

**PROCEDURE OF CASH SETTLEMENT AND COLLATERAL MANAGEMENT
SERVICES TO BE CARRIED OUT BY İSTANBUL TAKAS VE SAKLAMA BANKASI
A.Ş. IN THE ELECTRICITY FUTURES MARKET OF ENERGY MARKETS
MANAGEMENT INC. AND 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 cash settlement and collateral management services that İstanbul Takas ve Saklama Bankası A.Ş. will provide as the Central Settlement Institution in Electricity Futures Market.

Scope

ARTICLE 2 - (1) This procedure covers the issues related to membership, 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 in Electricity Futures Market.

Basis

ARTICLE 3 - (1) This procedure has been prepared based on Article 77 of Capital Market Law no 6362 that was published in Official Gazette no. 28513 dated 30.12.2012, General Regulation Regarding Establishment and Operating Principles of Central Settlement Institutions that was published in Official Gazette no. 28662 dated 30.05.2013, Regulation Regarding Amendment of Electricity Market Balancing and Settlement Regulation that was published in Official Gazette no. 27751 no. 06.10.2010; and Electricity Futures Market Central Settlement Institution Agreement that was signed between İstanbul Takas ve Saklama Bankası A.Ş. And Enerji Piyasaları İşletme A.Ş. on 14.10.2020.

Definitions and Abbreviations

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

- a) **Intermediary Bank:** The Bank from which market participants request transfer of market receivables and drawable cash collateral amounts,
- b) **GDDS:** Government Domestic Debt Securities,
- c) **EFT:** Electronic Fund Transfer System that enables sending payments in terms of Turkish Lira
- d) **ESTS:** Electronic Securities Transfer System,
- e) **EPIAŞ:** Enerji Piyasaları İşletme A.Ş.
- f) **EUR:** Currency of European Union,
- g) **Eurobond:** Long-term bonds with coupon payments that are issued in international markets in terms of foreign exchanges.
- h) **General Manager:** General Manager of İstanbul Takas ve Saklama Bankası A.Ş.

- i) **Central Settlement Institution:** Takasbank which is authorized as a central settlement institution according to Capital Market Law no 6362 dated 06.12.2012, and is used for carrying out financial operations between market participants that will be determined in Electricity Market Balancing and Settlement Regulation
- j) **Central Settlement Institution Participant Agreement:** The agreement which is prepared by Market Operator, which will be signed between market participants and Central Settlement Institution and which is related to collateral management and cash settlement services
- k) **Cash Settlement:** All of the processes that enable 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 period and conditions determined by Takasbank, by means of obtaining Energy Markets Management Inc.'s opinion
- l) **Market:** Electricity Futures Market (EFM) operated by EPIAŞ,
- m) **Market Participant (Participant):** Legal Entities which have license defined in the Electricity Market Balancing and Settlement Regulation
- n) **Free Account:** Free current accounts at Takasbank in TL (11) and foreign exchange (11YP),
- o) **System:** Takasbank system,
- p) **SWIFT: (Society for Worldwide Interbank Financial Telecommunication):** International financial telecommunications network and messaging infrastructure
- q) **Day T:** The day when gross debit/credit information is sent by EPIAŞ
- r) **Takasbank:** İstanbul Takas ve Saklama Bankası A.Ş. which is authorized as Central Settlement
- s) **CBTR:** 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 apart from the collaterals in order to be used in case market participants do not fulfill their financial obligations.
- u) **USD:** Currency of the USA,
- v) **Member:** Market participant that has the authority to perform a transaction in Electricity Futures Market,
- w) **EFM Collateral:** Collateral given for Electricity Futures Market,
- x) **Principles and Procedures for Operating Electricity Futures Market:** Principles and procedures regarding rights and obligations of the Market Operator, Central Settlement Institution and Market participants about Electricity Futures Market, transactions executed in the Electricity Futures Market, operations of recording and settlement, collateral and default management and default guarantee account.
- y) **Board of Directors:** The Board of Directors of Takasbank,
- z) **Regulation:** Electricity Market Balancing and Settlement Regulation

CHAPTER TWO

Principles for membership and Accounts

Conditions for Membership:

ARTICLE 5 - (1) Conditions stated below must be met in order to receive settlement and collateral management services for the Market.

- a) Authorization to trade in the Market was not revoked due to contradictions to the relevant legislation,
- b) Agreements, undertakings, and contracts of which content is determined by Takasbank are signed and presented to Takasbank,
- c) Technical infrastructure for executing its transactions at Takasbank which has been determined and announced by Takasbank to the clientsi has been established and required measures are taken for its operability.,
- d) Cash and collateral accounts are opened timely and correctly in their own name at Takasbank to perform transactions related to collateral and payments.

