

# **Power Futures Market**

**User Guide** 

01.03.2022



**For Opinions and Suggestions** 

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#### **INTRODUCTION**

Power Futures Market is based on "continuous trade" method and physical delivery. It is designed to protect market participants from counterparty risk by EPİAŞ's central counter party service.

Futures trade can be made in organized markets as well as in over the counter (OTC) market in terms of bilateral contracts. OTC trades involves counterparty risk and all of them are not published regularly therefore price discovery function is not fulfilled.

Market participants are able balance their portfolio and make physical optimization in spot electricity markets. Furthermore market participants are able to protect themselves against price risk by hedging and have insight to futures prices (price discovery). Therefore power spot and power futures markets can be considered as mutually complementary and they fulfill different needs of the market participants.

Matchings on the power futures market contracts bring the physical delivery obligation of the electricity energy corresponding to the power of 0,1 MW (1 lot) and multiples of it per hour in the particular bidding zone throughout the hours covered by the load type in the delivery period to the trading parties.

Base load futures contracts for month, quarter and year delivery periods are available for market participants to trade within the Power Futures Market. Contracts for different delivery periods and load types can be opened for trade in the forthcoming period.

Process	Start Time	End Time
License Check	09:00	09:05
Pre-Seance	10:00	12:59
Collateral Check	12:00	12:05
Pre-Seance Order Verification	12:45	12:59
Intra-Seance	13:00	16:00
DIP Calculation and Publication	16:00	16:45
End of Day Operations	16:45	17:00

Table 1: Power Futures Market Processes

- <u>License Check</u>: It is the process where the licenses of the organizations registered to PFM are checked.

  The active contracts available for trade are displayed to organizations according to license end dates.
- <u>Pre-Seance</u>: Market participants are able to make passive or cancel their suspended orders within the pre-seance process. Active order submission is not allowed in this process.
- <u>Collateral Check</u>: Market participant's collateral status is updated according to collateral data received from TAKASBANK. According to collateral sufficiency, it is determined whether the market participant is in default or not.
- <u>Pre-Seance Order Verification</u>: Organization's suspended order(s) coming from the last seance day enter in the process of order verification. In this process market participants can not make operations for their orders.
- Intra Seance: It is the process where the organizations submit orders and orders are matched. In this
  process it is possible to trade on the active contracts which are displayed on the order book. Trade
  registration entry can be made.

- <u>DIP Calculation and Publication</u>: It is the process where the DIP is calculated based on the prices of matchings and active bid/ask orders during the seance and published. If there are not sufficient matchings and orders for calculating the DIP, the market operator applies the survey and/or the auction methods for calculating the DIP in this process.
- End of Day Operations: Prices of the remaining active orders are controlled whether they are within the daily price change limits which are calculated by the new published DIPs. The orders are cancelled if their order prices are out of the daily price change limits. The oders are suspended if their order prices are within the daily price change limits. The market participants are not able to submit orders in this process. Required collateral amount is calculated for each market participant by using the new DIPs and open positions. Calculated collateral amounts are sent to TAKASBANK.

### 1. EKYS Operations

In order to make transactions in the Power Futures Market (PFM), the user of the market participant needs to have authorization in EKYS. Operations of changing authorization or granting authorization to unauthorized user are made via "Authorization Group Operations" in EKYS. Authorizations are defined only by PK admin.

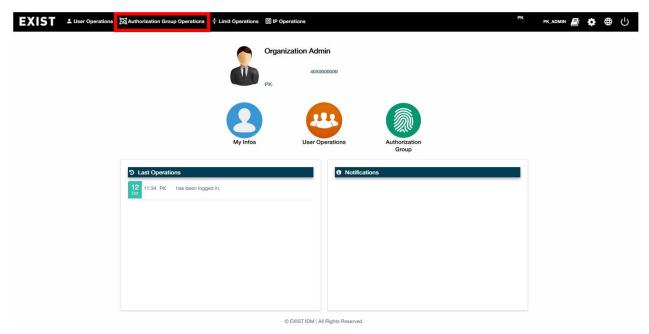


Figure 1: EKYS Authorization Group Operations

- Authorization page is viewed via "Authorization Group Operations" heading.

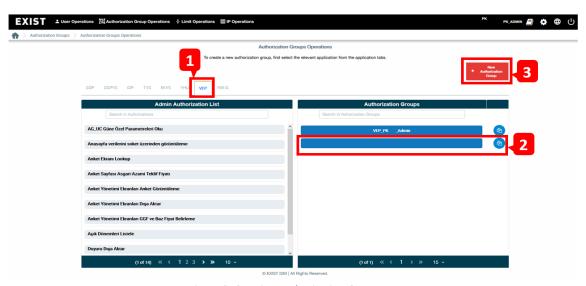


Figure 2: Creating Authorization Group

- 1- It is the section where the PK Admin selects the market for authorization. Authorizations regarding the selected market are displayed in the "Admin Authorization List".
- 2- Groups to be authorized are displayed in the "Authorization Groups" section and the group is selected for authorization.

3- PK Admin can create a new authorization group by clicking the relevant sections in the pop-up window, created group is displayed in the "Authorization Groups" section.

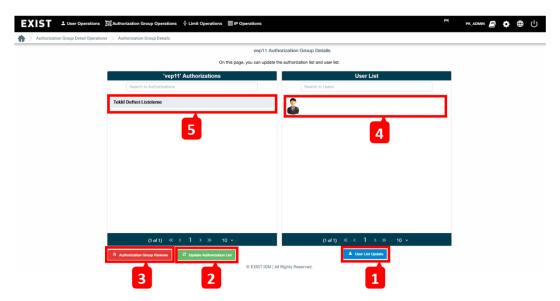


Figure 3: Authorization Group Details

- 1- It redirects to the page where the user(s) are selected for authorization.
- 2- It redirects to the page where the authorizations are selected for the users to be authorized.
- 3- It deletes the selected authorization.
- 4- It is the section where the user(s) selected from the "User List Update" page are displayed. Adding and removing user operations are made in the "User List Update" page.
- 5- It is the section where authorizations defined for the user(s) listed in the "User List" section are displayed.



Figure 4: Updating and Defining Authorization List

1- It is the section where all the available authorizations are listed for the selected authorization group to

be defined.

- 2- It is the section where the authorizations selected from "VEP Authorizations" section are displayed.
- 3- It moves the selected authorization(s) to "VEP USER Authorizations" section. In this section it is possible to select the authorizations one by one or by clicking the button all the authorizations can be moved.
- 4- It saves the selected authorizations for the selected group.
- 5- It enables to define the selected authorizations for a new added group.

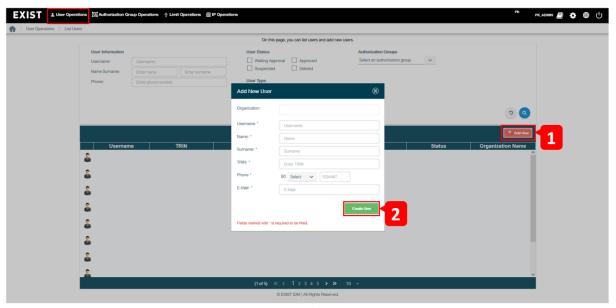


Figure 5: EKYS Adding New User

- 1- In the User Operations >> List Users section, button opens the page where new user information is entered.
- 2- After entering the required information to "Add New User" pop-up, clicking "Create User" button creates new user. Created new user needs to be authorized.

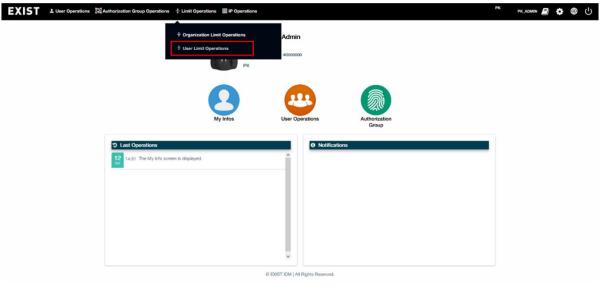


Figure 6: Introduction to User Upper Limit Operations

PK Admin is redirected to the page where PK Admin can define sub-user and PK Admin upper limits.

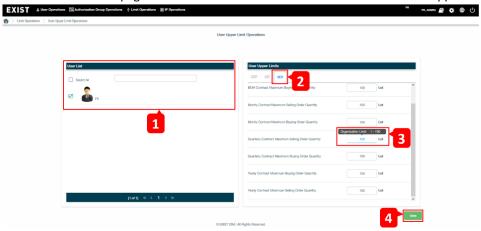


Figure 7: User Upper Limit Operations

- 1- It is the section where PK Admin selects the user(s) for defining user upper limits. User name can be searched from the search section. User upper limits can not be defined without selecting the relevant user(s).
- 2- It is the section where the market is selected for defining user upper limits for the selected user(s).
- 3- It is the section where buy and sell order quantity limits are defined based on the delivery period.
- Organization limit is calculated and defined by the market operator and PK Admin is able to enter upper limits within the defined organization limits.
- 4- PK Admin saves the defined values.

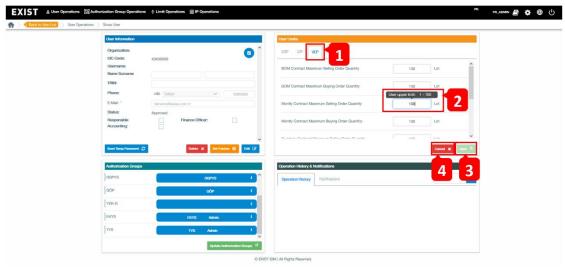


Figure 8: Determining User Limits

- 1- It is the section where the market is selected for defining user limits by sub-user or PK Admin user.
- 2- It is the section where buy and sell order quantity limits are defined based on the delivery period within the limits determined by the PK Admin.
- User can not enter a value out of the limits defined by the PK Admin.
- 3- It saves the limits defined by the user.
- 4- It cancels the limits defined by the user.

## 2. Market Operations

#### 2.1. Dashboard

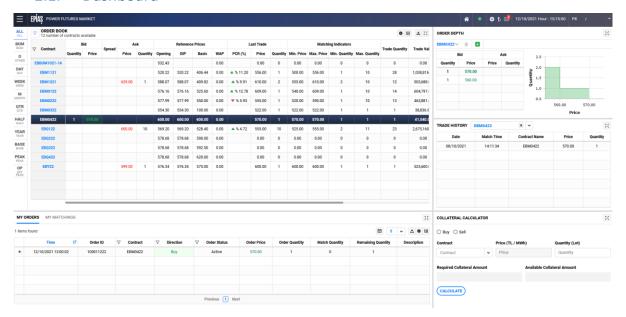


Figure 9: Dashboard

#### 2.1.1. Dashboard Header



Figure 10: Dashboard Header

1- icon lists "Market Operations", "Collateral Operations", "Default Operations", "Settlement Operations" titles. Under each title, pages related to corresponding title take place.

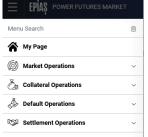


Figure 11: Menu Titles

- 2- icon signals that PFM application is active for submitting orders, system is running and access is granted.
- 3- icon opens the settings window. "Settings", "Region", "Language" ve "User Guide" titles take place in the window.



Figure 12: Settings

- A- Opens the window where general, theme, style and description settings can be made
- B- Region is selected. Operations can be made for the selected region.
- C- Application's language is selected.
- D- User guide of the application takes place.

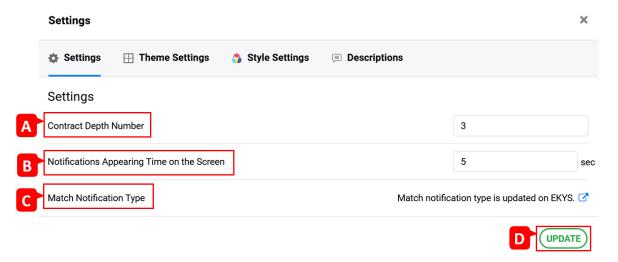


Figure 13: General Settings

- A- The maximum number of orders to be displayed in the order depth for each order direction is determined.
- B- It is the duration of the system notification's appearance on the screen.
- C- It forwards to the EKYS page where the intraday matching notification type is set. User is notified for the matchings according to the selected notification type in the relevant page.
- D- Determined settings are saved.

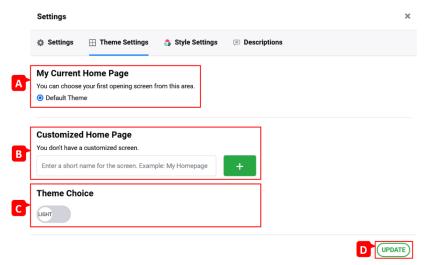


Figure 14: Theme Settings

- A- If the customized homepage is created, customized homepage and default theme selections take place, otherwise default theme selection takes place. User can select one of them.
- B- In addition to the default theme determined by the Market Operator, user can design and save a customized homepage.
- User enters the name of the customized homepage and by pressing button, the name of the homepage to be customized is listed under "My Current Homepage" section.

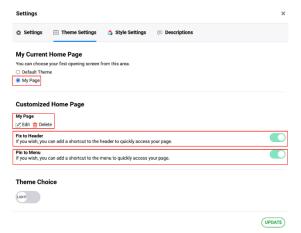


Figure 15: Creating Customized Home Page

- "Edit" opens the screen where the customized homepage can be designed. "Delete" cancels the creation of customized homepage.
- Fix to Header: If the button is activated, customized homepage is fixed to header. When it is fixed, icon appears in the header. This button opens the screen where the customized homepage can be designed.



Pin to Menu: If the button is activated, customized homepage is listed in the menu bar.

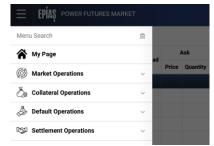


Figure 17: Customized Homepage on the Menu Bar

- Customized homepage is accessible from customized homepage section or header. If the customized homepage is created for first time, "edit" button opens the screen where the template selections appear.

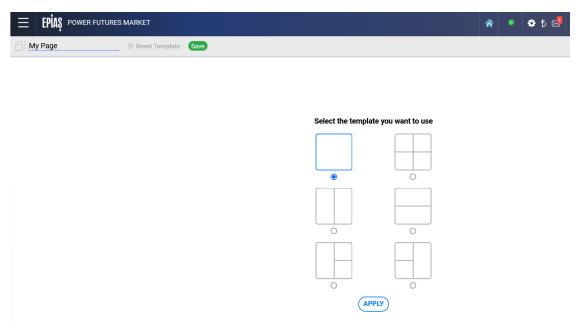


Figure 18: Customized Homepage Template Selection

- The selected template appears in the page that will be customized.



Figure 19: Customized Homepage

According to the selected template, the page is splitted into sections and modules that are available for selection are listed in the "Select Module" menu on the top of each section. For each section separate modules can be selected. Each section can be splitted vertically and horizontally or sections can be merged.

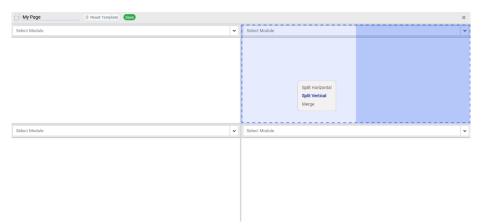


Figure 20: Splitting and Merging Customized Homepage Sections

- Previously saved customized homepage can be saved with a new name or by resetting the template a new design can be saved.

