope of the Procedure, and to provide any and all support during the investigations to be carried out by the authorized officers of Takasbank;

c) To ensure adaptation to the system revisions to be made by Takasbank within the specified periods and to participate in the tests;

d) To fulfil other obligations under the Procedure within the prescribed time periods and in a complete manner.

(2) If any member foresees that it will be unable to fulfil its obligations either partially or completely, the related member is required to notify such situation immediately to EPİAŞ and to Takasbank together with all





substantiating information and documents containing the reasons thereof. Such notification shall not constitute an impediment preventing Takasbank from taking the necessary measures specified in the Procedure.

(3) Market participants shall be responsible for fulfilment of all obligations related to the transactions they have executed in accordance within the framework of the activities stipulated under the Procedure as well as the functions performed by their employees within the scope of their duties.

(4) Members shall execute their transactions via remote access using the user codes and passwords allocated to the personnel that they have authorized. The responsibility arising from the transactions executed over the system using the allocated passwords and from the use of the password by unauthorized people shall solely rest with the Member.

(5) In cases where access to the system is impossible, transactions may be executed by Takasbank in accordance with the written instructions to be given by the people authorized to represent the member.

Members' obligations regarding settlement and collateral transactions

ARTICLE 8 - (1) Members are required to fulfil the following obligations regarding settlement and collateral transactions:

a) The payments related with invoices communicated by EPİAŞ to them shall be timely and accurately made to Takasbank through banks and such payments shall be monitored through Takasbank screens;

b) The transactions that will allow for utilization of cash and non-cash securities entering their accounts at Takasbank for the payment of collaterals and invoices shall be executed through Takasbank screens;

c) The collateral at the required amount notified by EPİAŞ shall be timely and completely deposited to their collateral accounts opened at Takasbank in their name in order to secure their payment obligations;

c) The fees and commissions requested from them in relation to collateral management and cash settlement service provided by Takasbank shall be timely and completely deposited to Takasbank;

d) The account number of correspondent/intermediary bank account that the invoice receivables arising from the NFM as well as the collateral amounts withdrawable in TL, USD, and EUR will be transferred to shall be entered into Takasbank system and the transfers made to the correspondent/intermediary bank account shall be monitored;

e) Any changes in the authorized signatures specified in the signature circular submitted to Takasbank shall be immediately notified to Takasbank and the new circular shall be delivered duly;

f) Members shall ensure the security of their user names and security passwords given by Takasbank to them;

g) Members shall execute their transactions in accordance with the requirements specified in the implementing published by Takasbank and announced by EPİAŞ to market participants over the CTP.

(2) The Member acknowledges, represents and warrants that it has executed and will execute the transactions over its accounts held with Takasbank in its own name and on its own account, pursuant to the Regulation on Measures regarding Prevention of Laundering of Proceeds of Crime and Financing of Terrorism and the other related applicable laws and regulations; and if it executes any transaction over its accounts on behalf of any other person, it shall inform Takasbank in writing thereof before executing the related transaction and immediately submit the documents of the persons on whose account it acts for their identity verification under the provisions of the aforementioned Regulation; otherwise, Takasbank shall be entitled to abstain from accepting the transactions without sending a prior notice and to terminate the agreements unilaterally.





Suspension of member activities and removal from membership

ARTICLE 9 - (1) The status of the members whose authorizations to trade in the Natural Gas Futures Market are revoked are switched from active to passive status in Takasbank System.

(2) Obligations which are arising from the transactions present under the Procedure, belonging to the market participants of which activities are suspended or which are removed from membership by EPİAŞ, or which want to arising from membership according to their written request, continues.

(3) Takasbank shall be entitled to take any and all measures it deems necessary, including the following measures, to ensure completion of the clearing and settlement transactions of the member the activities of which are suspended or which is removed from membership.

- a) Restraining the member from trading directly over its accounts at Takasbank;
- b) Using the member's settlement receivables to cover its settlement debts;
- c) Recourse to the member's assets held in its free accounts at Takasbank.