Membership Application and Admittance

ARTICLE 6 - (1) The institutions which will apply for the membership are required to communicate their application request in writing addressed to the Takasbank Head Office and submit information and documents listed below in the attachment affirming the fulfillment of the conditions sought for membership

- a) Participant Agreement between Takasbank and EFM Central Settlement Institution
- b) EFM Participant Member User Declaration,
- c) Electricity Market Participants Joint Liability Undertaking,
- d) Other information and documents requested by Member Service and Support Team
(Fixed IP Forms, Undertaking of Corporate E-mail, documents related to account opening, etc.)

(2) Following completion of the membership process, Market Participants execute settlement and collateral transactions related to EFM operations by accessing the Takasbank EFM application through the internet with user codes, passwords, and key Word and SMS codes defined for them by Member Service and Support Team.

(3) In order for the institutions of which membership application has been accepted to begin operations at Takasbank, it must authorize the personnel who will execute transactions on behalf of the member through the Takasbank system beginning from the notification of acceptance of its membership application

General Obligations of the Members

ARTICLE 7 - (1) The Members are obliged to comply with the following issues:

- a) Comply with system durations determined by Takasbank, act in accordance with all rules and principles stipulated by this Procedure and other relevant legislation for market settlement operations.
- b) Fulfill the fees, commissions, and other obligations required by Takasbank in due time
- c) Present any type of information and documents to be requested related to issues deemed necessary by Takasbank in relation to their businesses and transactions within the scope of this Procedure, and provide any support for the investigations to be conducted by Takasbank officers,
- ç) Adapt the system revisions to be made by Takasbank within the determined periods and participate in the tests,
- d) Fulfill other obligations under this Procedure in a complete manner and within due time

(2) If any Member foresees that it will be unable to either partially or totally fulfill its obligations, this Member is obliged to notify such situation immediately to EPIAŞ and Takasbank together with all verifying information and documents also including the reasons of the situation. The mentioned notification shall not constitute an impediment for Takasbank to take the necessary measures determined in this Procedure

(3) The members are responsible for the fulfillment of all obligations related to the transactions they have performed within the framework of activities regulated under the Procedure and functions performed by their employees within the scope of their duties.

(4) The members perform their transactions through remote access by using the user codes and passwords allocated to the personnel authorized by them. The responsibility arising from the transactions conducted in the system by using the allocated password and from the use of the password by unauthorized persons shall belong to the member

(5) In cases when access to the system is not possible, the transactions can be executed by Takasbank in accordance with the written instructions to be given by persons having authority to represent the Market Participant

Obligations of the members regarding settlement and collateral transactions

ARTICLE 8 - (1) Members are obliged to fulfill the obligations stated below related to settlement and collateral transactions:

- a) Perform invoice payments that have been communicated by EPIAŞ to themselves, and payments related to advances, to Takasbank through banks in a correct manner and in due time and monitor them through Takasbank applications.
- b) Perform transactions which will enable utilization of cash and non-cash assets incoming to the account at Takasbank for collateral, advance and invoice payments, through Takasbank applications
- c) Deposit the collateral with an amount reported by EPIAŞ in full and in due time to collateral accounts that were opened at Takasbank in their name for collateralizing payment obligations.

- d) 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
- e) Follow up sending EFM settlement receivables to intermediary bank account reported for spot electricity market
- f) Submit new authorized signatures list by immediately notifying Takasbank about the changes in authorized signatories in the list of authorized signatures that have been submitted to Takasbank,
- g) Ensure security of the user codes and security codes that have been given them by Takasbank
- h) Perform their transactions in accordance with the matters stated in the rules of practice which has been published by Takasbank and announced by EPIAŞ to the market participants through the Market Management System

(2) According to the Regulation Regarding Measures Related To The Prevention Of Laundering Of Crime Revenues And Financing Terrorism, the participant accepts, declares, and guarantees that it has performed/will perform transactions in its own name for accounts at Takasbank, if a transaction is performed in the name of another person, it will notify Takasbank in written before performing the transaction and immediately present the documents related to the identification of the persons on behalf of whom it is acting according to the provisions of the above-mentioned regulation, otherwise Takasbank has the right to refrain from accepting the transactions and unilaterally terminate the agreements without sending a warning beforehand.

Suspension of activities of the member, and termination of membership.

ARTICLE 9 - (1) Status of the participants of which authorization to trade in Electricity Futures Market is revoked are changed from “Active” to “Passive” in the 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 EPIAŞ, or which want to resign from membership according to their written request, continues.

(3) Takasbank has the power to take measures deemed necessary, including the ones stated below for completion of settlement transactions of the institution of which activities are suspended or which are removed from membership.

- a) Prevent the member to perform transactions directly on accounts at Takasbank
- b) Using members’ settlement receivables to pay off settlement debts,
- c) Recourse to the assets of the member in its free accounts at Takasbank

Transaction Accounts

ARTICLE 10 - (1) Transaction, Commission, and Cash Collateral Accounts have opened automatically in the Takasbank system after completion of the membership process.