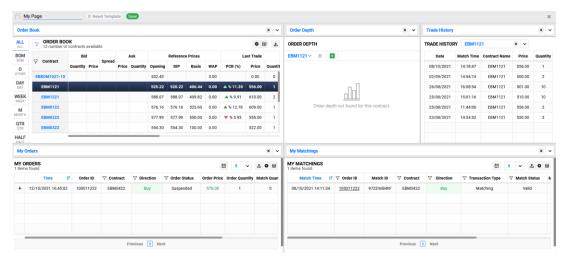


Figure 21: Customized Homepage

- C- Applications theme color can be changed. There are two selections: "Light" and "Dark".
- D- Determined settings are saved.

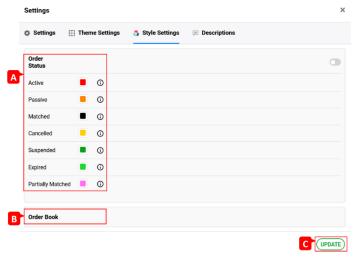


Figure 22: Style Settings

- A- Different colors can be set for order statuses. Colors set for order statuses are displayed in Dashboard >> My Orders section. button needs to be active in order to display colors belonging to order statuses
- B- Column frames between the headings in the order book can become more apparent by activating the selection.
- C- Determined settings are saved.

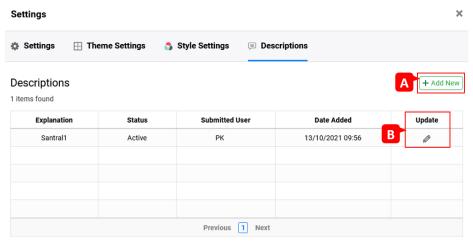


Figure 23: Settings - Descriptions

It is the section where the user saves its descriptions to be used in the description field of the order entry pop-up. Information regarding saved descriptions are listed.

- A- User can add multiple descriptions. By clicking + Add New button, the pop-up appears where the description needs to be written and user writes the text and saves it.
- B- User can update the saved description. In the update section text can be updated and the status of the saved descriptions can be made passive.



Figure 24: Dasboard Header-2

4- It is the link for the current collateral display area. By clicking the icon, organization's current collateral is displayed in the pop-up window.



Figure 25: Current Collateral Display Section

5- It is the link for the announcements and notifications. Market operator's announcements are displayed in the announcement section. System notifications are displayed in the notifications section.



Figure 26: Announcements and Notifications Section

- 6- It is the section where the current date and hour information are displayed.
- 7- When a user logins the application, the username and the organization's short name are displayed.
- 8- It shows the links to the user logs page and log out. If the organization is in default state, the username and the short name of the organization are written in yellow color.

#### 2.1.1.1. Order Book

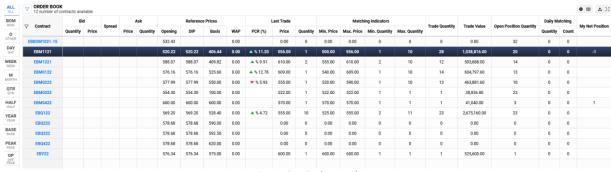


Figure 27: Order Book

It is the section where the user submits bid and ask orders for the active contracts. Contract statistics are displayed in this section.

- **Contract**: Active and suspended contracts which are determined by the market operator are displayed.
- **Bid Price**: It shows the best bid's price for the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Bid Quantity**: It shows the best bid's quantity for the relevant contract. If there are multiple bids having the same best bid's price, then the sum of their quantities are displayed. The unit of the quantity is "Lot".

- 1 Lot equals to 0,1 MW.
- **Spread**: It refers to the difference between the best ask's price and best bid's price for the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Ask Price**: It shows the best ask's price for the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Ask Quantity**: It shows the best ask's quantity for the relevant contract. If there are multiple asks having the same best ask's price, then the sum of their quantities are displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Opening: It refers to the daily opening price of the relevant contract. Opening price is used for calculating the daily price change limits which indicates the valid price range for the orders on that particular day.
   Opening price is equal to the calculated DIP on the previous seance day. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>DIP (Daily Index Price)</u>: It is calculated by the matchings on the relevant contract. If the total quantity of the matchings is insufficient, then it is calculated according to the market rules defined by the regulation. It determines the opening price of the following seance day. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Basis**: It refers to the first opening price of relevant contract unless a new basis price is determined. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>WAP</u>: It is the weighted average price of the matchings on the relevant contract within the seance. WAP is updated as a result of each matching within the seance. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **PCR (Price Change Ratio)**: It is the change ratio of the last matching's price compared to the previous matching price.
  - a-  $extstyle{ extstyle{ iny 1}}$  It shows that the last matching price is higher than the previous matching price.
  - b- Ht shows that the last matching price is equal to the previous matching price.
  - $\sim$  It shows that the last matching price is lower than the previous matching price.
- Last Trade Price: The last matching's price on the relevant contract is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Last Trade Quantity: The last matching's quantity on the relevant contract is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Matching Indicators Min. Price**: The minimum matching price on the relevant contract is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Matching Indicators Max. Price**: The maximum matching price on the relevant contract is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Matching Indicators Min. Quantity</u>: The minimum matching quantity on the relevant contract is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Matching Indicators Max. Quantity**: The maximum matching quantity on the relevant contract is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Quantity</u>: The total matching quantity on the relevant contract is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Value</u>: The total value of the matchings on the relevant contract is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Open Position Quantity: Open position quantity on the relevant contract is displayed. The unit of the

- quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Daily Matching Quantity**: The total matching quantity on the relevant contract within the seance is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Daily Matching Count</u>: The total number of matchings on the relevant contract within the seance is displayed.
- <u>My Net Position</u>: It is the difference between the organization's total buy matchings quantity and total sell matchings quantity on the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.



Figure 28: Order Book Setting Icon

dicon is used for setting the columns located in the order book. Column dragging and pinning can be enabled/disabled in this section. When it is enabled, it is possible to drag and drop columns in the screen. Then the selection is saved. The saved customized screen keeps the settings for the following login sessions.



Figure 29: Order Book Heading Settings

- It is possible to pin the heading left/right or remove all the pins for the relevant column by right clicking the mouse on the order book column.



Figure 30: Pinning Dashboard Order Book Columns

e- icon filters the desired columns to be displayed in the order book. It is possible to hide and show selected columns. Hide all and show all options are available.



Figure 31: Order Book Column Filter

f- icon opens the pop-up where the user can upload multiple order by excel. Excel template is available for multiple orders in the pop-up and it can be downloaded. Relevant excel file is uploaded to this section.

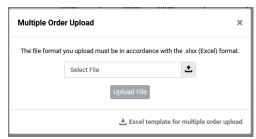


Figure 32: Dashboard Multiple Order Upload Pop-up

- Order validation is carried out after the file is uploaded. Results of the uploaded orders whether they are successful or not and the reasons are listed in the pop-up. Succesful orders are submitted to order book by the Save Orders button. Cancel it button cancels the submission of successful orders to the order book.

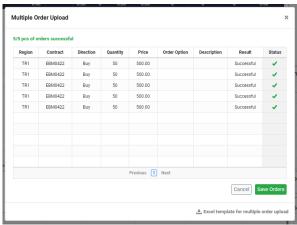


Figure 33: Multiple Order Upload Screen

- Excel template for multiple order upload is available in the multiple order upload popup. It is possible to upload multiple orders by entering the required information to the excel file.

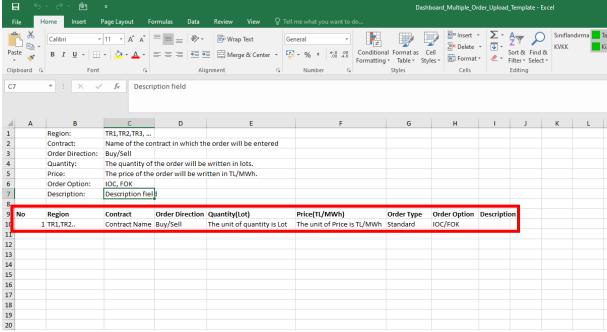


Figure 34: Order Book Multiple Order Upload Template

g- icon makes it possible to display the order book in a seperate pop-up independent from other sections. The size of the pop-up window can be changed.



Figure 35: Order Book Contract Selection

h- Active and suspended contracts which are determined by the market operator can be filtered according to delivery period and load type and those selected contracts are displayed in the order book.



Figure 36: Order Book Contract Filter

i- icon opens the contract filter. Load type, delivery period, all days and contracts are displayed in the contract fiter. Contracts are displayed according to the selected filters from headings. Selection is saved by button and it is displayed in the order book.

© Deselect All button deselects the selected contracts. C Assumed button selects all the active and

Suspended contracts.

ALL
ALL
BOM
BOM
O
OTHER
DAY
DAY
DAY
WEEK
WEEK
WEEK
H
M
MONTH
HALF
HALF
HALF
YEAR
VEAR
VEAR
BOM
GOTTAGT

EBM0122

PEAK

Figure 37: Creating Order in the Order Book

- j- In order to open the order creation pop-up, the relevant contract's row is left clicked within the "bid" or "ask" columns and "Create Order", "Quick Buy", "Quick Sell" options appear.
- k- If "Create Order" option is selected, unselected order direction is displayed in the order creation pop-up.
- I- If "Quick Buy" option is selected, order direction is selected as "buy" and the best ask's price and quantity are automatically written to the price and quantity sections in the order creation pop-up.
- m- If "Quick Sell" option is selected, order direction is selected as "sell" and the best bid's price and quantity are automatically written to the price and quantity sections in the order creation pop-up.
- n- Double clicking on the best bid in the order book and "Quick Sell" option work the same way.
- o- Double clicking on the best ask in the order book and "Quick Buy" option work the same way.

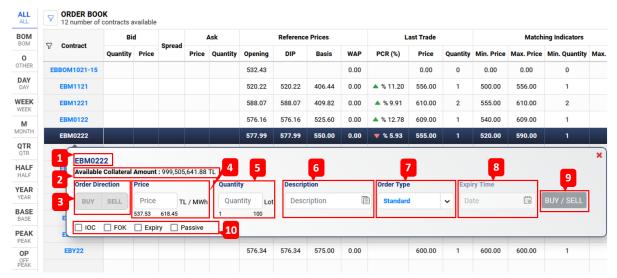


Figure 38: Order Creation Pop-Up in the Order Book

- 1- Selected contract's name is displayed in the order creation pop-up.
- 2- Organization's available collateral amount is displayed.

- 3- Order direction is selected in this section by the user. Buy or sell can be selected.
- 4- User can enter the price within the range. The range is determined by increasing and decreasing the opening price by 7%. Order having price out of this range will not be saved.
- 5- User can enter the quantity within the range determined by the market operator. At the moment the range is from 1 to 100.
- 6- User can write a description for the order or select a description which is previously saved in the settings.
- 7- User can select an order type.
- 8- It determines the order's expiry time. The order remains active until the expiry time unless it is matched, made passive or canceled.
- 9- "BUY/SELL" button becomes "BUY" if the order direction is selected as buy. It becomes "SELL" if the order direction is selected as sell. Order is saved with this button.
- 10- It is possible to save the order by selecting "IOC", "FOK", "Expiry", "Passive".
  - a- IOC(Immediate or Cancel): Order is saved with IOC. The order matches with the suitable orders immediately. Partial match is allowed. If there is remaining quantity unmatched, the remaining quantity of the order is canceled immediately.
  - b- FOK(Fill or Kill): Order is saved with FOK. The order is executed immediately, if the total quantity of the order is not matched then the order is canceled.
  - c- Expiry: It activates the "Expiry Time" section.
  - d- Passive: The status of the order becomes passive and it does not match.
- If the best bid belongs to the user's organization, the best bid price has a green shade and the price is displayed as bold.
- If the best ask belongs to the user's organization, the best ask price has a red shade and the price is displayed as bold.

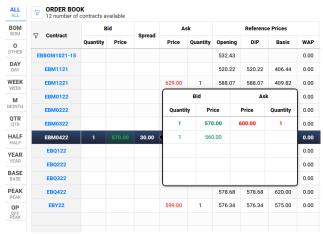


Figure 39: Order Depth Pop-Up in the Order Book

- After selecting the contract in the order book, moving the mouse to "Spread" column opens the order depth pop-up for the relevant contract.
- In the order depth maximum 5 orders for each direction are displayed for the relevant contract.

- If the order in the order depth belongs to the organization, quantity and price values are displayed as bold.



Figure 40: Setting Dashboard Screen Splits

- After setting dashboard screen splits, by right clicking on the frames of the screen splits "Reset" button appears and this button sets back the default screen splits.

#### 2.1.1.2. Order Depth



Figure 41: Dashboard Order Depth

- Bid and ask orders belonging to the contract selected from the order book are displayed.
- Graphical display of the orders listed in the order depth is displayed.
- If the order in the order depth belongs to the organization, quantity and price values are displayed as bold.
- By clicking button, it is possible to open order depths for 3 different contracts. It is not possible to open order depths for more than 3 contracts and order depth can not be displayed for the selected contract.
- icon fixes the selected contract's order depth.
- If the organization has multiple orders with the same price, those orders are displayed separately.
- icon opens the order depth in a separate pop-up and the size of the pop-up window can be changed.

#### 2.1.1.3. Trade History

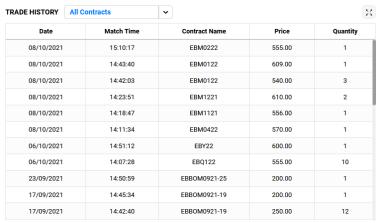


Figure 42: Dashboard Trade History

- Matchings for all the contracts are displayed.
- If a contract is selected from the order book, then all the matchings for the selected contract are displayed.
- If a contract is selected from the trade history filter, all the matchings for the selected contract are displayed.
- $\stackrel{\textstyle imes}{}$  icon opens the trade history in a separate pop-up and the size of the pop-up window can be changed.

#### 2.1.1.4. Order and Matchings

#### 2.1.1.4.1. My Orders

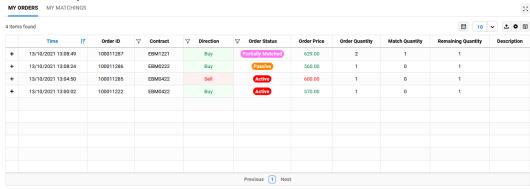


Figure 43: Dashboard - My Orders

- Organization's orders having status of active, passive, matched, partially matched, cancelled and suspended are displayed.
- Transactions made in the order book are displayed.



Figure 44: Dashboard - My Orders Filters

- 1- It displays the number of orders listed in the "My Orders" section.
- 2- icon opens the "My Orders" section in a separate pop-up window. The size of the pop-up window can be changed.
- 3- By using icon, orders to be displayed in the "My Orders" section can be filtered.



Figure 45: Dashboard – My Orders Data Display Selection

- 4- filter determines the number of orders to be displayed in the "My Orders" section without moving to the next page. 5, 10, 25 and 50 options are available.
- 5- icon exports the data displayed in the "My Orders" section.
- icon enables to drag and pin the columns displayed in the "My Orders" section.
- icon enables to hide or add columns displayed in the "My Orders" section.



Figure 46: Dashboard – My Orders Headings

icon enables the user to see the history of each order separately.

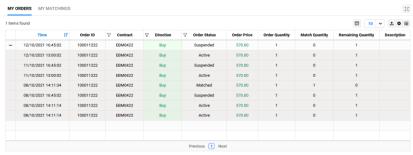


Figure 47: Dashboard – My Orders – Order History

- <u>Time</u>: It displays the order's operation time. 1 icon located on the "Time" heading sorts the orders based on time from old to new or from new to old.
- Order ID: Relevant order's ID is displayed.