Accounts

ARTICLE 10 - (1) Members have trading/transaction, commission and collateral accounts.

- (2) The trading, commission and cash collateral accounts are opened automatically in Takasbank system upon completion of the membership process. The other collateral accounts are opened when it is intended to deposit collaterals.
- (3) Settlement transactions are executed over "11-Member free current account" held with Takasbank.

Transfer of settlement receivables and collateral withdrawal amounts to the Intermediary/Correspondent bank accounts

ARTICLE 11 - (1) The members shall enter into and define in Takasbank system their Correspondent/Intermediary Bank account numbers necessary for automatic transfer of their invoice settlement receivables arising from the Market as well as their collateral amounts withdrawable in cash in TL, USD, and EUR and in the form of GDDS to their correspondent bank accounts via EFT/SWIFT/ESTS.

CHAPTER THREE

Settlement Principles

Responsibility of Takasbank

ARTICLE 12 - (1) Takasbank is not responsible for the members' obligations towards EPİAŞ and other Market participants except for the obligations undertaken by it hereunder in relation to cash settlement and collateral management service.

General principles regarding settlement

ARTICLE 13 - (1) Cash settlement operations are executed over Takasbank system.

(2) The members execute their transactions by accessing to Takasbank system through the web infrastructure provided by Takasbank.

(3) The members' rights and obligations arising from their transactions subject to clearing and settlement are concluded on account by Takasbank over the designated accounts.





(4) Takasbank does not give any warranty for conclusion of transactions on their date of settlement and within their time periods. Conclusion of clearing and settlement transactions within their time periods is conditional upon the timely fulfilment by the debtor members of their obligations.

(5) The obligations related with transactions executed in the Market are fulfilled on the date of settlement using the related settlement accounts.

a) The payable amount notified by EPİAŞ is collected from the debtor member's free current account opened at Takasbank.

b) Following completion of the transfer of the receivable amount notified by EPİAŞ to the creditor member's free current account opened at Takasbank, it is automatically transferred via EFT to the correspondent bank accounts entered into and defined by the creditor member on Takasbank NFM screens.

(6) It is essential that the currency used in execution of transactions shall be used for payment of cash obligations arising from settlement operations.

Netting-off

ARTICLE 14 - (1) For invoice transactions, the net debts/receivable are calculated by way of netting-off performed over the gross debt/receivable data sent monthly by EPİAŞ on an individual member basis. The net debt/receivable difference is calculated as the debt/receivable of EPİAŞ. Net debt/receivable data resulting from such netting-off are displayed on Takasbank screens.

Times and periods related with settlement transactions

ARTICLE 15 - (1) Settlement times and periods are as follows.

Invoice Debt Closing	4 th business day following the notification date (T+4)	until the end of the day
Invoice Automatic Debt Closing	5 th business day following the notification date (T+5)	at the beginning of the day
Distribution of Invoice Receivables	5 th business day following the notification date and the following days	at specified periods throughout the day
EFT (within the minimum lower limit)	Twice a day	15:00 and 17:00

(2) Where necessary, the settlement period may be temporarily changed by the General Manager.

(3) No settlement operations are executed on half business days.

Collection of invoice debts

ARTICLE 16 - (1) The deadline for payment of invoice debts is the 4th business day following the notification date (T+4). Notification date refers to the date the invoice details are sent by EPİAŞ to Takasbank.

(2) Members may close out their cash debts from their free current accounts held at Takasbank within the period from the notification date until the end of the deadline for payment.

(3) If EPİAŞ has any debt payable, this debt is automatically closed out from EPİAŞ current account opened by EPİAŞ at Takasbank at the beginning of the deadline date.