(2) Settlement Transactions are realized through an “11- member free current account” at Takasbank.

Sending settlement receivables and collateral withdrawal amounts to intermediary bank accounts.

ARTICLE 11 - (1) İntermediary bank accounts that are defined in the spot electricity market shall be used for transfers of EFM settlement receivables and collateral withdrawal transactions. It is impossible that intermediary bank account differs based on markets.

CHAPTER THREE

Principles of Settlement

Responsibility of Takasbank

ARTICLE 12 - (1) Besides the obligations that Takasbank undertakes with this Procedure in relation to cash settlement and collateral management services, Takasbank is not responsible for the obligations of the members towards EPIAŞ and other Market Participants.

General principles regarding Settlement

ARTICLE 13 - (1) Cash settlement transactions are realized through the Takasbank system.

(2) Members perform their transactions by accessing the Takasbank system through web infrastructure provided by Takasbank.

(3) Rights and obligations of the members arising from transactions that are subject to settlement are concluded by Takasbank through determined accounts.

(4) There is no guarantee given by Takasbank regarding the completion of the transaction within the settlement date and period. Completion of settlement transactions in due time depends on the condition that the debtor member fulfills its obligations in due time.

(5) Obligations related to the transactions performed in the Market are fulfilled by using relevant accounts at the settlement date.

a) Debt amount that has been reported by EPIAŞ, is collected from the free current account that was created at Takasbank.

b) Receivable amount that has been reported by EPIAŞ is automatically sent via EFT to intermediary bank accounts that have been defined for spot electricity market following its transfer to the free current account of the payee member that has been created at Takasbank.

(6) It is essential that the currency type, from which transactions are realized, shall be used for payment of cash obligations arising from settlement operations.

Netting

ARTICLE 14 - (1) For invoice transactions, net debt/receivable information are calculated by performing participant-based netting through gross debt/receivable information sent monthly by EPIAŞ. The difference between net debt/receivable is calculated as EPIAŞ debt/receivable. Net

debt/receivable information resulting from netting is shown based on periods on Takasbank applications.

(2) Advance debit and credit balances which are generated within the scope of buy and sell transactions performed in the spot market in the name of the member for closing the existing positions of the member by EPIAŞ, are reported to Takasbank based on members by EPIAŞ within the scope of EFM default management in the market. Advance debit/credit balances due to EFM default are not netted with the spot market debit/credit balances of the participant. EFM advance credit balances are blocked and deducted if there is invoice debt for the same period.

Durations related to Settlement Operations

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

Advance Debt Pay Off - Due to EFM (Participant – without default)	T+1	15:00
Advance Debt Pay Off - Due to EFM (Participant – with default)	T+1	15:00-17:00
Advance Automatic Debt Pay Off - Due to EFM	T+1	15:00
Advance Receivable Distribution - Due to EFM	T+1	15:00 and later
Invoice Debt Pay Off	6. working day following notification date (T+6)	Until the end of the day
Invoice Automatic Debt Pay Off	7. working day following notification date (T+7)	At the beginning of the day
Invoice Receivable Distribution	7. working day following notification date and in the following days	Periods determined within the day
EFM (Within Minimum lower limit)	Three times a day	15:00, 16:00 and 17:00

(2) Settlement period can be changed temporarily by the General Manager in situations where deemed necessary.

(3) Settlement transactions are not realized in half working days.

(4) Settlement for advance notifications related to transactions performed in the previous working day of the weekends or official holidays is realized on the first working day following the weekend or official holiday.

(5) Settlement for advance notifications related to transactions performed on weekends and official holidays are realized on the second working day following the weekend or official holiday.

Collection of advance debts.

ARTICLE 16 - (1) Debtor members shall send debt amounts to their 11 free current accounts at Takasbank via EFT, until the last hour of the settlement at the first working day (T+1) following the day when gross debit/credit information is sent by EPIAŞ

(2) Cash debts are paid off by transferring debts that have been collected until the last hour of the settlement from members' 11 free current accounts to "Advance Settlement Pool" and by transferring debts that have been collected after the last hour of the settlement and the following days to "Advances Default Pool" through Takasbank system. Partial debt payment is possible. Settlement of advance credit and debit balances are realized by using a spot market settlement pool.