- **Contract**: It displays the contract that the order is submitted.  $\nabla$  icon located on the "Contract" heading enables to filter contracts related to orders.
- <u>Direction</u>: It displays the direction of the order.  $\nabla$  icon located on the "Direction" heading enables to filter directions of orders.
- Order Status: It displays the latest status of the order. User can make changes according to the status of the order. Possible changes are listed as follows;
  - a- Active Update-Deactivate-Cancel b- Passive -> Update -Activate- Cancel c- Cancelled -> d- Suspended Deactivate - Cancel -> e- Expired Partially Matched Update (Remaining Quantity)- Deactivate - Cancel -> Matched ->
- In order to change the status of the order, the market participant needs to left click on the relevant row.

  According to the status of the order, available change options are listed. Desired change can be made by selecting one of the available options. Selected row is displayed in a different color.



Figure 48: Dashboard – My Orders – Changing Order Status

- Order updating pop-up window opens when the user selects the "Update".
- User is able to update the price and the quantity of the relevant order. The order loses the order priority following the update expect decreasing the order quantity.
- User is not able to change the direction of the order in the order updating pop-up window.
- User is able to change the order status from active to passive.
- User is able to add a new description to the order.
- User is able to save the changes by clicking on the Update button.
- User is able to cancel the changes by clicking on the cancel button.

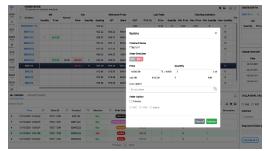


Figure 49: Dashboard – My Orders – Order Updating Pop-Up

- <u>Order Price</u>: It displays the price of the order. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Order Quantity: It displays the quantity of the order. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Match Quantity**: It displays the match quantity of the order. If the order status is partially matched, then the quantity of the last matching is displayed in the match quantity section. If the order is not matched, then it is diplayed as "0". The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Remaining Quantity**: It displays the remaining quantity of the order. If the order is matched, then the remaining quantity is displayed as "0". If the order is partially matched, then the remaining quantity of the order is displayed. If the order is not matched, then the order quantity is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Description**: It displays the text written in the description field while saving the order.

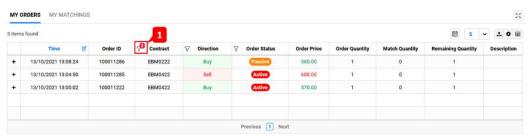


Figure 50: Dashboard – My Orders Filter

1- When the headings of "My Orders" section are filtered, the number of selected items within the filter is displayed on the filter icon.

#### 2.1.1.4.2. My Matchings



Figure 51: Dashboard – My Matchings

- Matchings occured in the order book are displayed.
- "Valid" and "Invalid" matchings belonging to the organizations are displayed.
- User can object to its matchings in the "My Matchings" section.



Figure 52: Dashboard - My Matchings Filter

- 1- It displays the number of matchings listed in the "My Matchings" section.
- 2- icon opens the "My Matchings" section in a separate pop-up window. The size of the pop-up window can be changed.
- 3- By using icon, matchings to be displayed in the "My Matchings" section can be filtered.



Figure 53: Dashboard – My Matchings Data Display Selection

- 4- filter determines the number of matchings to be displayed in the "My Matchings" section without moving to te next page. 5, 10, 25 and 50 options are available.
- 5- icon exports the data displayed in the "My Matchings" section.
- icon enables to drag and pin the columns displayed in the "My Matchings" section.
- icon enables to hide or add columns displayed in the "My Matchings" section.



Figure 54: Dashboard – My Matchings Headings

- **Match Time**: It displays the match time of the matchings. icon located on the "Match Time" heading sorts the matchings based on match time from old to new or from new to old.
- <u>Order ID</u>: The Order ID of the matched order is displayed. 
  ☐ icon located on the "Order ID" heading enables to filter Order ID related to matched orders. Clicking on the Order ID in the row opens the pop-up window displaying the version list of the relevant matching.

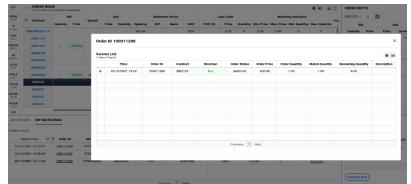


Figure 55: Dashboard – My Matchings Detail Pop-Up

- **Match ID**: Match ID of the matched order is displayed.
- **Contrat**: It displays the contract that the relevant order is matched. 

  √ icon located on the "Contract" heading enables to filter contracts related to matchings.
- <u>Direction</u>: It displays the direction of the matched order.  $\overrightarrow{V}$  icon located on the "Direction" heading enables to filter directions of matched orders.
- *Transaction Type*: The transaction type of the relevant matching is displayed.
- Match Status: It displays the status of the matching. There are two match statuses such as valid and invalid.
   Match status can be changed to invalid by the market operator following an accepted objection to the matching.
- **Match Price**: It displays the price of the matching. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Match Quantity**: It displays the match quantity of the matching. If the order is partially matched, then each partially matched quantity is displayed separately. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Objection</u>: It is the section where the user makes an objection to its matching. Objection needs to be made separately for each matching.
  - If the matching's state is open for objection, then the objection button object is displayed as active.
  - Objection to a matching can be made within the 15 minutes following the matching occurs.
  - Object button opens the pop-up window where the user enters the objection description. After entering the description, the object button on the pop-up window sends it to the market operator. The status of the objection is displayed as objected until the market operator answers it.
- If the objection is rejected, then the status of the objection is displayed as Rejected in the objection section.
- If the objection is accepted, then the status of the objection is displayed as section.
- If the objection period is passed, then the objection button object is displayed as passive.

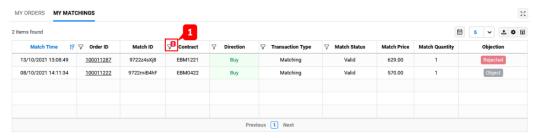


Figure 56: Dashboard - My Matchings Contract Filter

1- When the headings of "My Matchings" section are filtered, the number of selected items within the filter is displayed on the filter icon.

#### 2.1.1.5. Collateral Calculator

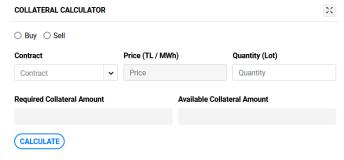


Figure 57: Dashboard – Collateral Calculator

- User is able to calculate the required collateral before saving the order.
- Order Direction: User needs to select the order direction for calculating contract collateral.
- **Contract List**: It is the section where the contract is selected for calculating the contract collateral.
- **Price (TL/MWh)**: It is the section where the order price is entered for calculating the contract collateral.

  The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity (Lot)**: It is the section where the order quantity is entered for calculating the contract collateral.

  The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Required Collateral Amount**: It is the section where the organization's total required collateral amount for saving the order is displayed. The unit of the amount is TL. It is sensitive to 2 decimal places.
- <u>Available Collateral Amount</u>: It is the section where the organization's available collateral amount at the moment of calculation is displayed. The unit of the amount is TL. It is sensitive to 2 decimal places.
- <u>Calculate</u>: button calculates the total required collateral amount for saving the order with the parameters entered by the user.

#### 2.2. Order and Matchings

#### 2.2.1. My Orders

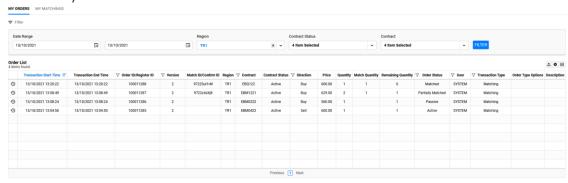


Figure 58: My Orders Page

- It is the page where the organization's all matchings and orders are displayed.



Figure 59: My Orders Filter

- 1- All the orders within the selected date range are displayed.
- 2- All the orders for the selected region are displayed.
- 3- Contract statuses are listed for the contracts having transaction. There are contract statuses of pending, active, suspended and closed.
- 4- The contracts that have transactions within the selected date range are listed.
- 5- It displays the data according to the selected filters.



Figure 60: My Orders Headings

- Order List: It displays the number of orders within the selected date range.
- icon exports the data displayed in the "My Orders" section.
- icon enables to drag and pin the columns displayed in the "My Orders" section.
- icon enables to hide or add columns displayed in the "My Orders" section.
- icon on the row opens the pop-up window displaying the version list of the order.

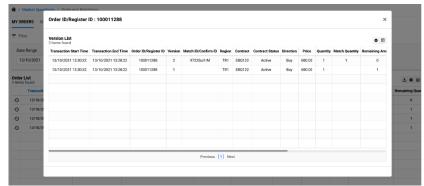


Figure 61: My Orders Version Pop-Up

- Version List: The number of versions for the relevant order is displayed in the version list pop-up window.
- <u>Transaction Start Time</u>: It displays the first transaction time for the relevant order.
- Transaction End Time: It displays the last transaction time for the relevant order.
- <u>Order ID / Register ID</u>: Relevant order's ID is displayed. If it is a trade registration, Register ID of the relevant trade registration is displayed.
- **Version**: The last version of the relevant order is displayed.
- <u>Match ID / Confirm ID</u>: Match ID of the matched order is displayed. If it is a trade registration, Confirm ID of the relevant trade registration is displayed.
- **Region**: It displays the region of the relevant order.
- **Contract**: It displays the contract that the relevant order is saved.
- <u>Contract Status</u>: It displays the status of the contract. There are contract statuses of pending, active, suspended and closed.
- <u>Direction</u>: It displays the direction of the order. Order direction can be buy or sell.
- **Price**: It displays the price of the order. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the quantity of the order. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Match Quantity**: It displays the match quantity of the order. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Remaining Quantity: It displays the remaining quantity of the order. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Order Status: It displays the status of the orders.
- <u>User</u>: It displays the name of the user that made the relevant operation on the order or matching.
- <u>Transaction Type</u>: It displays the transaction type of the relevant order. Transaction types;
  - Matching
  - Trade Registration
  - o DIP Auction
  - Basis Price Auction
  - o Default Auction
  - Default Order Book

#### 2.2.2. My Matchings

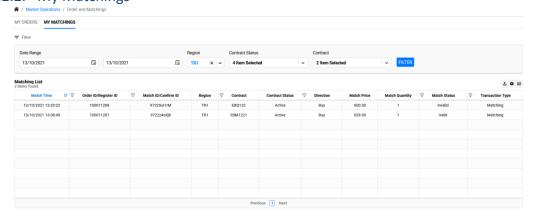


Figure 62: My Matchings

- All the matchings belonging to the organization are displayed.
- If the organization has partially matched order, then each partially matched quantity is displayed separately.



Figure 63: My Matchings Filter

- 1- All the matchings within the selected date range are displayed.
- 2- All the matchings for the selected region are displayed.
- 3- Contract statuses are listed for the contracts having transaction. There are contract statuses of pending, active, suspended and closed.
- 4- The contracts that have transactions within the selected date range are listed.
- 5- It displays the data according to the selected filters.



Figure 64: My Matchings Headings

- Matching List: It displays the number of matchings within the selected date range.
- icon exports the data displayed in the "My Matchings" section.
- icon enables to drag and pin the columns displayed in the "My Matchings" section.
- icon enables to hide or add columns displayed in the "My Matchings" section.
- **Match Time**: It displays the match time of the matchings.
- <u>Order ID / Register ID</u>: The Order ID of the matched order is displayed. If it is a trade registration, Register ID of the relevant trade registration is displayed.

- <u>Match ID / Confirm ID</u>: Match ID of the matched order is displayed. If it is a trade registration, Confirm ID of the relevant trade registration is displayed.
- **Region**: It displays the region of the relevant matching.
- **Contract**: It displays the contract that the relevant order is matched.
- <u>Contract Status</u>: It displays the status of the contract. There are contract statuses of pending, active, suspended and closed.
- Direction: It displays the direction of the matching. Matching direction can be buy or sell.
- **Match Price**: It displays the price of the matching. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Match Quantity</u>: It displays the match quantity of the matching. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Match Status: It displays the status of the matching. There are two match statuses such as valid and invalid.
   Match status can be changed to invalid by the market operator following an accepted objection to the matching.
- **Transaction Type**: It displays the transaction type of the relevant matching. Transaction types;
  - Matching
  - Synthetic Matching
  - Trade Registration
  - Default Matching
  - o DAM Default Matching
  - Default Auction
  - Default Order Book
  - o Default Position Allocation
  - o DIP Auction
  - o Basis Price Auction

#### 2.3. Trade Registration Entry

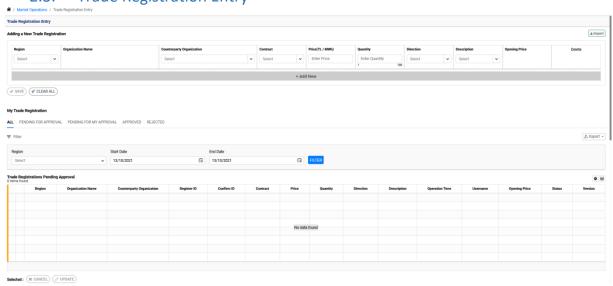


Figure 65: Trade Registration

- Organization is able to make a trade registration entry on an active contract by selecting a counterpart organization.
- Organization is able to update and cancel trade registrations pending for counterpart organization's

approval. Organization is able to reject and confirm trade registrations pending for its approval.

- Trade registration price is not included in the DIP calculations.



Figure 66: Trade Registration Entry

- 1- User selects the region for the trade registration.
- 2- The name of the organization is displayed for the user entering a trade registration.
- 3- It is the section where the counterparty organization is selected for trade registration by the user. Organizations having active market participation status are displayed.
- 4- It is the section where the contract is selected for the trade registration.
- 5- It is the section where the price is entered for the trade registration. The unit of the price is TL/MWh. It is sensitive to 2 decimal places. Price can be entered in the range of 0 2000 TL/MWh.
- 6- It is the section where the quantity is entered for the trade registration. The unit of the quantity is "Lot".

  1 Lot equals to 0,1 MW. Quantity can be entered in the range of 1 100 lot.
- 7- It is the section where the direction is selected for the trade registration.
- 8- It is the section where the description is selected for the trade registration. In this section, two descriptions are listed. Descriptions: "OTC" and "Trade Registration".
- 9- It is the section where the current opening price is displayed for the selected contract.
- 10- Multiple trade registrations can be entered. The button deletes the trade registration entry on the relevant row.
- 11- It enables to upload multiple trade registrations. After filling the excel template with the relevant values, the excel file needs to be uploaded in the pop-up window. Trade registration entries are saved following the verification of trade registration entries.

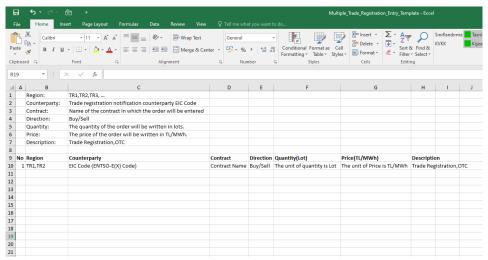


Figure 67: Uploading Multiple Trade Registrations

12- Multiple trade registrations can be entered. "+ Add New" button opens the new section to enter trade

registration.

13- It saves the values entered in the trade registration entry section. If the trade registration entry is saved, it is displayed as saved. If the trade registration entry is not saved, the reason for not saving it is displayed in the description.



Figure 68: Trade Registration Entry Information

14- It deletes all the values entered in the "Trade Registration Entry" section.