(4) Cash debts that are not closed out by members on such deadlines shall be automatically closed by the system from the member's current free account on the following business day (T+5). If there is insufficient balance in the free account; recourse is made to the items listed below in the following order:

a) Excess Cash TL NFM collateral;





b) Excess Cash TL DGA contribution margin amount;

c) Excess cash TL spot transaction, invoice transaction and imbalance collaterals in the respective order;

- ç) Cash portion in TL of the NFM collateral required to be maintained;
- d) Non-cash excess of NFM collaterals;
- e) Non-cash portion of NFM collaterals required to be maintained;
- f) Cash portion in TL of the DGA contribution margin amount required to be maintained;
- g) Non-cash excess of the DGA contribution margin amount;
- ğ) Non-cash portion of the DGA contribution margin amount required to be maintained;
- h) The amount of default management contribution of the Market Operator;
- 1) Cash portion of other market participants' DGA contribution margin amounts;
- i) Non-cash portion of other market participants' DGA contribution margin amounts;

j) Cash portion in TL of the spot transaction, invoice transaction and imbalance collaterals required to be maintained, in the respective order;

k) Non-cash excess of the spot transaction collateral and the non-cash collateral portion required to be maintained in the respective order;

1) Non-cash excess of the spot imbalance collateral and the non-cash collateral portion required to be maintained in the respective order;

m) Non-cash excess of the spot invoice transaction collateral and the non-cash collateral required to be maintained in the given order;

n) Contributions recollected from other market participations with a DGA margin call;

and they are deducted and set off from the participant's debts without any prior notice.

(5) The debtor participant's obligations are closed out by liquidating the asset subject to collateral on a best effort basis and over the best price without any obligation to fulfil any preconditions.

(6) No default interest is calculated for the debts closed out from the free account, the NFM cash TL collateral surplus and the DGA contribution cash TL surplus.

(7) Default interest is calculated for the debts closed out from, if any, the cash portion of the collateral required to be maintained.

(8) In Takasbank system, cash debts are closed by transferring the debts collected from the members' 11 free current accounts until the settlement cut-off time to the "Invoice Settlement Pool" account and the debts collected on the following days to the "Invoice Default Pool" account. It is also possible to close out debts in part.

Distribution of invoice receivables

ARTICLE 17 - (1) The net receivable details are displayed on Takasbank screens on an individual period basis after the netting-off performed with reference to the invoice debt/credit details notified by EPİAŞ.

(2) The deadline for payment of invoice receivables is the 5th business day following the notification date. The date EPİAŞ approves the details of the invoice issued by participants to EPİAŞ constitutes the notification date.





(3) Invoice receivable distribution is realized according to the ratio of all amounts collected from market participants for the relevant invoice period to their net receivable amounts. In case the payments cannot be made completely, if a new collection is made, these are also distributed to the creditor market participants according to the procedure in the first sentence.

(4) EPİAŞ's invoice receivables are credited to EPİAŞ free current account held with Takasbank until the receivable amount is fully completed through debt closings performed by members starting from the notification date.

(5) The invoice receivables credited to EPİAŞ free account are sent/transferred to the correspondent bank account notified by EPİAŞ to Takasbank for the NFM at 15:.00 via EFT every business day until completion of the total amount to be transferred to the correspondent bank account as notified by EPİAŞ.

(6) The receivables of the member for whom the deadline has come for payment of invoice receivables shall be transferred to the member's free current account held at Takasbank at the specified periods starting from the beginning of the day, by checking and ensuring that there is sufficient balance in the invoice settlement and invoice default settlement pool for the related period. If there is insufficient balance in the invoice settlement and invoice default settlement pool for the related period, the next receivable is paid in part.

(7) The amounts that are credited to members' free current accounts;

a) are deducted and set off from and against the NFM Invoice Default and Spot Invoice Default debts respectively if the member has any overdue debts related to the markets operated by the Market operator. The remaining amount is used to supplement the deficient NFM trading/transaction and DGA collaterals, respectively.

b) are transferred to the participant's assignment account defined in the spot market via EFT up to invoice receivable assignment amount if the member has a deed of assignment in the spot market.

c) are transferred to the correspondent bank account notified by the member to Takasbank for the NFM market via EFT if the member does not have any assignment, or if the participant has an assignment, the amount excluding the assignment amount is transferred to the said account via EFT.

c) the portion excluding the assignment amount is sent to the execution assignment account notified to Takasbank if there is any execution assignment defined in the name of the member.