(3) Cash debts that are not closed by the participants as of 15:00 are closed automatically by the system through the participant's free current account. If the balance in the free account is insufficient, without requiring any warning, debts of the participant are appropriated by recourse to the following respectively:

- a) Excess Cash TRY EFM Collateral,
- b) Excess Cash TRY DGA Contribution Margin amount,
- c) TRY Cash portion of EFM Collateral that must be kept,
- d) Non-Cash portion of EFM Collateral that must be kept,
- e) TRY Cash portion of DGA Contribution Margin amount that must be kept,
- f) Non-Cash portion of DGA Contribution Margin amount that must be kept,
- g) Amount of default management contribution of the Market Operator,
- h) Cash and non-cash portions of other market participants' DGA Contribution Margin amounts,
- i) Contribution margins recollected from market participants with a DGA margin call.

(4) Obligations of the debtor participant are fulfilled by liquidating the asset that is subject to the collateral in the best effort and with the best price

(5) Default interest is not calculated for the debts paid off more than the amounts of the free account, cash EFM collateral, and cash DGA contribution margin.

(6) Default interest is calculated for the debts paid off with the cash portion of the EFM collateral that has to be kept if any.

Distribution of advance receivables.

ARTICLE 17 - (1) In the default collateral management process, receivables of advances that emerge as the result of transactions performed within the scope of closing EFM positions, are distributed to 11 free current accounts of members "Advances Settlement Pool" beginning from 15:00. The amounts that are recorded as credit entry to the free current accounts of the participants are;

- a) Advance receivable of the participant is blocked in the TRY cash EFM collateral account until the period of the relevant invoice and is invested. Mentioned amount, is not considered within the total collateral amount that is presented by the participant during the controls performed by EPIAŞ related to.
- b) Electricity Futures Market Advance blocked amount of the participant, first of all, is appropriated for the EFM invoice debt for the relevant period.

c) If there are unpaid debts of the participant in due time related to the markets operated by the market operator, Spot Invoice Default, EFM Invoice Default, Spot Advance Default, and EFM Advance Default are appropriated respectively.

ç) Credit balance amount left after the appropriation, is sent to pledge and intermediary bank accounts respectively via EFT.

Collection of invoice debts.

ARTICLE 18 - (1) Last payment day of invoice debt is the 6. Working day (T+6). Following notification date. Notification date is the date when invoice information is sent to Takasbank by EPIAŞ.

(2) When invoice information reaches Takasbank, if;

- a) The participant does not have a net invoice credit/debit balance (neutral),
- b) There are receivables blocked due to monthly assignments and/or EFM transactions

Spot Invoice Default, EFM Invoice Default, Spot Advance Default, and EFM Advance Default shall be appropriated respectively from the blocked amounts due to monthly assignments together with the accrued interest of participant's blocked EFM advance receivable at the first working day following invoice notification date for the debts of the participant which have not been paid in due time and shall be sent to participant's assignment and/or intermediary bank accounts via EFT at 15:00

(3) Participants can pay off their cash debts from a free current account at Takasbank beginning from the notification date until the last payment date.

(4) In case EPIAŞ has a debt, the debt shall be paid off at the beginning of the last payment date from EPIAŞ current account that has been opened at Takasbank.

(5) In case of participants have not paid off invoice debt at the beginning of T+6 working day, advance receivables due to blocked EFM transactions (together with accrued interest) and spot advance receivable that is blocked because of monthly assignment shall be appropriated respectively for the invoice debt.

(6) Cash debts that have not been paid off by the participants at the last payment date, are paid off automatically by the system from the free current account of the participant on the next working day (T+7). If the balance of the free account is not sufficient; without requiring any warning debts of the participant are appropriated by recourse to the following respectively:

- a) Excess Cash TRY EFM collateral,
- b) Excess Cash TRY DGA Contribution Margin amount,
- c) TRY Cash portion of EFM Collateral that must be kept,
- d) Non-Cash portion of EFM Collateral that must be kept,
- e) Excess cash spot collateral,
- f) TRY Cash portion of DGA Contribution Margin amount that must be kept,
- g) Non-Cash portion of DGA Contribution Margin amount that must be kept,
- h) Amount of default management contribution of the Market Operator,

- i) Cash portions of other market participants' DGA Contribution Margin amounts,
- j) Non-Cash portions of other market participants' DGA Contribution Margin amounts,
- k) Cash and non-cash portion of spot collateral that must be kept.
- l) Contribution margins recollectd from market participants with a DGA margin call

(7) Obligations of the debtor participant are fulfilled by liquidating the asset that is subject to the collateral in the best effort and with the best price, without the obligation to fulfill any precondition

(8) Default interest is not calculated for the debts paid off from the free account, from excess of cash EFM collateral, and cash DGA contribution margins.

(9) Default interest is calculated for the debts paid off with the cash portion of the collateral that has to be kept if any.

(10) Cash debts are paid off by transferring debts that have been collected until the last hour of the settlement from members' 11 free current accounts to "Invoice Settlement Pool" and by transferring debts that have been collected in the following days to "Invoice Default Pool" through Takasbank system. Partial debt payment is possible.