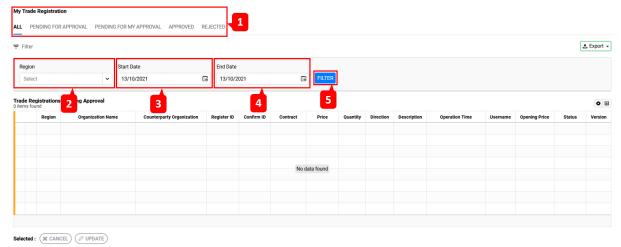


Figure 69: Trade Registration Filter

- 1- User is able to select "All", "Pending For Approval", "Pending For My Approval", "Approved", "Rejected" trade registration sections.
- 2- Region is selected for the trade registrations to be displayed in "My Trade Registration" section.
- 3- Data is displayed in the "My Trade Registrations" section starting from the selected date.
- 4- Data is displayed in the "My Trade Registrations" section up to the selected date.
- 5- Data is displayed in the "My Trade Registrations" section according to the selected filters.

# 2.3.1. Trade Registrations Pending Approval



Figure 70: Trade Registrations Pending Approval

- Trade Registrations Pending Approval List: It displays the number of items listed in the "Trade Registrations

- Pending Approval" section.
- By clicking on the icon on the row, the operation history of the trade registration pending approval is displayed.



Figure 71: Trade Registrations Pending Approval Detail

- Trade registrations need to be selected by the icon in order to make operations. The icon on the top row selects all the trade registrations.
- **Region**: It displays the region of the relevant trade registration.
- **Organization Name**: It displays the name of the organization which enters the trade registration in the "Trade Registration Entry" section.
- <u>Counterparty Organization</u>: It displays the name of the counterparty organization which is selected by the organization entering the trade registration. The counterparty organization's approval is pending.
- **Register ID**: It displays Register ID created for each saved trade registration entry.
- <u>Confirm ID</u>: It displays Confirm ID created for each approved trade registration entry. Each approved trade registration has a Confirm ID.
- <u>Contract</u>: It displays the name of the contract selected in the "Trade Registration Entry" section.
- <u>Price</u>: It displays the price entered in the "Trade Registration Entry" section. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the quantity entered in the "Trade Registration Entry" section. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Direction</u>: It displays the direction selected in the "Trade Registration Entry" section.
- <u>Description</u>: It displays the description selected in the "Trade Registration Entry" section.
- **Operation Time**: It displays the time that the trade registration entry is saved.
- **Username**: It displays the name of the user saving the trade registration entry.
- **Opening Price**: It refers to the daily opening price of the contract regarding the trade registration entry. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Status**: It displays the latest status of the trade registration.
- <u>Version</u>: It displays the latest version of the trade registration. Other versions are displayed in the detail section.
- <u>Update</u>: It enables to update the trade registrations listed in the "Trade Registrations Pending Approval" section. (□) icon needs to be selected in order to update the relevant trade registration. Trade registration corresponding to the selected icon will be updated. Price and quantity can be updated in the "Trade

Registration Update" pop-up window or the update can be cancelled.

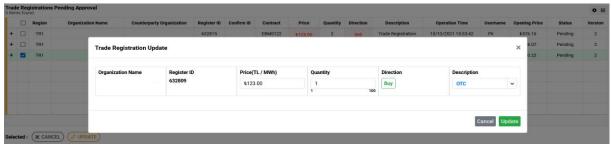


Figure 72: Trade Registration Updating Pop-Up

- <u>Cancel</u>: It is possible to cancel trade registrations listed in the "Trade Registrations Pending Approval" section. (□) icon needs to be selected in order to cancel the relevant trade registration. Trade registration corresponding to the selected icon will be cancelled.

# 2.3.2. Trade Registrations Pending For My Approval Trade Registrations Pending For My Approval Region organization Name Counterparty Organization Register ID Confirm 10 Contract Price Ouantity Direction Description Operation Time Opening Price Status Version Operation Time Opening Price Status Version Operation Time Opening Price Status Version Operation Time Opening Price Status Opening Price Opening P

Figure 73: Trade Registrations Pending For My Approval

- It is the section where the user confirm or reject trade registrations pending for its approval.
- Trade Registrations Pending For My Approval List: It displays the number of items listed in the "Trade Registrations Pending For My Approval" section.
- icon displays the history of the trade registration pending for the user's approval.
- icon needs to be selected in order to make operation on the relevant trade registration. The icon on the top row selects all the trade registrations.
- **Region**: It displays the region of the relevant trade registration.

(★ REJECT) (✔ CONFIRM

- <u>Organization Name</u>: It displays the name of the organization which enters the trade registration in the "Trade Registration Entry" section.
- <u>Counterparty Organization</u>: It displays the name of the counterparty organization which is selected by the organization entering the trade registration. The counterparty organization's approval is pending.
- Register ID: It displays Register ID created for each saved trade registration entry.
- <u>Confirm ID</u>: It displays Confirm ID created for each approved trade registration entry. Each approved trade registration has a Confirm ID.
- Contract: It displays the name of the contract selected in the "Trade Registration Entry" section.
- <u>Price</u>: It displays the price entered in the "Trade Registration Entry" section. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the quantity entered in the "Trade Registration Entry" section. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

- **Direction**: It displays the direction selected in the "Trade Registration Entry" section.
- **Description**: It displays the description selected in the "Trade Registration Entry" section.
- **Operation Time**: It displays the time that the trade registration entry is saved.
- Username: It displays the name of the organization saving the trade registration entry.
- **Opening Price**: It refers to the daily opening price of the contract regarding the trade registration entry. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Status**: It displays the latest status of the trade registration.
- <u>Version</u>: It displays the latest version of the trade registration. Other versions are displayed in the detail section.
- <u>Confirm</u>: It enables to confirm the trade registrations listed in the "Trade Registrations Pending For My Approval" section. (□) icon needs to be selected in order to confirm the relevant trade registration. Trade registration corresponding to the selected icon will be confirmed.
- <u>Reject</u>: It enables to reject the trade registrations listed in the "Trade Registrations Pending For My Approval" section. (□) icon needs to be selected in order to reject the relevant trade registration. Trade registration corresponding to the selected icon will be rejected.

#### 2.3.3. Approved Trade Registrations

Appr 1 iten	o III														
	Region	Organization Name	Counterparty Organization	Register ID	Confirm ID	Contract	Price	Quantity	Direction	Description	Operation Time	Username	Opening Price	Status	Version
-	TR1			1091076	2758ubd4tE	EBM0822	6100.00	1	Buy	отс	11/02/2022 14:05:31		61,309.80	Approved	4
	TR1			1091076		EBM0822	6100.00	1	Buy	отс	11/02/2022 14:05:30		61,309.80	Processing	3
	TR1			1091076		EBM0822	6100.00	1	Buy	отс	11/02/2022 14:03:32		61,309.80	Pending	2
	TR1			1091076		EBM0822	6100.00	1	Buy	отс	11/02/2022 14:03:32		61,309.80	Processing	1
П															
П															
					Previous 1	Next									

Figure 74: Approved Trade Registrations

- Approved Trade Registrations List: It displays the number of items listed in the "Approved Trade Registrations" section.
- By clicking on the ticon on the row, the operation history of the approved trade registration is displayed.
- **Region**: It displays the region of the relevant trade registration.
- **Organization Name**: It displays the name of the organization which enters the trade registration in the "Trade Registration Entry" section.
- <u>Counterparty Organization</u>: It displays the name of the counterparty organization which is selected by the organization entering the trade registration.
- Register ID: It displays Register ID created for each saved trade registration entry.
- <u>Confirm ID</u>: It displays Confirm ID created for each approved trade registration entry. Each approved trade registration has a Confirm ID.
- <u>Contract</u>: It displays the name of the contract selected in the "Trade Registration Entry" section.
- <u>Price</u>: It displays the price entered in the "Trade Registration Entry" section. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the quantity entered in the "Trade Registration Entry" section. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

- <u>Direction</u>: It displays the direction selected in the "Trade Registration Entry" section.
- **Description**: It displays the description selected in the "Trade Registration Entry" section.
- **Operation Time**: It displays the time that the trade registration entry is confirmed.
- **Username**: It displays the names of the organizations and the system.
- **Opening Price**: It refers to the daily opening price of the contract regarding the trade registration entry. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Status**: It displays the latest status of the trade registration.
- <u>Version</u>: It displays the latest version of the trade registration. Other versions are displayed in the detail section.

#### 2.3.4. Rejected and Canceled Trade Registrations

Region	Organization Name	Counterparty Organization	Register ID	Confirm ID	Contract	Price	Quantity	Direction	Description	Operation Time	Username	Opening Price	Status	Version
TR1			1089816	2758qYXxB7	EBY23	6100.00	1	Buy	отс	10/02/2022 15:34:39		\$1,297.60	Cancelled	5
TR1			1089816	2758qYXxB7	EBY23	6100.00	1	Buy	отс	10/02/2022 15:19:14		<b>61,297.60</b>	Approved	4
TR1			1089816		EBY23	6100.00	1	Buy	отс	10/02/2022 15:19:13		<b>61,297.60</b>	Processing	3
TR1			1089816		EBY23	6100.00	1	Buy	отс	10/02/2022 15:18:22		\$1,297.60	Pending	2
TR1			1089816		EBY23	6100.00	1	Buy	отс	10/02/2022 15:18:21		<b>61,297.60</b>	Processing	1

Figure 75: Rejected and Cancelled Trade Registrations

- Trade registrations cancelled by the organization/market operator or rejected by the counterparty organization are displayed in the "Rejected and Cancelled Trade Registrations" section.
- Rejected and Cancelled Trade Registrations List: It displays the number of items listed in the "Rejected and Cancelled Trade Registrations" section.
- By clicking on the ticon on the row, the operation history of the rejected or cancelled trade registration is displayed.
- **Region**: It displays the region of the relevant trade registration.
- <u>Organization Name</u>: It displays the name of the organization which enters the trade registration in the "Trade Registration Entry" section.
- <u>Counterparty Organization</u>: It displays the name of the counterparty organization which is selected by the organization entering the trade registration.
- **Register ID**: It displays Register ID created for each saved trade registration entry.
- <u>Confirm ID</u>: It displays Confirm ID created for each approved trade registration entry. Each approved trade registration has a Confirm ID.
- **Contract**: It displays the name of the contract selected in the "Trade Registration Entry" section.
- <u>Price</u>: It displays the price entered in the "Trade Registration Entry" section. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the quantity entered in the "Trade Registration Entry" section. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Direction</u>: It displays the direction selected in the "Trade Registration Entry" section.
- **Description**: It displays the description selected in the "Trade Registration Entry" section.
- Operation Time: It displays the time that the trade registration entry is rejected or cancelled.

- <u>Username</u>: It displays the names of the organizations and the system.
- **Opening Price**: It refers to the daily opening price of the contract regarding the trade registration entry. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Status**: It displays the latest status of the trade registration.
- <u>Version</u>: It displays the latest version of the trade registration. Other versions are displayed in the detail section.

# 2.4. Auction Management

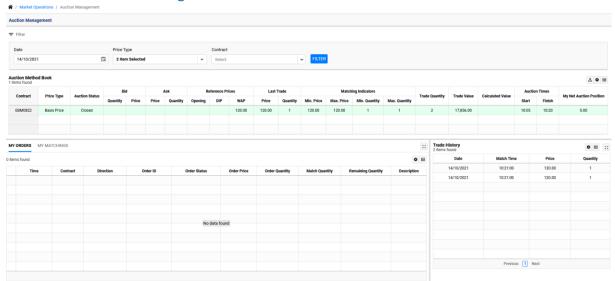


Figure 76: Auction Management

- User is able to submit an order for the contract in the DIP or Basis Price Auctions which are initiated by the market operator.
- The order submitted by the user is valid for its organization.
- The orders submitted in the auction are only valid for relevant auction.
- Bid and ask orders are submitted within the auction duration. Orders are matched according to the order priority and matching rules while the auction status is "Evaluating".
- If the market participant's order is matched in the auction, this matching becomes a position for the relevant market participant. Market participant is responsible from its matchings occured in the auction.
- Market participant is able to submit bid and ask orders within the auction period. Market participant is not able to submit self-matching bid and ask orders.
- The user can update or cancel the orders submitted to the auction.
- If the organization has a matching in the auction, the organization can make an objection to its matching.
- Active auctions are displayed in the "Auction Management" Page unless a date is selected.

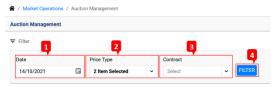


Figure 77: Auction Management Filter

- 1- It is the section where the date is selected. Active, cancelled and closed auctions are displayed for the selected date.
- 2- Price type of the auction is selected. Basis Price and DIP are the two available price types.
- 3- Contracts that have active, cancelled and closed auctions are listed in the contract filter.
- 4- Data regarding the auction(s) is displayed for the selected filters.

#### 2.4.1. Auction Method Book



Figure 78: Auction Method Book

- **Contract**: It displays the contracts that has an DIP-Basis Price Auction on it.



Figure 79: Auction Management Order Entry Pop-Up Window

- For submitting order to the auction, clicking on the contract name opens the order entry pop-up window.
  - A- It displays the available collateral amount during the order submission. The unit of the amount is TL. It is sensitive to 2 decimal places.
  - B- Order direction is selected for the order. There are two order directions: "Buy" and "Sell".
  - C- It is the section where the order price is entered. Price can be entered in the range of 0-2000 TL/MWh. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
  - D- It is the section where the order quantity is entered. Quantity can be entered in the range of 1
     100 lot. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - E- It is the section where the description is written.
  - F- After entering the values to the required sections, order is saved by clicking the "BUY/SELL". If "BUY" is selected in the order direction section, the button appears as "BUY". If "SELL" is selected in the order direction section, the button appears as "SELL".
- **Price Type**: It displays the type of the auction. Auction type: DIP or Basis Price Auction.
- Auction Status: The status of the auction is displayed. The status of the auction can be active,

cancelled, closed. If the auction is active, it has the statuses of pending, active, evaluating, object and answer objection. Auction status of each contract is independent.

- a- Cancelled: It states that the auction is cancelled by the market operator. Orders and matchings of the cancelled auction become invalid.
- b- Closed: It states that the auction is finished and closed.
- c- Active: It states that the auction is open for submitting order.
- d- Pending: It is the status before the auction becomes active.
- e- Evaluating: It states that the orders submitted to the auction are evaluated following the end of the auction order entry time. Orders are evaluated according to order entry time and price.
- f- Object: It states that it is possible to object to auction matching. In this status, pre-objection results regarding the relevant contract are dislayed.
- g- Answer Objection: It states that the market operator is answering the objections. Auction status becomes closed following the "Answer Objection" status ends.
- <u>Bid Quantity</u>: It displays the quantity of the bid order submitted to the auction for the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Bid Price</u>: It displays the price of the bid order submitted to the auction for the relevant contract.

  The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Ask Price</u>: It displays the price of the ask order submitted to the auction for the relevant contract.

  The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Ask Quantity</u>: It displays the quantity of the ask order submitted to the auction for the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Reference Prices Opening**: It displays the current opening price of the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Reference Prices DIP**: It displays the current DIP of the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Reference Prices WAP**: It displays the weighted average price of the auction matchings. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Last Trade Price</u>: It displays the matching price of the last matching in the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Last Trade Quantity</u>: It displays the matching quantity of the last matching in the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Matching Indicators Min. Price**: It displays the minimum matching price of the matchings in the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Matching Indicators Max. Price</u>: It displays the maximum matching price of the matchings in the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Matching Indicators Min. Quantity: It displays the minimum matching quantity of the matchings in the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Matching Indicators Max. Quantity: It displays the maximum matching quantity of the matchings

- in the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Quantity</u>: It displays the total matching quantity of the auction for the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Value</u>: It displays the total matching value of the auction for the relevant contract. The unit of the value is TL.
- <u>Calculated Value</u>: Weighted average price of the matchings calculated after the objections are
  answered is displayed in this section if the market operator publishes it for the contract. The unit
  of the price is TL/MWh. It is sensitive to 2 decimal places.
- Auction Start Time: It displays the auction start time for the relevant contract.
- Auction End Time: It displays the auction end time for the relevant contract.
- <u>My Net Auction Position</u>: It displays the net auction position based on the auction matchings after the auction is closed.
- icon exports the data displayed in the "Auction Method Book" section.
- icon enables to drag and pin the columns displayed in the "Auction Method Book" section.
- icon enables to hide or add columns displayed in the "Auction Method Book" section.