CHAPTER FOUR

Principles regarding Default Procedures

General principles of default

ARTICLE 18 - (1) From the member that fails to fulfil its obligation within the prescribed settlement periods, a default interest calculated over the unfulfilled obligation amount shall be collected together with other legal liabilities thereon, considering the periods specified in the first paragraph of article 15 within the framework of NFM regulations.

Invoice default penalty principles

ARTICLE 19 - (1) The market participants failing to pay their invoice debts within four business days following the notification date or the members not having sufficient cash balances in their free current accounts and NFM collateral and DGA contribution cash TL collateral accounts as surplus collateral in the beginning of the 5th business day following the notification date shall be deemed to be in default without any further notice and invoice default penalty shall be calculated by Takasbank.





(2) In the calculation of invoice default penalty amount; the outstanding debt amounts that are not closed out by the members by the end of the deadline date for payment and their debt amounts that could not be covered from the member's free current accounts, or NFM collateral and DGA contributions cash TL collateral surplus amounts on the 5th business day following the notification date shall be taken into account.

(3) In case that EPİAŞ does not pay the invoice amount payable to market participants within five business days following the date of receipt of the invoice, default interest is calculated for the amount required to be paid.

(4) The members not closing out their invoice debts on the deadline for payment and whose invoice receivables are not transferred on the deadline for payment may monitor the details related with their debts/credits in default from Takasbank screens on the following business day. EPİAŞ may report the data of all members.

(5) The details related with invoice default penalties calculated for the previous period are collectively sent to EPİAŞ at the beginning of the first business day every month.

Calculation of default penalty

ARTICLE 20- (1) The interest rate used in the calculation of invoice default penalty is the monthly interest rate determined pursuant to "article 51 of the Law no. 6183 on the Procedure for Collection of Public Receivables" for the payments made after the deadline for payments.

(2) The invoice default penalty is calculated with the formula given below.

Invoice Default Penalty Formula =
$$30$$
 Base * Interest Rate 30

(3) The default amount is calculated on the basis of the calendar days between the date of default and the date of fulfilment of the obligations.

(4) The minimum default base and the minimum default interest amount are determined by the Market Operator and announced to market participants through the CTP. No default is calculated for the amounts below the minimum default base. The minimum default interest amount is collected from the Market participant for the default interests calculated and found below the minimum default interest amount.

Accrual, notification and collection

ARTICLE 21 - (1) The amounts related with default penalty are reflected as debts/credits into the related market participant's invoice for the same period.

CHAPTER FIVE

Collateral and DGA Contribution Operations

Collateral and DGA contribution types

ARTICLE 22 – (1) Members have to hold and maintain "NFM collateral" and "DGA contribution margin".

a) NFM collateral refers to the collateral with its size determined by EPİAŞ, which is collected for obligations related to the NFM operated by EPİAŞ.

b) DGA contribution margins refer to market participants' contributions other than collaterals, which are held at the Central Settlement Institution and the Market Operator to be used in cases where market participants fail to fulfil their obligations under the NFM.





Natural Gas Futures Market collateral

ARTICLE 23 – (1) Members have to maintain NFM collateral at sufficient amounts specified by EPİAŞ in order to execute transactions in the market. The implementing principles regarding collateral calculations are determined by EPİAŞ.

(2) The total NFM collateral amounts that the members are required to maintain are notified by EPİAŞ to Takasbank every business day. Members' current NFM collateral amount details are sent by Takasbank to EPİAŞ at the requested hours.

(3) If any member's total collateral amount falls below the total collateral amount required to be maintained; the insufficient collateral information is also notified by Takasbank to members via Takasbank screens, short messages and electronic mails.