Distribution of Invoice Receivables

ARTICLE 19 - (1) After the netting which has been performed according to invoice debt/receivable information reported by EPIAŞ, net receivable information is shown based on periods in Takasbank application modules.

(2) Last payment date of invoice receivable is the 7. Working day following the notification date at the latest. The day when the invoices that are issued by the participants are approved by EPIAŞ is the notification date.

(3) After the invoice message reaches Takasbank and approved by EPIAŞ, EPIAŞ receivable distribution sequence number is determined. Priority order for invoice receivable distribution shall be determined automatically by the system according to the receivable distribution sequence of EPIAŞ.

(4) Invoice receivable of EPIAŞ is recorded to EPIAŞ free current account at Takasbank as credit entry as long as the participants pay off debt beginning from notification date until the receivable is completed.

(5) The invoice receivable which has been recorded in EPIAŞ free account as a credit entry is sent to the intermediary bank account that is communicated by EPIAŞ to Takasbank for spot electricity market at 15:00 every working day via EFT until the amount which is reported by EPIAŞ for transfer to its intermediary bank account is completed.

(6) Relevant period's invoice settlement and invoice default settlement pools are checked for determined periods and the receivable of the participant of which invoice receivable last payment date has come, shall be transferred to participant's free current account at Takasbank, when sufficient balance is present. If there is not sufficient balance in invoice settlement and invoice default settlement pools for the relevant period, the next receivable shall be partially paid.

(7) The amounts that have been recorded in participants' free current account as credit entries shall be;

- a) Appropriated for relevant debts with Spot Invoice Default, EFM Invoice Default, Spot Advance Default, and EFM Advance Default if the participant has overdue debts related to markets operated by the Market operator.
- b) In case letter of assignment is present, transferred to participant's assignment account that has been defined in the spot market as much as the assignment amount, by combining with the invoice receivable and if any, advance receivable due to Electricity Futures Market transactions which have been blocked, together with its accrued interest.
- c) Transferred to the intermediary bank account which the participant has been reported to Takasbank for spot electricity market via EFT together with the amount excluding the monthly/Daily assignment amount if any, and advance receivable due to Electricity Futures market transactions together with its accrued interest, which has been blocked for the relevant invoice period, in case the participant does not have a letter of assignment.
- ç) Sent to assignment account for bankruptcy court dealing except the portion of assignment amount if there is an assignment for bankruptcy court dealing in the name of the participant.

Assignment Transactions

ARTICLE 20 - (1) Participants are obliged to submit assignment agreements to EPIAŞ.

- (2) Assignment conditions are defined by EPIAŞ in the Takasbank spot electricity market on a participant basis.
- (3) Assignment payments of the participants can be made monthly or daily.
- (4) Advance and invoice payments are performed by Takasbank according to assignment conditions based on the assignment information that EPIAŞ defined to the system.
- (5) Assignment for bankruptcy court dealing definition can also be performed by Takasbank, according to reporting of legal authorities made to the Banks.

CHAPTER FOUR

Principles Regarding Default Transactions.

General default principles.

ARTICLE 21 - (1) Default interest and other legal obligations which are calculated according to obligation amount that has not been fulfilled are collected from the member that has not fulfilled its obligation within determined settlement periods according to EPIAŞ regulations, by taking the periods stated in the first paragraph of Article 15.

Advance default and damage payment principles

ARTICLE 22 - (1) When a market participant does not make advance debt payment arising from EFM at T+1 working day until 15:00 at the latest, or when the participant does not have sufficient balance as excess collateral in the free current account, EFM collateral and DGA participation margin cash collateral account in the process of automatic debt pay off performed at 15:00, the participants are considered to go into default without requiring any working and advance default fine shall be calculated by Takasbank.

(2) As of 15:00, from participants' free current accounts, excess EFM collateral, and DGA participation margin cash TRY collateral accounts, the unpaid debt shall be taken into consideration for advance default fine calculation.

(3) Advance damage payment is calculated by Takasbank for the participants of which receivable have not been transferred to their free current account because there remain debtor participants in the settlement day.

(4) Receivable amounts that cannot be transferred on the settlement day are taken into consideration for advance damage payment calculation.

(5) Participants which have not paid off their debt on the settlement date and of which advance receivable has not been transferred, can track their default debt/receivable information through Takasbank application modules. EPIAŞ can report the data of the participants.

(6) Advance default and damage information that has been calculated for the previous period are sent collectively to EPIAŞ on the first working day of each month.

Principles regarding invoice default and damage payment.

ARTICLE 23 - (1) In case the market participant does not pay its invoice debt within six working day following the notification date, and at the beginning of the 7th business day following the notification date the participant does not have sufficient balance in the free current account, as excess collateral amounts in EFM collateral and DGA participation margin cash collateral accounts, the participants are considered to go into default without requiring any warning and invoice default fine shall be calculated by Takasbank.