# 2.4.2. Auction Management My Orders and Matchings

# 2.4.2.1. Auction Management My Orders

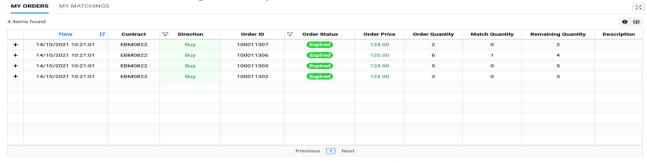


Figure 80: Auction Management My Orders

- It displays the orders and matchings data for the selected date and contract in the "Auction Management My Orders" section.
- <u>Time</u>: It displays the time for the latest status of the auction order.
- <u>Contract</u>: It displays the contract that the relevant order is saved for the auction.
- **Direction**: It displays the direction of the order submitted to the auction.
- Order ID: ID of the order submitted to the auction is displayed.
- Order Status: It displays the status of the order submitted to the auction. Order Status: Active, cancelled, matched, partially matched, expired, passive and suspended.
- <u>Order Price</u>: It displays the price of the order submitted to the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Order Quantity</u>: It displays the quantity of the order submitted to the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Match Quantity: It displays the match quantity of the order submitted to the auction. The unit of

- the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Remaining Quantity**: It displays the remaining quantity of the order submitted to the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Description</u>: It displays the description written in the order entry pop-up window of the auction.
- icon enables to drag and pin the columns displayed in the "Auction Management My Orders" section.
- icon enables to hide or add columns displayed in the "Auction Management My Orders" section.
- icon opens the "Auction Management My Orders/My Matchings" section in a separate pop-up window. The size of the pop-up window can be changed.

# 2.4.2.2. Auction Management My Matchings WY MATCHINGS 2 Items found Match Time IF Contract V Direction V Order ID Match ID Match Price Match Quantity V Match Status Objection 14/10/2021 10:21:00 EBM0822 Buy 100011306 972252k/08J 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Buy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 120.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 10:20.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 10:20.00 1 Valid Object 14/10/2021 10:21:00 EBM0822 Divy 100011306 97226Divz7 10:20.00 1 Valid Object 14/10/2021 10:21:00 1

#### Figure 81: Auction Management My Matchings

- It is the section where the auction matchings are displayed and objection is made for the matching.
- **Match Time**: It displays the match time of the matching.
- **Contract**: It displays the contract that the relevant order is matched in the auction.
- <u>Direction</u>: It displays the direction of the order matched in the auction. There are two directions: Buy and Sell.
- Order ID: ID of the order matched in the auction is displayed.
- Match ID: Match ID of the matching is displayed.
- Match Price: Match price of the matching is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Match Quantity**: Match quantity of the matching is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Match Status**: It displays the status of the matching. There are two match statuses: "Valid" and "Invalid". If the matching is valid, then the match status is displayed as "Valid". If the matching is invalid, then the match status is displayed as "Invalid".
- Objection: It is the section where the user makes an objection to its auction matching. If the status of the auction is "Object", an objection can be made for the matching. "Object" button will be active. Objection for a matching can be made by clicking the button and entering the objection description. If an objection is made, "Object" button changes into "Objected". Answer for the auction objection should be monitored in the "Objections" page.

- icon enables to drag and pin the columns displayed in the "Auction Management My Matchings" section.
- icon enables to hide or add columns displayed in the "Auction Management My Matchings" section.
- icon opens the "Auction Management My Orders/My Matchings" section in a separate pop-up window. The size of the pop-up window can be changed.

# 2.4.3. Auction Management Trade History



Figure 82: Auction Management Trade History

- It is the section where all the matchings are displayed for the selected contract.
- **Date**: It displays the date of the matching on the relevant contract.
- Match Time: It displays the match time of the matching on the relevant contract.
- **Price**: It displays the matching price of the matching. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the matching quantity of the matching. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- icon enables to drag and pin the columns displayed in the "Auction Management Trade History" section.
- icon enables to hide or add columns displayed in the "Auction Management Trade History" section.
- icon opens the "Auction Management Trade History" section in a separate pop-up window.

  The size of the pop-up window can be changed.

# 2.5. Survey Management

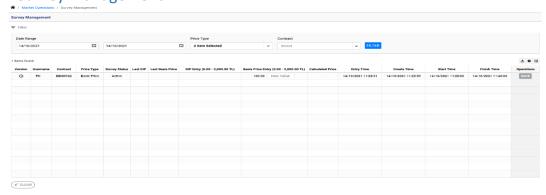


Figure 83: Survey Management

- User is able to submit prices to contracts within the surveys opened by the market operator in order to determine DIP or Basis Price of the relevant contracts.
- Active and pending surveys are displayed unless a date is selected.
- When the date is selected, active, pending, closed and cancelled surveys are displayed for the selected date range.
- User is able to submit multiple prices to the survey until the survey end time. The latest submitted price is used for calculating the survey result.



Figure 84: Survey Management Filter

- 1- It is the section where the start date and end date are selected. Active, pending, closed and cancelled surveys are displayed within the selected date range.
- 2- Survey type (price type) can be selected. DIP and basis price types can be selected separately or together. Surveys are displayed according to the selected price type.
- 3- Available contracts are listed. Data regarding the selected contracts are displayed.
- 4- FILTER button displays the data according to selected filters.



Figure 85: Survey Management Order Entry

- Number of surveys filtered by the user is displayed.

- <u>Version</u>: The version list of the prices submitted to the survey is displayed for the organization. The latest submitted price is used for calculating the survey result. button opens the pop-up window where the version list of the prices submitted to the survey for the relevant contract is dispalyed. All the prices submitted for the relevant contract are displayed. Username is the name of the organization's user who submits the relevant price on behalf of the organization.

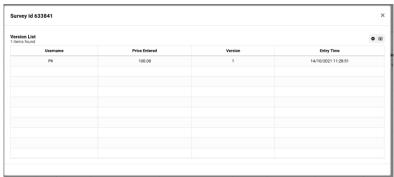


Figure 86: Survey Management Version List Pop-Up Window

- <u>Username</u>: Username is the name of the organization's user who submits the relevant price on behalf of the organization. The username corresponding to the last version is displayed.
- **Contract**: It displays the contract of DIP or basis price survey.
- **Price Type**: It displays the price type of the survey.
- <u>Survey Status</u>: It displays the status of the survey opened for DIP or basis price. Survey status can be active, pending, cancelled and closed.
- <u>Last DIP</u>: It displays the last DIP of the contract opened for survey. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Last Basis Price</u>: It displays the last basis price of the contract opened for survey. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>DIP Entry (0-2000 TL)</u>: It is the price submitted to the survey for determining the DIP. 0 2000 TL is the available range for submitting price. The unit of the price is TL/MWh. It is sensitive to 2 decimal places. Latest submitted price is displayed next to the section where the price for DIP is entered.
- Basis Price Entry (0-2000 TL): It is the price submitted to the survey for determining the basis price.
   0 2000 TL is the available range for submitting price. The unit of the price is TL/MWh. It is sensitive to 2 decimal places. Latest submitted price is displayed next to the section where the price for basis price is entered.
- <u>Calculated Price</u>: Following the end of the survey entry time, submitted prices are evaluated. It is the section where the calculated price is displayed if the market operator publishes the price for the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Entry Time**: It displays the price entry time for the relevant contract in the survey.
- <u>Create Time</u>: It displays the market operator's survey creation time for the relevant contract.
- **Start Time**: It displays the survey start time for the relevant contract.
- Finish Time: It displays the survey finish time for the relevant contract.

- <u>Operations</u>: "Save" button will be active when price is entered for the relevant contract. button saves the submitted price.
- VLEAR button deletes the entered price before saving it. It deletes the values entered in the section.

## 2.6. Cascading

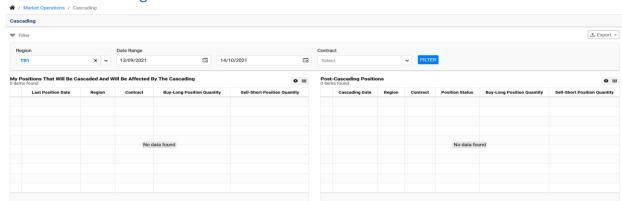


Figure 87: Cascading

- It is the page where the contracts with long or short positions are cascaded on the cascading date (last trade day for the relevant contract).
- Cascading is the process of transfering the open positions from year contract to quarter contracts and from quarter contracts to month contracts. Following the cascading operation, the transfered positions and the open positions on the target contract are offset if those positions have opposite directions. Following the cascading operation, the transfered positions are added to the open positions on the target contract if those positions have the same direction.



Figure 88: Cascading Filter

- 1- Region is selected for the cascading operation.
- 2- Start date and end date are selected for displaying the cascading operation within the date range.
- 3- It is the section where the contract is selected for the cascading operation.
- 4- It displays the data according to selected region, date range and contract filters.
- 5- It exports the data displayed in the cascading page in the selected format.

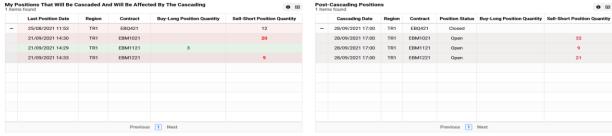


Figure 89: Cascading Detail

- Positions that will be cascaded and will be affected by the cascading operation and post-cascading positions are displayed.



Figure 90: My Positions That Will Be Cascaded And Will Be Affacted By The Cascading

- icon enables to drag and pin the columns displayed in the "My Positions That Will Be Cascaded And Will Be Affected By The Cascading" section.
- icon enables to hide or add columns displayed in the "My Positions That Will Be Cascaded And Will Be Affected By The Cascading" section.
- 1- Position that will be cascaded is displayed.
- 2- Positions that will be affected by the cascading are displayed.
  - Last Position Date: Last position date of the contracts having positions that will be cascaded and will be affected are displayed.
  - Region: Region of the positions that will be cascaded and will be affected are displayed.
  - **Contract**: Contracts having positions that will be cascaded and will be affected are displayed.
- Contracts are listed according to delivery period and load type in the contract column.
  - Delivery periods are sorted as year, quarter and month respectively.
  - Load types are sorted as base, peak and off-peak respectively.
- Cascading operation will take place between year and quarter contracts having the same load type.
- Cascading operation will take place between quarter and month contracts having the same load type.
  - <u>Buy-Long Position Quantity</u>: It is the quantity of the long positions that will be cascaded and will be affected by cascading. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - <u>Sell-Short Position Quantity</u>: It is the quantity of the short positions that will be cascaded and will be affected by cascading. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW

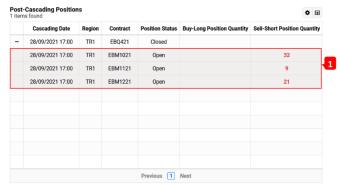


Figure 91: Post-Cascading Positions

- icon enables to drag and pin the columns displayed in the "Post-Cascading Positions" section.
- icon enables to hide or add columns displayed in the "Post-Cascading Positions" section.
- 1- Post-cascading positions are displayed.
  - Cascading Date: It is the date of cascading operation.
  - **Region**: The region of cascaded position is displayed.
  - **Contract**: The contract of cascaded position is displayed.
  - <u>Position Status</u>: It is the latest position status of cascaded contracts. There are two position status: "Open" and "Closed".
    - a- Open: The position status is displayed as "Open" if the relevant contract is open for trade and the delivery period has not started yet.
    - b- Closed: The position status is displayed as "Closed" if the relevant contract is not open for trade and the delivery period has started.
  - <u>Buy-Long Position Quantity:</u> It is the section where the long position quantity of contracts are displayed after the cascading operation. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - <u>Sell Short Position Quantity:</u> It is the section where the short position quantity of contracts are displayed after the cascading operation. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

#### 2.7. Net Balance and Positions

#### 2.7.1. Net Positions

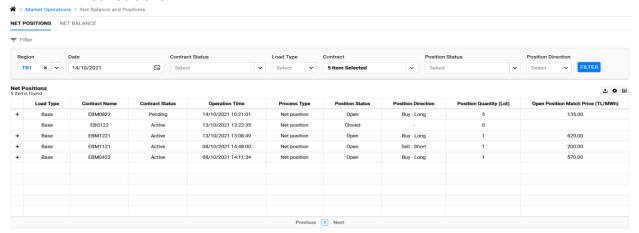


Figure 92: Net Positions

- Positions on the contracts are displayed as a result of the organization's matchings.
- The latest version of positions on the selected date is displayed.



Figure 93: Net Positions Filter

- 1- Region: The region of the net positions is selected.
- 2- Date: The date is selected for displaying the net positions on a specific date.
- 3- Contract Status: Status of the contract regarding the relevant position is displayed. Contract status can be pending, active, suspended and closed.
- 4- Load Type: Positions on the contracts are displayed according to selected load type.
- 5- Contract: Contracts having positions as a result of the matchings are listed.
- 6- Position Status: Status of position is selected. Position satutus can be "Open" or "Closed".
- 7- Position Direction: Direction of position is selected. Position direction can be "Buy-Long", "Sell-Short" and "Net Position".
- 8- Filter: Data is displayed in the page according to selected filters.

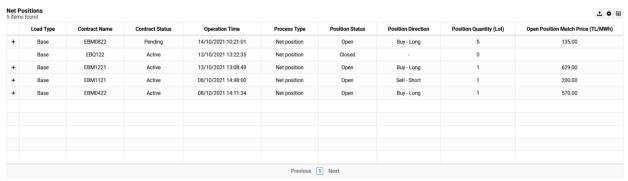
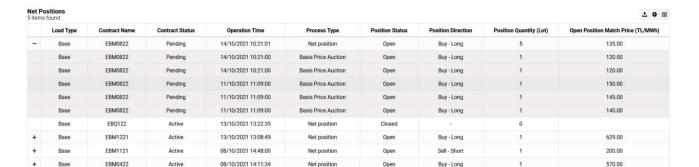


Figure 94: Net Positions Headings

- <u>Net Positions</u>: Number of positions is displayed for the selected date.
- icon exports the data displayed in the "Net Positions" section.
- icon displays the matchings composing the net position on the relevant contract.



Previous 1 Next

Figure 95: Net Positions Matching Details

- **Load Type**: It displays the load type of the contract having position on it. Positions are displayed separately for each load type.
- **Contract Name**: The name of the contract regarding the position is displayed.
- <u>Contract Status</u>: The status of the contract regarding the position is displayed. Contract status can be pending, active, suspended and closed.
- Operation Time: Creation time of the relevant position and matching is displayed.
- Process Type: The type of the matching on the relevant contract is displayed. Process types;
  - Matching
  - Synthetic Matching
  - Trade Registration
  - o DIP Auction
  - o Basis Price Auction
  - o Default Matching
  - o DAM Default Matching
  - Default Auction
  - Default Order Book
  - Default Position Allocation
- **Position Status**: The status of the position/matching is displayed. Position status:
  - Open; Position status is open for the matching quantities which are not offset by the matchings with opposite direction. The position is open if the position quantity on the net position is different from zero.
  - <u>Closed</u>; Position status is closed for the matching quantities which are offset by the matchings with opposite direction. The position is closed if the position quantity on the net position is zero.
- <u>Position Direction</u>: Direction of position is displayed as a result of the matchings composing the net position. Position direction can be "Buy-Long", "Sell-Short" and "Net Position".
- Position Quantity: The total quantity of the matchings composing the net position is displayed. If all the matchings have the same direction, then it is the total quantity of the matchings. If there are matchings with opposite directions on the contract, then the net position quantity after the offset is displayed in the net position row. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

- **Open Position Match Price**: Match price of the net open position is displayed for the contracts having net open positions. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
  - The weighted average matching prices of the matchings composing the net position is calculated as the open position match price.
  - If the net position status is closed, open position match price is not calculated and it is displayed as blank.