(4) The amounts held in Takasbank in the free accounts of the members with NFM collateral deficits are automatically used by the system for completion of the insufficient collateral amount without any need for a further margin call. The relevant collateral supplementation is automatically performed by the system at the predetermined times when the details of collateral amounts required to be maintained by the member are sent by EPİAŞ to Takasbank and before the relevant collateral adequacy control is performed by EPİAŞ.

(5) Members are obliged to deliver their collaterals in the form of electronic letter of guarantee to EPİAŞ, and to keep the collaterals other than electronic letters of guarantee in their collateral accounts held at Takasbank.

(6) Members are required to complete their collateral deficits that they are obliged to deposit to Takasbank, until 12.30 on every business day. If the total NFM collateral level does not cover the required total collateral amount as it may be identified in the control made at 12.30 every business day; market participants are deemed by EPİAŞ to be in default due to their collateral deficits.

(7) Members may fulfil their FNM collateral obligations with electronic letters of guarantee and assets listed in the first paragraph of article 25 herein.

(8) Members are required to send their electronic letters of guarantee to EPİAŞ until the cut-off time specified in the NFM Operating Procedures and Principles legislation.

(9) The assets to be accepted as collaterals, valuation haircuts related with collaterals and composition of collaterals are determined by EPİAŞ in accordance with the opinion of the Central Settlement Institution.

Default Guarantee Account contribution margin

ARTICLE 24 - (1) This refers to the account comprising market participants contribution margins and to be used to cover the portion of loss or damages exceeding the relevant market participants collaterals which may occur in cases where the market members are in default in the Natural Gas Futures market.

(2) The total amount of the DGA contribution margins required to be maintained by members is notified to Takasbank after they are calculated and revised by EPİAŞ. This amount may be revised by EPİAŞ for several times within a month considering the risk level of the relevant market participants and the market conditions. The members' current DGA contribution amounts are also sent by Takasbank to EPİAŞ.

(3) Members may fulfil their NFM collateral obligations with the assets listed in the second paragraph of article 25 herein. At least 50% of the total contribution margins required to be held by members must be maintained in cash in Turkish Lira.

(4) If any member's cash and total DGA contribution amount fall below the DGA contribution amounts required to be maintained; the insufficient DGA contribution details are also notified by Takasbank to members via Takasbank screens, short messages and electronic mails.





(5) The amounts held in Takasbank in the free accounts of the members with DGA contribution deficits are automatically used by the system for completion of the insufficient DGA contribution amounts without any need for a further margin call to supplement the DGA contributions. The relevant DGA contribution supplementation is automatically performed by the system at the predetermined times when the details of the DGA contribution amounts required to be maintained by the member are sent by EPİAŞ to Takasbank and before the relevant DGA contributions sufficiency control is performed by EPİAŞ.

(6) Members are required to complete their DGA contribution deficits that they are obliged to deposit to Takasbank, until 12.30 on every business day. If the current cash TL and/or total NFM contribution amount maintained does not cover the required cash TL and/or total contribution amount required to be maintained as it may be identified in the control performed by EPİAŞ at 12.30 for three successive business days; the relevant market participants are deemed by EPİAŞ to be in default due to their DGA contribution deficits.

Assets accepted by Takasbank as NFM Collateral and Default Guarantee Account contributions

ARTICLE 25 -(1) Members have to deposit to their accounts held with Takasbank the assets listed below from and among those that are acceptable to EPİAŞ for provision as NFM collaterals for the fulfilment of their obligations arising from settlement transactions.

- a) Cash (in Turkish Lira)
- b) Foreign Currency (in EUR, USD)
- c) Government Domestic Debt Securities (GDDS)
- ç) Eurobonds issued by the Republic of Turkey Ministry of Treasury and Finance (EUROBOND)

(2) Members have to deposit to their accounts held with Takasbank the assets listed below from and among those that are acceptable to EPİAŞ for fulfilment of their obligations related with DGA contributions.

- a) Cash (in Turkish Lira)
- b) Foreign Currency (in EUR, USD)
- c) Government Domestic Debt Securities (GDDS)

Valuation of Collaterals and Default Guarantee Account contributions

ARTICLE 26 -(1) The valuation haircuts listed below shall apply to the assets accepted as collaterals and DGA contributions.