(2) Unpaid debt amounts which has not been paid off by the participants and which cannot be met from participants' free current accounts, excess EFM collateral, and DGA participation margin cash TRY collateral accounts, at the 7. working day following the notification date shall be taken into consideration for invoice default fine calculation.

(3) Damage payment shall be calculated for the amount which is required to be paid if EPIAŞ does not pay the invoice amount to be paid to market participants within seven working days following the notification date of the invoice

(4) Receivable amounts that cannot be transferred to the participant in the last payment date are taken into consideration for invoice damage payment calculation

(5) Participants which have not paid off their invoice debt at the last payment date and of which invoice receivable has not been transferred at the last payment date, can track their default debt/receivable information through Takasbank application modules. EPIAŞ can report data of the participants

(6) Invoice default and damage information that has been calculated for the previous period are sent collectively to EPIAŞ on the first working day of each month.

Default fine and damage payment interest

ARTICLE 24- (1) The interest rate which is used in the calculation of advance default fine; is 50% of the interest rate determined under article 51 of the Law no. 6183 on the Procedure for

Collection of Public Receivables, for the payments made after 15:00, and is the interest rate determined under the same article for the debts that are paid off in the following working days.

(2) Interest rate which is used in the calculation of advance damage payment is the interest rate determined under article 51 of Law no. 6183 on the Procedure for Collection of Public Receivables for the payments made after the settlement day.

(3) Interest rate which is used in the calculation of invoice default fine, is the monthly interest rate determined under article 51 of Law no. 6183 on the Procedure for Collection of Public Receivables for the payments made after the last payment date.

(4) Interest rate which is used in the calculation of invoice damage payment, is the monthly interest rate determined under article 51 of the Law no. 6183 on the Procedure for Collection of Public Receivables for the payments made after invoice receivable last payment day

Advance, invoice default fine, and damage payment are calculated by the formula given below:

$$\begin{array}{l} \text{Advance/Invoice Default Fine} \\ \text{Damage Payment} \end{array} = \frac{\text{Base amount} * \text{Interest Rate}}{30} * \text{Days}$$

(5) Default interest is calculated based on calendar days between the date of going default and the date when obligations are fulfilled.

(6) Minimum default base amount is TRY 100; minimum default interest amount is TRY 10. Default shall not be calculated for the amounts below the minimum default base amount. The minimum default interest amount shall be collected from the market participant for the default interests calculated below the minimum default interest amount.

(7) For damage payments, the calculation shall be performed regardless of the minimum default interest amount.

(8) Damage payment shall not be made to the members for Takasbank and CBRT related delays.

Accrual, notification, and collection

ARTICLE 25 - (1) The amounts related to default interest and damage payment are reflected in the relevant market participant's invoice for the same period as debt/receivable.

CHAPTER FIVE

Collateral Transactions

Types of Collaterals

ARTICLE 26 – (1) Participants are obliged to keep two types of collaterals as “EFM Collateral” and “DGA Contribution Margin”.

a) EFM Collateral is the collateral that is taken from the participants for their obligations related to balancing mechanism and settlement and of which size is determined by EPIAŞ

b) DGA contribution margins, are the contribution margins of market participants apart from the collaterals, which are kept at the Central Settlement Institution and the Market Operator to be used in case where market participants do not fulfill their obligations

Collateral of Electricity Futures Market

ARTICLE 27 – (1) Participants are obliged to keep a sufficient amount of EFM collaterals determined by EPIAŞ for performing transactions in the market. Code of conduct related to collateral calculations are determined by EPIAŞ.

(2) Total amount of EFM collaterals that must be kept by the participants are reported by EPIAŞ to Takasbank every working day. Information of existing EFM collateral amounts of the Participants are sent by Takasbank to EPIAŞ at requested hours.

(3) If the total collateral amount of the participant decreases below the total amount of collateral required to be kept, the information about insufficient collateral shall be reported to participants by Takasbank through the application of Takasbank, SMS, and e-mail.

(4) The amount which is present in the accounts at Takasbank of the participants who have EFM collateral deficit, is used automatically by the system for covering the insufficient collateral without requiring a margin call. Relevant collateral coverage transaction is performed automatically by the system at the determined time when information of collateral amounts that have to be kept by the participant is sent to Takasbank by EPIAŞ, and before collateral adequacy control is performed by EPIAŞ.

(5) Participants are obliged to submit letter of guarantee type collaterals to EPIAŞ and to keep collaterals other than letters of guarantee in collateral accounts at Takasbank.

(6) Participants have to cover their insufficient collaterals that they are obliged to deposit to Takasbank, until 12:00 each working day. If EFM collateral level does not meet the total collateral amount required to be presented at the control performed at 12:00 each working day, participants are considered to go default by EPIAŞ due to insufficient collaterals of the market participants.