#### 2.7.2. Net Balance

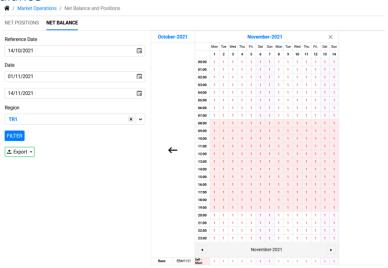


Figure 96: Net Balance

- Organization's hourly net balance is displayed for the filtered date range.
- Hourly net balance is calculated by offseting the positions of the contracts covering the same delivery period. If the positions have opposite directions, they are offset and the remaining open position is calculated as the hourly net balance. If the positions have the same direction, then the total open quantity is calculated as the hourly net balance. Calculated hourly net balance is displayed.

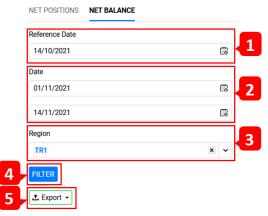


Figure 97: Net Balance Filter

- 1- End of day data for the selected date is displayed.
- 2- Net balance is displayed according to selected start and end dates.
- 3- Net balance is displayed for the selected region.

- 4- It displays the filtered data in the net balance section.
- 5- It exports the data displayed in the net balance section.



Figure 98: Net Balance Value Display

- 1- It displays the delivery period(s) for the selected date range and previous&following delivery periods of the selected date.
- 2- It directs to the section where the data is displayed for the previous delivery period of the selected date.
- 3- Load type of contracts regarding the positions is displayed. Net balance is displayed separately for each load type.
- 4- Contracts having positions covering the selected dates are displayed. Each contract is displayed separately.
- 5- It directs to the section where the data is displayed for the following delivery period of the selected date.
- 6- Single click on the relevant hour opens the pop-up window where the details of all matchings are displayed for the selected hour.

# 2.8. Limit Management

#### 2.8.1. Market Limits Screen

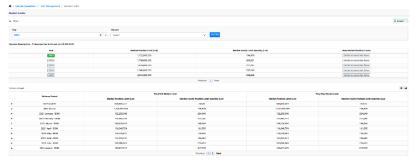


Figure 99: Market Limits

- Total market limit quantity is displayed separately for each year. Market limit refers to the maximum total open position quantity for the market.
- Hourly limit quantity depending on the market limit is also displayed.



Figure 100: Market Limits Filter

- 1- Years that have calculated market limits are listed.
- 2- It displays the versions of calculated market limits. Versions are listed according to the selected year.
- 3- It displays the data according to selected filters.
- 4- It exports the data displayed in the market limits section.
- 5- Version date is displayed in the version description.
- 6- Years that have calculated market limits are displayed. The color of the selected year is highlighted.

  Market limits based on delivery periods are displayed for the selected year.
- 7- Market position limit quantity is displayed for the years. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- 8- Market hourly limit quantity is displayed for the years. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- 9- If the market limits are updated, new market position limits and its effective date are displayed by clicking on the button. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.



Figure 101: Market Limits Headings

- Market Limits List: It displays the number of items for the selected year.
- 1- Delivery periods are displayed for the selected year.
- ticon displays the market limit details for each delivery period.



Figure 102: Market Limits Delivery Period Details

- 2- Total Sell Market Limits: Total short market position limit is displayed based on delivery period for the selected year.
  - a- Market Position Limit: Total short market position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - b- Market Hourly Position Limit Quantity: Total hourly short market position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- 3- Total Buy Market Limits: Total long market position limit is displayed based on delivery period for the selected year.
  - a- Market Position Limit: Total long market position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - b- Market Hourly Position Limit Quantity: Total hourly long market position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

# 2.8.2. Organization Limits

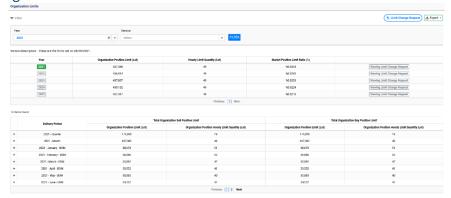


Figure 103: Organization Limits

- Organization limits are displayed separately for each year. Organization limit refers to the maximum total open position quantity for the organization.
- Organization's hourly limit quantity depending on the organization limits is also displayed.
- Organization's market position limit ratio is displayed for each year.



Figure 104: Organization Limits Filter

- 1- Years that have calculated organization limits are listed.
- 2- It displays the versions of calculated organization limits. Versions are listed according to the selected year.
- 3- It displays the data according to selected filters.
- 4- Organization requests to increase or decrease the organization limit.
- 5- It exports the data displayed in the organization limits section.

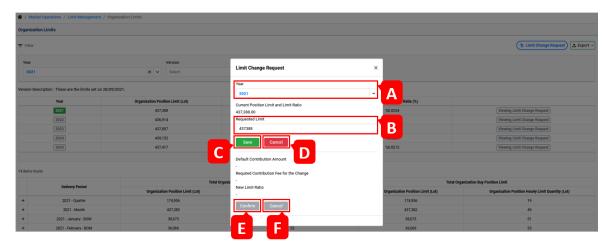


Figure 105: Organization Limit Change Request Pop-Up

- A- Relevant year is selected for limit change request.
- B- Requested limit quantity is entered.
- C- It saves the requested limit quantity.
- D- It cancels the requested limit quantity.
- E- New values are displayed in the "Default Contribution Amount", "Required Contribution Fee for the Change" and "New Limit Ratio" sections according to the requested change. "Confirm" button sends the request to market operator for evaluation.
- F- "Cancel" button cancels the request.
- 6- Version date is displayed in the version description.
- 7- Years that have calculated organization limits are displayed. The color of the selected year is highlighted.

  Organization limits based on delivery periods are displayed for the selected year.
- 8- Organization position limit quantity is displayed for the years. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- 9- Hourly limit quantity of the organization is displayed for the years. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- 10- Organization's market position limit ratio is displayed for each year.
- 11- New organization limits as a result of the limit change request are displayed.



Figure 106: Organization Limits Headings

- Organization limits list: It displays the number of items for the selected year.
- 1- Delivery periods are displayed for the selected year.
- ticon displays the organization limit details for each delivery period.



Figure 107: Organization Limits Delivery Period Details

- 2- Total Organization Sell Position Limit: Organization's total short position limit is displayed based on delivery period for the selected year.
  - a- Organization Position Limit: Organization's short position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - b- Organization Position Hourly Limit Quantity: Organization's hourly short position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- 3- Total Organization Buy Position Limit: Organization's total long position limit is displayed based on delivery period for the selected year.
  - a- Organization Position Limit: Organization's long position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
  - b- Organization Position Hourly Limit Quantity: Organization's hourly long position limit quantity is displayed based on delivery period for the selected year. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

# 2.9. License Status Monitoring

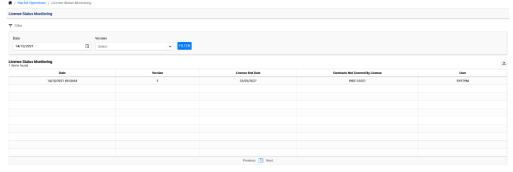


Figure 108: License Status Monitoring

- The contract(s) which are not covered by the organization's license end date, are listed in the license status monitoring page. Organization is not able to trade on those contracts.
- <u>Date Filter</u>: License status is displayed in the selected date. The data regarding the selected date is displayed in the page.
- <u>Version Filter</u>: Version count of the data regarding license control for the selected date is displayed. Data for selected version is displayed.
- **Filter**: It displays the data in the page according to the selected filters.
- <u>Date</u>: It displays the filtered date and the time of the license control on that day.

- **Version**: License control version on the relevant day is displayed.
- <u>License End Date</u>: Organization's license end date is displayed.
- Contracts Not Covered By License: The contracts that the organization is not able to trade are displayed.
- <u>User</u>: The user who carries out the license control is displayed.

# 2.10. Announcements and Objections

#### 2.10.1. Announcements

This page displays announcements which are made by the market operator or the system.

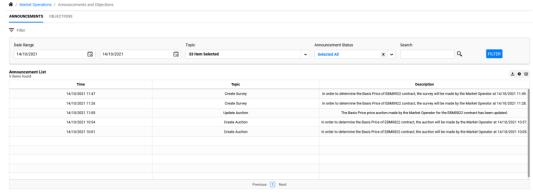


Figure 109: Announcements



Figure 110: Announcements Filter

- 1- When start and end dates are selected, announcements are displayed within the filtered date range.
- 2- Announcement topic is selected. Announcements for the selected topic are displayed.
- 3- Read and unread selections are listed in the announcement status filter. Announcements are displayed according to the selection.
- 4- It displays the announcements according to the selected filters in the page.
- 5- Announcements can be searched. Search is made according to the text written in this section.



Figure 111: Announcements Descriptions

- Announcement List: It displays the number of announcements for the selected date or date range.
- <u>Time</u>: It displays the date and the time of the relevant announcement.
- **Topic**: It displays the topic of the announcement.

- **Description**: It displays the text of the announcement.
- icon exports the information displayed in the page.

# 2.10.2. Objections

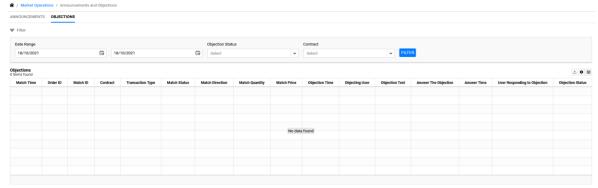


Figure 112: Objections

- User is able to view its organization's active, rejected and accepted objections, information regarding the objections, objection status and the market operator's answer to objection.



Figure 113: Objections Filter

- 1- When start and end dates are selected, objections having active, rejected and accepted status are displayed within the filtered date range.
- 2- Information is displayed according to the selected objection status.
- 3- Contracts that have objections are listed. Information is displayed according to the selected contract.
- 4- It displays the objection information according to the selected filters in the page.



Figure 114: Objection Headings

- **Objections**: It displays the number of objections for the selected date range.
- Match Time: It displays the match time of the objected matching.
- Order ID: It displays the order ID of the objected matching.
- <u>Match ID</u>: It displays the match ID of the objected matching.
- **Contract**: It displays the contract of the objected matching.
- Transaction Type: It displays the transaction type of the objected matching. Transaction types;

- Matching
- Synthetic Matching
- o DIP Auction
- Basis Price Auction
- o Default Matching
- o DAM Default Matching
- o Default Auction
- Default Order Book
- Default Position Allocation
- Match Status: It displays the match status of the objected matching.
- <u>Match Direction</u>: It displays the match direction of the objected matching. Match direction can be either buy or sell.
- Match Quantity: It displays the match quantity of the objected matching. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Match Price</u>: It displays the match price of the objected matching. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Objection Time: It displays the objection time of the objected matching.
- Objecting User: It displays the objecting user.
- **Objection Text**: It displays the text written in the description while saving the objection.
- Answer The Objection: It displays the text written by the market operator for answering the objection.
- **Answer Time**: It displays the time of the answer to the objection.
- <u>User Responding to Objection</u>: It displays the username that answers the objection.
- <u>Objection Status</u>: It displays the latest status of the objection. If the objection is not answered, the objection status is displayed as "Active". If the objection is answered and rejected, the objection status is displayed as "Reject". If the objection is answered and accepted, the objection status is displayed as "Approve".

## 2.11. Reports

#### 2.11.1. Contract Index Prices

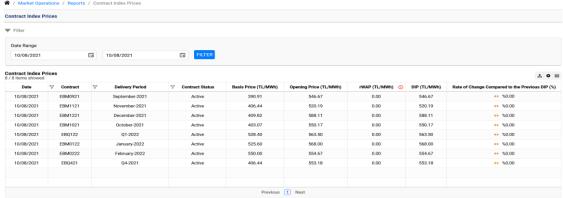


Figure 115: Contract Index Prices

Data regarding contract index prices are displayed for the selected date range.

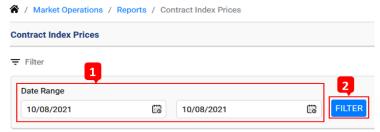


Figure 116: Contract Index Prices Filter

- 1- Contract index prices are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.



Figure 117: Contract Index Prices Detail

- icon exports the information displayed in the contract index prices section.
- By using icon, it is possible to drag and drop columns or the columns can be pinned.
- By using icon, it is possible to add and drop columns to the contract index prices section.
- **Date**: It displays the data for the selected date or date range.
- **Contract**: Active, suspended, pending and closed contracts are displayed for the selected date.
- **Delivery Period**: Contract's delivery period is displayed.
- **Contract Status**: Contract status is displayed. There are four different contract statuses: Active, suspended, pending and closed.
- **Basis Price**: Contract's basis price is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Opening Price</u>: Contract's opening price for the relevant day is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>rWAP</u>: The weighted average price of matchings occured in the order book, basis price auction, DIP auction and default order book is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>DIP</u>: Contract's daily index price for the relevant day is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Rate of Change Compared to The Previous DIP: DIP's rate of change compared to the previous DIP is displayed.

# 2.11.2. Contract Matching Prices

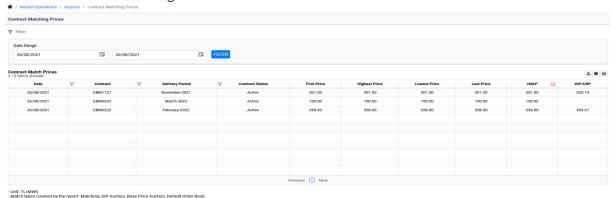


Figure 118: Contract Matching Prices

- Matching prices of the contracts are displayed for the relevant day.



Figure 119: Contract Matching Prices Filter

- 1- Matching prices of the contracts are displayed for the selected date range.
- 2- It displays the data for the selected date or date range.

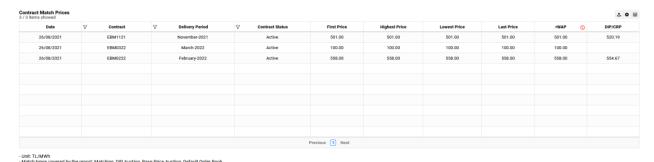


Figure 120: Contract Matching Prices Detail

- icon exports the data displayed in the "Contract Matching Prices" section.
- icon enables to drag and pin the columns displayed in the "Contract Matching Prices" section.
- icon enables to hide or add columns displayed in the "Contract Matching Prices" section.
- **Date**: It displays the day or the days according to the selected filters.
- **Contract**: It displays the contract that has valid matchings on it.
- <u>Delivery Period</u>: It displays the delivery period of the relevant contract.
- <u>Contract Status</u>: It displays the status of the relevant contract.
- First Price: It displays the first match price of the relevant contract on the relevant day. The unit of the

- price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Highest Price</u>: It displays the highest match price of the relevant contract on the relevant day. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Lowest Price**: It displays the lowest match price of the relevant contract on the relevant day. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Last Price</u>: It displays the last match price of the relevant contract on the relevant day. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **rWAP**: The weighted average price of matchings occured in the order book, basis price auction, DIP auction and default order book is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>DIP/CRP</u>: It displays the daily index price (DIP) and collateral reference price (CRP) of the relevant contract on the relevant day. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.