Collateral Type	Collateral Group	Valuation Haircuts
TL	TL	1,00
Foreign Currency (EUR, USD)	DVZ	0,95
Treasury Bills/Government Bonds	HB / DT	0,91
FX-Indexed Government Bonds	DTE	0,83
Electronic Letter of Guarantee (TL)	ETM	1,00
Electronic Letter of Guarantee (EUR and USD)	ETM	0,95
Eurobond (Eurobond)	EUT	0,88

(2) Collaterals and DGA contributions are subjected to valuation by Takasbank at the end of the day. GDDSs are valued using the daily indicator prices published by the CBRT in thr Official Gazette on the day of calculation. In the valuation of the collaterals in foreign currencies, DGA contributions (USD and EUR) and letters of electronic guarantee in foreign currencies, the daily foreign exchange buying rates announced by the CBRT at 15:30 one business day before the day of calculation are used. In the valuation of Eurobonds issued by the Republic of Turkey Ministry of Treasury and Finance, the prices calculated with the yield curves comprising the traded Eurobonds, or the prices determined by Takasbank in cases where the said yield curve cannot be formed are used.





Depositing Collateral and DGA contribution margins

ARTICLE 27 – (1) Members shall deposit their collaterals other than electronic letters of guarantee and their DGA contribution margins to their relevant accounts over Takasbank system. Electronic letters of guarantee should be delivered to EPİAŞ and entered into the system by EPİAŞ.

(2) Collaterals and DGA contributions may be deposited within the hours when the system is open for trading. Collaterals and DGA contributions may not be deposited on half business days; they are considered as full holidays.

(3) Members may give instructions for depositing collaterals and DGA contributions in writing; and in such cases, Takasbank users shall execute the depositing of collaterals and DGA contributions on behalf of the market participant.

Withdrawal of collaterals and DGA contributions

ARTICLE 28 – (1) Members may withdraw their collaterals other than electronic letters of guarantee and their DGA contributions from the relevant accounts to their free accounts or to their correspondent bank accounts that they have notified to Takasbank for the NFM market via Takasbank system.

(2) Since electronic letters of guarantee are accepted and stored by EPİAŞ, they are deposited by EPİAŞ as collaterals in the name of the participant in Takasbank system.

(3) If members maintain collaterals and DGA contributions exceeding the amount of NFM collaterals and DGA contributions required to be maintained as notified by EPİAŞ, they may withdraw the amount in excess.
(4) If members withdraw their collaterals and DGA contribution amounts, the amounts withdrawn are transferred to the market participants' correspondent bank accounts via EFT or SWIFT; and the amounts in the form of GDDS are sent/transferred through ESTS. The Eurobond collaterals are transferred by Takasbank to the correspondent bank account notified by the member upon the member's written instruction.

(5) Market participants may execute NFM collaterals and DGA contributions between the hours of 09.30-12.00 every business day. No collaterals and DGA contributions may be withdrawn on half business days; and such days are considered as full holidays.

(6) Members may close out their market and commission debts with the cash amount that they transfer to their free accounts before the cut-off time for withdrawal of collaterals and DGA contributions.

(7) Members may give written instructions for withdrawal of collaterals and DGA contributions; in such cases, Takasbank shall execute the withdrawal of collaterals and DGA contributions for and on behalf of the Market participant.

(8) In the event that the details related with the total collaterals and DGA contributions required to be maintained are notified by EPİAŞ to Takasbank for several times; the members that have insufficient collaterals and DGA contributions according to the most recently notified amounts shall be informed again.

Margin call to supplement collaterals and DGA contribution margins

ARTICLE 29 - (1) A margin call to supplement collaterals and DGA contributions is essentially made/issued electronically via Takasbank screens. After Takasbank electronically issues a margin call to supplement collaterals and DGA contributions; the member is deemed to have received the call without any need for a further warning or notice.