(7) The participants can fulfill their EFM collateral obligations at Takasbank with Turkish Lira, Foreign Currency (EURO, US Dollar), Government Domestic Debt Securities issued by Turkish Republic Ministry of Treasury and Finance only if they are bearer, and Eurobonds issued by Turkish Republic Ministry of Treasury and Finance.

(8) Participants are required to submit their letters of guarantee to EPIAŞ until the last hour determined under EFM Operating Procedures and Principles Legislation.

(9) Assets to be accepted as collaterals, valuation Coefficients related to collaterals, the composition of collaterals, are determined by EPIAŞ in accordance with the opinion of the Central Settlement Institution

Contribution Margin of Default Guarantee Account

ARTICLE 28 - (1) It is collateral consisting of participation margins of the market participants to be used for the portion of the damages exceeding collaterals of the participants that may occur in case the participants go into default at Electricity Futures Market,

(2) Total amount of DGA contribution margins that are required to be kept by the participants are sent to Takasbank after calculated and updated by EPİAŞ. More than one update can be realized by EPİAŞ within a month considering the risk status of the relevant market participants and market conditions.

(3) Participants can fulfill DGA contribution margin obligations at Takasbank with Turkish Lira, Foreign Currency (EURO, US Dollar), Government Domestic Debt Securities issued by Turkish Republic Ministry of Treasury and Finance only if they are bearer. At least 50% of the total contribution margin that is required to be kept by the participants must be cash in Turkish Lira.

(4) If the total DGA contribution margin collateral amount of the participant decreases below the amount of the collaterals required to be kept, the information about insufficient collateral shall be reported to participants by Takasbank through the application of Takasbank, SMS, and e-mail

(5) The amount which is present in the accounts at Takasbank of the participants who have DGA contribution margin collateral deficit, is used automatically by the system for covering the insufficient collateral without requiring a margin call. Relevant collateral coverage transaction is performed automatically by the system at the determined time when information of collateral amounts that have to be kept by the participant is sent to Takasbank by EPİAŞ, and before collateral adequacy control is performed by EPİAŞ

(6) Participants have to cover their insufficient collaterals that they are obliged to deposit to Takasbank, until 12:00 each working day. The market participants of which existing TRY cash and/or total DGA contribution margin amounts do not meet TRY cash and/or DGA contribution margin collateral amount that has to be kept by the participant, in the control performed by EPİAŞ at 12:00 for 3 consequent working days, are considered to go default by EPİAŞ due to insufficient collaterals.

Assets that are accepted by Takasbank as Collateral and Default guarantee Account contribution margin

ARTICLE 29 – (1) The participants are obliged to deposit assets listed below among the ones accepted by EPİAŞ to be presented as collateral for fulfilling their obligations arising from settlement transactions, to their accounts at Takasbank.

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

(2) Participants are obliged to deposit the assets stated below among the ones accepted by EPİAŞ for DGA contribution margin to their accounts at Takasbank

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

Valuation of Collaterals and Default Guarantee Account contribution margin

ARTICLE 30 – (1) Below valuation coefficients are applied on the assets that are accepted as collaterals.

Collateral Type	Collateral Group	Valuation Haircut
TRY	TL	1,00
Foreign Currency (EUR,USD)	DVZ	0,95
Treasury Bill/Government Bond	HB / DT	0,91
FX Indexed Government Bond	DTE	0,83
Letter of Guarantee (TRY)	TM	1,00
Letter of Guarantee (EUR and USD)	TM	0,95
Eurobond	EUT	0,88

(2) Collaterals are subjected to valuation by Takasbank at the end of the day. GDDSs are valued by using Daily indicative prices of GDDSs determined by CBRT. For the valuation of collaterals in Foreign Currencies (USD and EUR), and Letter of Guarantees in Foreign Currencies, Daily exchange buy rates that are published by CBTR are used. For the evaluation of Eurobonds issued by the Turkish Republic Ministry of Treasury and Finance, prices that are calculated with yield curves consisting of traded Eurobonds and prices that are determined by Takasbank in a case where yield curve cannot be formed.

Depositing Collaterals

ARTICLE 31 – (1) Members shall deposit collaterals to collateral accounts through the Takasbank system.

(2) Collateral Depositing transactions can be performed within the hours when the system is open. Collateral depositing transactions cannot be performed in half working days, and these days are accepted as a full holiday.

(3) The members can give written orders for depositing collaterals; in this case, collateral depositing transactions shall be performed by Takasbank users on behalf of market participants.

Collateral Withdrawal

ARTICLE 32 – (1) Members can perform collateral withdrawal transactions through the Takasbank system to their free accounts or to intermediary accounts which they have reported to Takasbank for the spot electricity market.