# 2.11.3. Contract Opening Closing Time

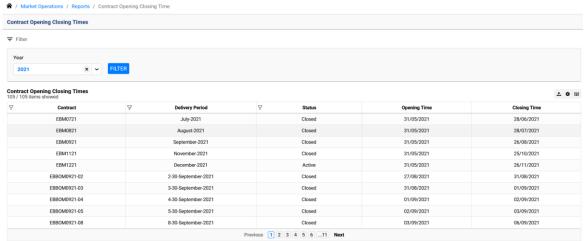


Figure 121: Contract Opening Closing Time

- Opening and closing dates of the contracts are displayed for the selected year.

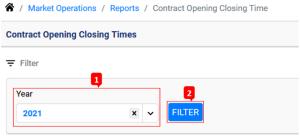


Figure 122: Contract Opening Closing Time Filter

- 1- Year is selected for filtering.
- 2- Data for the selected year is displayed.



Figure 123: Contract Opening Closing Time Detail

- icon exports the data displayed in the "Contract Opening Closing Time" section.
- icon enables to drag and pin the columns displayed in the "Contract Opening Closing Time" section.
- icon enables to hide or add columns displayed in the "Contract Opening Closing Time" section.
- **Contract**: It displays all the contracts for the selected year.
- **Delivery Period**: It displays the delivery period of the relevant contract.
- **Status**: It displays the status of the relevant contract for the selected day.
- **Opening Time**: It displays the opening time of the relevant contract.
- Closing Time: It displays the closing time of the relevant contract.

#### 2.11.4. Trade History

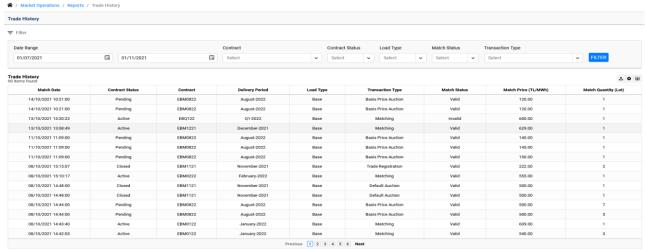


Figure 124: Trade History

- Matchings are displayed for the selected date range.



Figure 125: Trade History Filter

- 1- Date range is selected for displaying matchings.
- 2- Contract is selected for displaying matchings.
- 3- Contract status is selected for displaying matchings.

- 4- Load type is selected for displaying matchings.
- 5- Match status is selected for displaying matchings. There are two match statuses: "Valid" and "Invalid".
- 6- Transaction type is selected for displaying matchings. Transaction types:
  - Matching
  - Synthetic Matching
  - o Trade Registration
  - o DIP Auction
  - Basis Price Auction
  - Default Matching
  - DAM Default Matching
  - Default Auction
  - Default Order Book
  - Default Position Allocation
- 7- It displays the data according to the selected filters.

tory und								<b>±</b>
Match Date	Contract Status	Contract	Delivery Period	Load Type	Transaction Type	Match Status	Match Price (TL/MWh)	Match Quantity (Lot)
4/10/2021 10:21:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	120.00	1
4/10/2021 10:21:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	120.00	1
3/10/2021 13:20:22	Active	EBQ122	Q1-2022	Base	Matching	Invalid	600.00	1
3/10/2021 13:08:49	Active	EBM1221	December-2021	Base	Matching	Valid	629.00	1
1/10/2021 11:09:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	140.00	1
1/10/2021 11:09:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	145.00	1
1/10/2021 11:09:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	150.00	1
18/10/2021 15:15:07	Closed	EBM1121	November-2021	Base	Trade Registration	Valid	222.00	2
18/10/2021 15:10:17	Active	EBM0222	February-2022	Base	Matching	Valid	555.00	1
18/10/2021 14:48:00	Closed	EBM1121	November-2021	Base	Default Auction	Valid	500.00	1
8/10/2021 14:48:00	Closed	EBM1121	November-2021	Base	Default Auction	Valid	500.00	1
18/10/2021 14:44:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	500.00	7
18/10/2021 14:44:00	Pending	EBM0822	August-2022	Base	Basis Price Auction	Valid	500.00	3
18/10/2021 14:43:40	Active	EBM0122	January-2022	Base	Matching	Valid	609.00	1
18/10/2021 14:42:03	Active	EBM0122	January-2022	Base	Matching	Valid	540.00	3

Figure 126: Trade Hitory Detail

- Match Date: It displays the date of the matching.
- **Contract Status**: It displays the status of contract regarding the matching.
- <u>Contract</u>: It displays the contract regarding the matching.
- **Delivery Period**: It displays the delivery period of the contract regarding the matching.
- **Load Type**: It displays the load type of the contract regarding the matching.
- <u>Transaction Type</u>: It displays the transaction type of the matching.
- Match Status: It displays the match status of the matching.
- **Match Price**: It displays the match price of the matching. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Match Quantity**: It displays the match quantity of the matching. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- icon exports the data displayed in the "Trade History" section.
- icon enables to drag and pin the columns displayed in the "Trade History" section.
- icon enables to hide or add columns displayed in the "Trade History" section.

#### 2.11.5. Trade Quantity



Figure 127: Trade Quantity

- Data regarding the trade quantity are displayed for the selected date range.

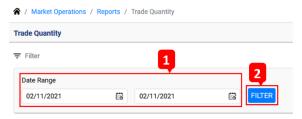


Figure 128: Trade Quantity Filter

- 1- Trade quantities are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.



Figure 129: Trade Quantity Detail

- **Date**: It displays the date of the trade.
- **Cascading Date**: It displays the cascading date if the cascading operation is made for the relevant contract.
- **Contract**: It displays the contract regarding the matching.
- **Delivery Period**: It displays the delivery period of the contract regarding the matching.
- Contract Status: It displays the status of contract regarding the matching.
- **Market Trade Quantity**: Total market trade quantity of the relevant contract is displayed for the relevant day. Matchings included in the Market Trade Quantity: Matching, DIP Auction, Basis Price Auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Registration Quantity</u>: Total trade registration quantity of the relevant contract is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Total Trade Quantity</u>: The sum of Market Trade Quantity and Trade Registration Quantity is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Synthetic Buy Quantity</u>: Total synthetic buy quantity of the relevant contract is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Synthetic Sell Quantity**: Total synthetic sell quantity of the relevant contract is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Long Open Position Quantity: Long open position quantity of the relevant contract is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Short Open Position Quantity**: Short open position quantity of the relevant contract is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

- <u>Buy Open Position Change Rate Compared to the Previous Day (%)</u>: Relevant contract's buy open position change rate compared to the previous day is displayed for the relevant day. It is displayed in percentage.
- <u>Sell Open Position Change Rate Compared to the Previous Day (%)</u>: Relevant contract's sell open position change rate compared to the previous day is displayed for the relevant day. It is displayed in percentage.
- icon exports the data displayed in the "Trade Quantity" section.
- icon enables to drag and pin the columns displayed in the "Trade Quantity" section.
- icon enables to hide or add columns displayed in the "Trade Quantity" section.

#### 2.11.6. Trade Value

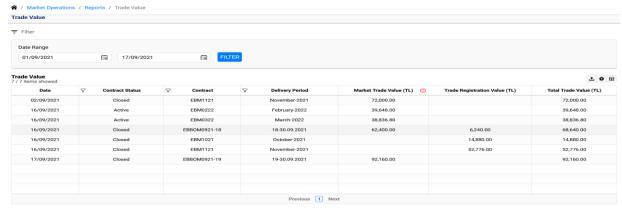


Figure 130: Trade Value

- Data regarding the trade value are displayed for the selected date range.



Figure 131: Trade Value Filter

- 1- Trade values are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.

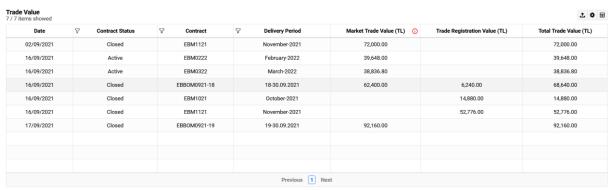


Figure 132: Trade Value Detail

- <u>Date</u>: It displays the date of the trade.
- Contract Status: It displays the status of contract regarding the matching.
- Contract: It displays the contract regarding the matching.

- **Delivery Period**: It displays the delivery period of the contract regarding the matching.
- Market Trade Value: Total market trade value of the relevant contract is displayed for the relevant day. It is displayed in terms of TL. Matchings included in the Market Trade Value:
  - Matching
  - Synthetic Matching
  - o DIP Auction
  - o Basis Price Auction
  - Default Matching
  - o DAM Default Matching
  - Default Auction
  - Default Order Book
  - o Default Position Allocation
- <u>Trade Registration Value</u>: Total trade registration value of the relevant contract is displayed for the relevant day. It is displayed in terms of TL.
- <u>Total Trade Value</u>: The sum of Market Trade Value and Trade Registration Value is displayed. It is displayed in terms of TL.
- icon exports the data displayed in the "Trade Value" section.
- icon enables to drag and pin the columns displayed in the "Trade Value" section.
- icon enables to hide or add columns displayed in the "Trade Value" section.

# 2.11.7. Number of Order and Trade

#### 2.11.7.1. Contract-Based Order and Trade Counts

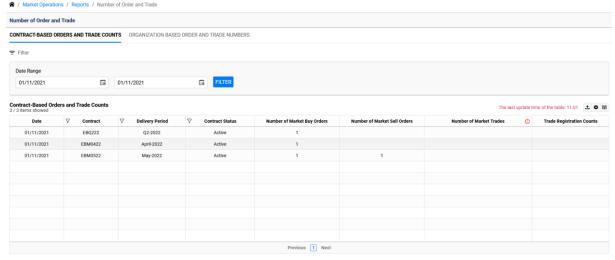


Figure 133: Contract-Based Order and Trade Counts

- Order and trade counts within the selected date range are displayed for the contracts (except pending contracts).

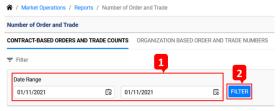


Figure 134: Contract-Based Order and Trade Counts

- 1- Contract based order and trade counts are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.



Figure 135: Contract-Based Order and Trade Counts Details

- Date: It displays the date of trades and orders.
- **Contract**: It displays the contract that has trade or order.
- **Delivery Period**: It displays the delivery period of the contract.
- **Contract Status**: It displays the status of the contract.
- Number of Market Buy Orders: It displays the number of submitted buy orders.
- Number of Market Sell Orders: It displays the number of submitted sell orders.
- **Number of Market Trades**: Number of market trades coming from matching, DIP auction and basis price auction is displayed.
- Trade Registration Counts: It displays the number of trade registrations for the relevant day.
- icon exports the data displayed in the "Contract Based Order and Trade Counts" section.
- icon enables to drag and pin the columns displayed in the "Contract Based Order and Trade Counts" section.
- icon enables to hide or add columns displayed in the "Contract Based Order and Trade Counts" section.

### 2.11.7.2. Organization Based Order and Trade Numbers

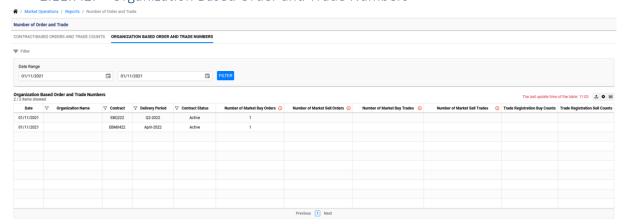


Figure 136: Organization Based Order and Trade Numbers

- Organization based number of order and trade within the selected date range are displayed for the contracts (except pending contracts).

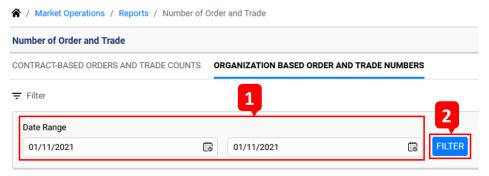


Figure 137: Organization Based Order and Trade Numbers Filter

- 1- Organization based numbers of order and trade are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.



Figure 138: Organization Based Order and Trade Numbers Detail

- **Date**: It displays the date of trades and orders belonging to the organization.
- **Organization Name**: Organization's name is displayed.
- **Contract**: It displays the contract that the organization has trade or order on it.
- **Delivery Period**: It displays the delivery period of the contract.
- Contract Status: It displays the status of the contract.
- Number of Market Buy Orders: It displays the number of buy orders submitted by the organization.
- Number of Market Sell Orders: It displays the number of sell orders submitted by the organization.
- Number of Market Buy Trades: It displays the number of organization's buy matchings.
- Number of Market Sell Trades: It displays the number of organization's sell matchings.
- <u>Trade Registration Buy Counts</u>: It displays the number of organization's buy trade registrations.
- <u>Trade Registration Sell Counts</u>: It displays the number of organization's sell trade registrations.
- icon exports the data displayed in the "Organization Based Order and Trade Numbers" section.
- icon enables to drag and pin the columns displayed in the "Organization Based Order and Trade Numbers" section.
- icon enables to hide or add columns displayed in the "Organization Based Order and Trade Numbers" section.

### 2.11.8. Quantity of Buy and Sell Orders

### 2.11.8.1. Contract Based Order and Trade Quantities

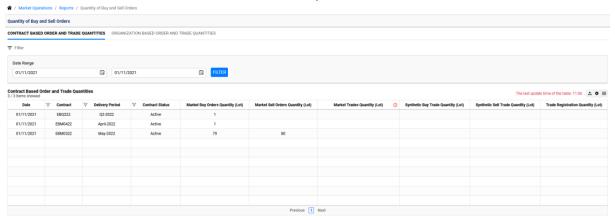


Figure 139: Contract Based Order and Trade Quantities

- Contract based order and trade quantities within the selected date range are displayed for the contracts.

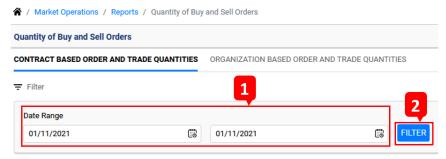


Figure 140: Contract Based Order and Trade Quantities Filter

- 1- Contract based order and trade quantities are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.



Figure 141: Contract Based Order and Trade Quantities

- **Date**: It displays the date of trades and orders.
- **Contract**: It displays the contract that has trade or order.
- **Delivery Period**: It displays the delivery period of the contract.
- **Contract Status**: It displays the status of the contract.
- Market Buy Orders Quantity: It displays the total quantity of market buy orders for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

- Market Sell Orders Quantity: It displays the total quantity of market sell orders for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Market Trades Quantity: Total quantity of market trades coming from matching, DIP auction and basis price auction is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Synthetic Buy Trade Quantity</u>: Total quantity of synthetic buy trades is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Synthetic Sell Trade Quantity</u>: Total quantity of synthetic sell trades is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Registration Quantity</u>: Total quantity of trade registrations is displayed for the relevant day. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- icon exports the data displayed in the "Contract Based Order and Trade Quantities" section.
- icon enables to drag and pin the columns displayed in the "Contract Based Order and Trade Quantities" section.
- icon enables to hide or add columns displayed in the "Contract Based Order and Trade Quantities" section.