- (2) The members receiving a margin call to supplement collaterals and DGA contributions are required to deposit collaterals and DGA contributions through the methods specified in article 27.
- (3) The cut-off times for margin calls to supplement collaterals and DGA contributions are determined by EPİAŞ electronic Letters of guarantee are submitted to the Market Operator and the collaterals other than







electronic letters of guarantee as well as DGA contributions are submitted to the Central Settlement Institution until the cut-off times to supplement collaterals and DGA contributions.

Accrual of interest on cash collaterals and DGA contributions

ARTICLE 30 - (1) The cash collaterals in Turkish Lira as well as the DGA contribution amounts deposited by members shall be subjected by Takasbank to accrual of interest under the best possible conditions considering the credit risk and liquidity conditions over the remaining amount after withholding the portion to be maintained as compulsory reserves. The interest accrual process shall be conducted within the limits of Takasbank.

(2) After deduction of taxes and other legal liabilities as well as Takasbank commission from the gross interest amounts earned as a result of interest accrual process at the time of distribution, the remaining balance is added to the relevant accounts as interest.

(3) The cut-off time for interest accrual is 15.40 on full business days and 10.45 on half business days.

(4) No interest accrual shall occur for the members that do not wish to earn interest in cases where they notify such requests to Takasbank in writing.

Takasbank membership collateral

ARTICLE 31 - (1) This collateral is collected at a lumpsum amount in order to cover any possible loss or damages in cases where the Natural Gas Futures Market participants fail to fulfil their obligations towards Takasbank such as subscription fees, charges, commissions and other obligations within the period granted to them to that effect.

- (2) The market participants that already have Takasbank membership collaterals deposited for Spot Natural Gas market shall be exempt from NFM membership collateral.
- (3) The market participants that do not have a membership collateral deposited in the Spot Natural Gas market or that have a collateral deficit shall be obliged to deposit the membership collateral for NFM membership or to supplement the deficient collateral.
- (4) When the collateral amount falls below the amount required to be maintained after collection of monthly commissions, the deficient portion is supplemented and completed by members. The membership commission collaterals that are not completed or that remain insufficient are directly collected by Takasbank from the members' free accounts.
- (5) No interest shall accrue for membership commission collaterals.

CHAPTER SIX

Miscellaneous Provisions

Fees and commissions

ARTICLE 32- (1) Cash settlement, collateral management, interest accrual commission and other fees and charges related to settlement and collateral services within the scope of the Procedure are determined by Takasbank by obtaining the opinion of EPİAŞ and then announced to members in the fees tariff published on the website.

(2) Fees and charges are accrued at the time of transaction or on a monthly basis according to the nature of the transaction and collected from the member's accounts held at Takasbank.

(3) The commission amounts not objected to within 3 business days following the date of accrual shall be deemed accepted.





(4) Members may pay their commission debts accrued on a monthly basis, either manually by selecting "Takasbank commission debt payment" from the "Payment transactions" screen in the Natural Gas Market menu using the balance in their free accounts within 6 business days following the date of accrual; or close out them by directly sending cash funds at the amount of the debt to their membership commission collateral account and/or commission account.

(5) The Natural Gas Futures Market and Spot Natural Gas market commissions are summed up and accrued and charged to the member's commission account on a monthly basis.

(6) The monthly commissions not paid within the due period shall be directly collected firstly from the members' free accounts, and then from their membership commission collateral accounts.

Disciplinary provisions

ARTICLE 33 - (1) The disciplinary provisions provided in chapter seven of the Central Clearing and Settlement Regulation shall apply for the members not complying with the obligations specified herein.

Implementing Principles

ARTICLE 34 - (1) Takasbank is entitled and authorized to interpret the provisions of this procedure, and to take decisions by considering also the general provisions with respect to any issues not specified or clarified herein.

Entry into Force

ARTICLE 35 – (1) The Procedure shall enter into force on the date of its publication.

Execution

ARTICLE 36 - (1) The provisions of the Procedure shall be executed by the General Manager.