(2) The members can withdraw the excess collateral amount if they keep collateral amount more than EFM collateral and DGA Contribution margin amount which is required to be kept and reported by EPIAŞ.

(3) Withdrawn collaterals are sent to intermediary bank accounts via EFT or SWIFT and GDDS type collaterals are sent through ESTS upon the request of the market participants. Eurobond collaterals are transferred by Takasbank to an intermediary bank account which has been reported by the participant upon written order of the participant.

- (4) Market participants, can perform EFM collateral and DGA contribution margin collateral withdrawal transactions between 09.30 and 11.30 every working day. Collateral withdrawal transactions cannot be performed in half working days, and these days are accepted as full holiday
- (5) Members can pay off their market and commission debts with the cash collateral amount that they have transferred to free their accounts before the last hour of collateral withdrawal.
- (6) The members can give written orders for collateral withdrawal; in this case, the collateral withdrawal transaction is realized by Takasbank on behalf of the market participant.
- (7) In case information of total collaterals that are required to be kept, are reported by EPIAŞ to Takasbank more than once, participants that have insufficient collaterals are informed again according to the last reported amounts.

Margin Call

ARTICLE 33 - (1) In principle, a Margin call is performed in the digital medium through Takasbank applications. Afterward, Takasbank send the margin call through a digital medium, the participant is considered to have taken the call without requiring other warning and notification

- (2) The participant to which margin call is sent, deposits the collaterals except for the letter of guarantees to Takasbank.
- (3) As acceptance and keeping of the letter of guarantees are performed by EPIAŞ, their depositing as collaterals in the Takasbank system on behalf of the participant are realized by EPIAŞ
- (4) Last hours for collateral coverage are determined by EPIAŞ. Letter of guarantees are presented to the market operator and other collaterals other than letters of guarantee are presented to Central Settlement Institution until the last hours of collateral coverage.

Interest accrual on cash collaterals

ARTICLE 34 - (1) Collaterals in Turkish Lira that have been deposited by the members are accrued interest in the best conditions possible by Takasbank, after deducting the portion to be allocated to required reserve by taking credit risk and liquidity conditions into consideration. Investing operation is performed within Takasbank limits.

- (2) The remaining balance by means of deducting taxes, other legal obligations, and Takasbank commission during distribution, from gross accrued interest amount obtained as the result of the investment, are added to the relevant accounts as accrued interest.
- (3) Interest accrual last hour is 15.40 in working days and 10.45 in half working days.
- (4) The interest accrual process shall not be conducted for the members that do not wish to earn interest. The related choice must have been entered into and defined in the system before the cut-off time for interest accruals.

Takasbank membership collateral

ARTICLE 35 - (1) The participants that have Takasbank membership collateral of the spot electricity market are exempt from EFM membership collateral.

- (2) The participants that do not have membership collateral in the spot electricity market or that have a collateral deficit, are obliged to deposit membership collateral for EFM membership or cover the collateral.

(3) If the collateral amount falls short of the amount that is required to be kept after monthly collections of commissions, the deficit is completed by the participants. Membership commission collaterals that have not been covered or have l

insufficient, are unilaterally collected from member's free accounts by Takasbank.

(4) Membership commission collaterals are not invested.

CHAPTER SIX

Various Provisions

Fees and Commissions

ARTICLE 36- (1) Cash settlement, collateral management, and commissions of accrued interest and other fees related to collateral services within the scope of the procedure, are announced by Takasbank to the members in the fee tariff presented in the website by taking the opinion of EPIAŞ

(2) The fee is accrued in the course of the transaction or monthly according to the properties of the transaction and is collected from the participant's account at Takasbank.

(3) Commission amount which is not objected to within 3 working days beginning from accrual date, are considered as accepted.

(4) Participants can manually pay off their commission debts that have been accrued monthly within 6 days beginning from accrual date by using the balance in their free accounts by selecting "Takasbank commission debt payment" through the "payment transactions" module within the Electricity Market menu, as well as by directly transferring cash amounting to debt amount to membership collateral account and/or commission account

(5) Commissions of Electricity Futures Market and spot electricity market are accrued monthly in member commission account.

(6) Monthly commissions that have not been paid in due time are collected unilaterally from the free account and membership commission collateral account of the members respectively.

Disciplinary Provisions

ARTICLE 37 - (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.

Code of Conduct

ARTICLE 38 – (1) Takasbank is entitled and authorized to interpret the provisions of this procedure, and to take decisions by considering also the general provisions for any issues not specified or clarified herein.

PROVISIONAL ARTICLE 1 - (1) The regulations that are determined by this Procedure abolish the General Letters with which these regulations were announced previously.

Enforcement

ARTICLE 39 – (1) The procedure shall enter into force on the date of its publication

Execution

ARTICLE 40 - (1) The provisions of the Procedure shall be executed by the General Manager.