### 2.11.8.2. Organization Based Order and Trade Quantities

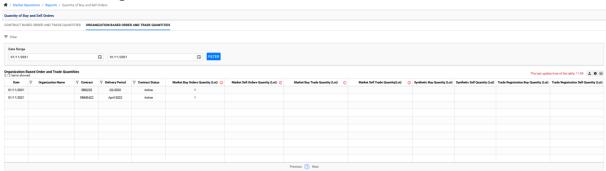


Figure 142: Organization Based Order and Trade Quantities

- Organization based order and trade quantities within the selected date range are displayed for the contracts.



Figure 143: Organization Based Order and Trade Quantities Filter

- 1- Organization based order and trade quantities are displayed for the date range by selecting start and end dates.
- 2- Data is displayed for the selected date or date range.



Figure 144: Organization Based Order and Trade Quantities Details

- **Date**: It displays the date of trades and orders belonging to the organization.
- Organization Name: Organization's name is displayed.
- **Contract**: It displays the contract that the organization has trade or order on it.
- **Delivery Period**: It displays the delivery period of the contract.
- Contract Status: It displays the status of the contract.
- Market Buy Orders Quantity: It displays the total quantity of buy orders submitted by the organization.

  The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Market Sell Orders Quantity: It displays the total quantity of sell orders submitted by the organization.

  The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Market Buy Trade Quantity: It displays the total quantity of organization's buy matchings coming from matching, DIP auction and basis price auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Market Sell Trade Quantity: It displays the total quantity of organization's sell matchings coming from matching, DIP auction and basis price auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Synthetic Buy Quantity**: It displays the total quantity of organization's synthetic buy matchings. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Synthetic Sell Quantity**: It displays the total quantity of organization's synthetic sell matchings. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Registration Buy Quantity</u>: It displays the total quantity of organization's buy trade registrations. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Registration Sell Quantity</u>: It displays the total quantity of organization's sell trade registrations. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- icon exports the data displayed in the "Organization Based Order and Trade Quantities" section.
- icon enables to drag and pin the columns displayed in the "Organization Based Order and Trade Quantities" section.
- icon enables to hide or add columns displayed in the "Organization Based Order and Trade Quantities" section.

### 2.12. Operations History

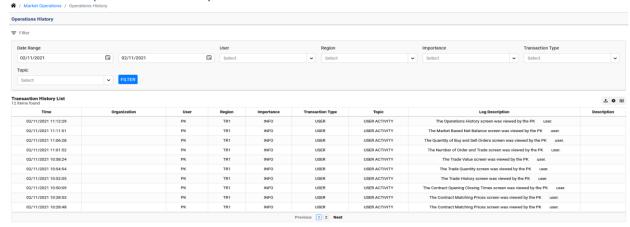


Figure 145: Operations History

It is the section where the user logs are displayed.



Figure 146: Operations History Filter

- 1- User logs are displayed for the date range by selecting start and end dates.
- 2- All the users belonging to the organization are listed.
- 3- Region is listed.
- 4- Types of user log importance are listed: "Info", "Warning" and "Error".
- 5- The user who performs the operation is listed: "System" and usernames.
- 6- Topics regarding the user logs are listed.
- 7- "Filter" button displays the data according to the selected filters.



Figure 147: User Logs

- Transaction History List: It displays the number of user logs for the selected date range and filters.
- <u>Time</u>: It displays the operation time of the user log.
- Organization: It displays the organization name of the user.
- <u>User</u>: It displays the username of the user who performs the operation.
- Region: It displays the region of the user log.
- <u>Importance</u>: It displays the importance of the user log.

- *Transaction Type*: It displays the username of the user who performs the operation.
- **Topic**: Topic regarding the user log is displayed.
- Log Description: Log description for the user log is displayed.
- <u>Description</u>: Description of the user log is displayed in this section if the user has entered a description for the relevant operation.
- icon exports the data displayed in the "Operation History" section.
- icon enables to drag and pin the columns displayed in the "Operation History" section.
- 国 icon enables to hide or add columns displayed in the "Operation History" section.

# 3. Collateral Operations



Figure 148: Collateral Operations Menu

Collateral Operations Menu consists of three headings as shown in the figure:

- Collateral Information
- Intra-Seance Collateral
- DGF Information

### 3.1. Collateral Information

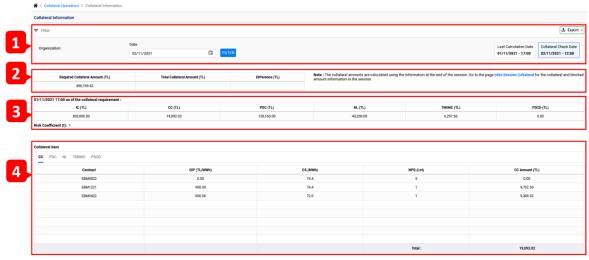


Figure 149: Collateral Information

The Collateral Information page is divided into 4 sections;

- 1- By selecting the date on the left, the filter button is pressed, and the collateral amount information on the desired date is displayed. The last calculation date for the relevant collateral items and the collateral control date are on the right.
- 2- Required collateral amount information and current collateral amount information are displayed.

- 3- Items constituting the required total collateral;
  - Initial collateral (IC),
  - Contract collateral (CC),
  - Physical delivery collateral (PDC),
  - Net Loss (NL),
  - Total markt to market collateral (TMtMC),
  - Perfect spread position collateral (PSPCD).
- 4- Detailed collateral information is available for collateral items.

Collateral information can be downloaded in excel, pdf and csv formats with the button on the top right of the page.

### 3.1.1. Contract Collateral (CC)

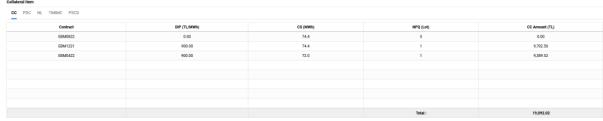


Figure 150: CC Items

CC can be selected from the tabs in the fourth section of the collateral information. The contract name, the DIP of the contract, the size of the contract, the net position quantity and the contract collateral amount calculated for the relevant contract, and the total contract collateral amount of the participant in the last line.

### 3.1.2. Physical Delivery Contract (PDC)



Figure 151: PDC Items

In the PDC tab, the delivery period, the net long position quantity (NLPQ), the net short position quantity (NSPQ), the physical delivery collateral amount (LPDC) calculated for long (buy) positions and the physical delivery collateral amount (SPDC) calculated for short (sell) positions are displayed. The bottom line contains the total amount information of LPDC and SPDC.

### 3.1.3. Net Loss (NL)

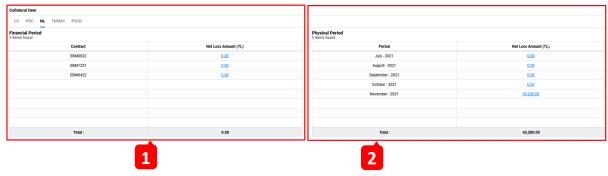


Figure 152: Net Loss

In the NL tab, two detail tables are displayed; the financial period and the physical period, which include the net loss amounts arising from the transactions for the financial and physical periods. In the financial period part, the contract names and net loss amounts, and in the physical period part, the net loss amount information calculated for the periods in which physical delivery begins.

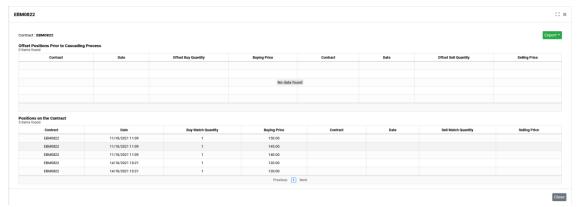


Figure 153: Financial Period Net Loss Details

1- When the links in the Financial Period Net Loss Amount column are clicked, a window opens with information on the positions that were offset before the cascading process on a contract basis and the positions on the contract. The button in the window allows the tables to be downloaded in excel, pdf and csv formats.



Figure 154: Physical Period Net Loss Details

2- When the links in the Physical Period Net Loss Amount column are clicked, a window opens with information on the positions that were offset before the cascading process on a period basis and the positions on the contract. The button in the window allows these tables to be downloaded in excel, pdf and csv formats.

### 3.1.4. Total Mark to Market Collateral (TMtMC)

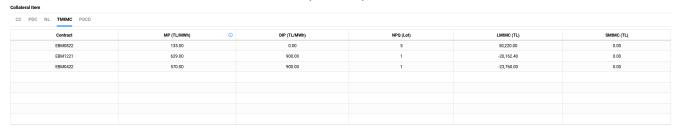


Figure 155: Total Mark to Market Collateral

In the TMtMC tab, the relevant contract, the weighted average price (AP) of the matches that constitutes the open position in the relevant contract, the Daily Index Price (DIP), the Net Position Quantity (NPQ), the mark to market collateral for the long positions (LMtMC), the markt to market collateral for the short positions (SMtMC) information are displayed.

### 3.1.5. Perfect Spread Position Collateral Discount (PSPCD)



Figure 156: Perfect Spread Position Collateral Discount

In the PPSCD tab, the first column shows the spread number, the contract column shows the contracts included in the spread, the "DIP" column shows the daily index prices of the contracts included in the spread, the "Quantity" column shows the quantities subject to the spread, and the "PSPCD" column shows the perfect spread position collateral discount amount.

### 3.2. Intra Seance Collateral

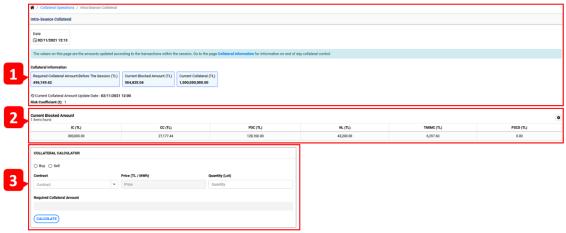


Figure 157: Intra Seance Collateral

By clicking on the "In-Seance Collateral" link displayed in the Collateral Operations menu, the "Intra-Seance Collateral" page is opened, where the blocked collateral amounts calculated according to the transactions in the

seance are displayed.

- A- The required collateral amount before the seance, the current blocked amount calculated according to the transactions made during the seance and the current collateral amount information are included.
- B- Collateral items that make up the current blocked amount;
  - Initial Collateral (IC),
  - Contract Collateral (CC),
  - Physical Delivery Collateral (PDC),
  - Net Loss (NL),
  - Total Mark to Market Collateral (TMtMC),
  - Perfect Spread Position Collateral Discount (PSPCD).
- C- There is a collateral calculator that can be used to calculate the required collateral amount for a new order. "Buy" or "Sell" direction is selected, contract of the relevant order, order price and order quantity information is entered and the required collateral amount is calculated.

### 3.3. DGF Information

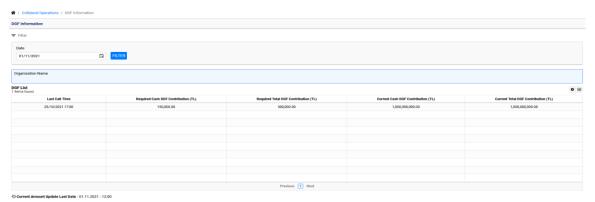


Figure 158: DGF Information

By clicking on the "DGF Information" link displayed in the Collateral Operations menu, the default guarantee fund contribution information page is opened. When filtering is done by selecting the date, the table containing the last call date and the required and current DGF contribution amounts is displayed. "Current Amount Last Updated Date" at the bottom of the table refers to the last update date of the current DGF amount information.

# 4. Default Operations

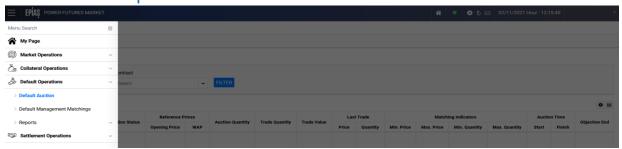


Figure 159: Default Operations Menu

Default Operations Menu consists of three headings as shown in the figure:

- Default Auction
- Default Management Matchings
- Reports

### 4.1. Default Auction

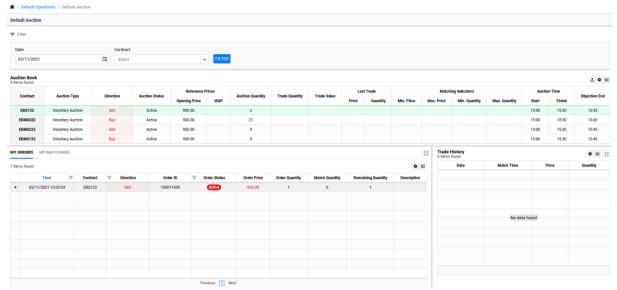


Figure 160: Default Auction Screen

- Voluntary/mandatory auctions opened for closing the open positions of default organization(s) are displayed.
- The market participants who are not in default, are able to view the opened auctions and submit orders to the contracts.
- The market participants who are not in default, are able to view default auction results, their own orders and their own matchings.

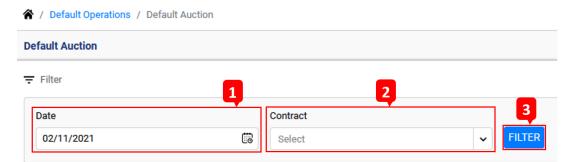


Figure 161: Default Auction Filter

- 1- Date is selected for displaying the default auction on the relevant date.
- 2- Contract is selected for displaying the default auctions opened for the relevant contract.
- 3- Auctions are displayed for the selected date and contracts.

### 4.1.1. Default Auction Book



Figure 162: Default Auction Book

- It displays the number of items listed in the default auction book.
- icon signals that PFM application is active for submitting orders, system is running and access is granted.
- icon exports the data displayed in the "Default Auction Book" section. The contract needs to be selected for exporting the data. The data regarding the selected contract is exported. The exported file includes orders, matchings and trade history of the selected contract.
- icon enables to drag and pin the columns displayed in the "Default Auction Book" section.



Figure 163: Default Auction Book Table Settings

- icon enables to hide or add columns displayed in the "Default Auction Book" section.
- <u>Contract:</u> It displays the contract of the default auction opened for closing the open positions of default organization(s).

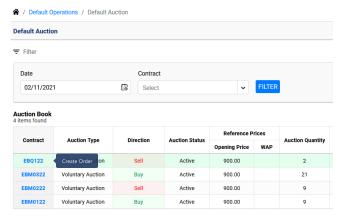


Figure 164: Default Auction Order Creation

a- For submitting order to the default auction, single left click on the relevant active contract name opens the "Create Order" button. Clicking on the "Create Order" button opens the order entry pop-up window.

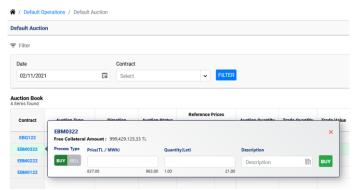


Figure 165: Default Auction Order Entry Pop-up

- a- When the order entry pop-up window is opened, process type (direction) of the order is pre-selected according to the direction of the default auction.
- b- Order price is entered within the range calculated with the opening price. Maximum order quantity is limited to the default auction quantity.
- c- After entering the values to the required sections, order is saved by clicking the "BUY/SELL" button.
- <u>Auction Type:</u> It displays the type of the default auction. There are two types of default auctions: Voluntary and Mandatory.
- <u>Direction:</u> It displays the direction of the order to be submitted to the contract.
- <u>Auction Status:</u> The status of auction is displayed for each contract. The status of the auction can be pending, active, object, cancelled and closed.
- Opening Price: It displays the opening price of the relevant contract. The unit of the price is TL/MWh.
   It is sensitive to 2 decimal places.
- <u>WAP:</u> Weighted average price of the matchings on the contract is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Auction Quantity: The total quantity of the auction is displayed for the contract. The unit of the

- quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Quantity:</u> Total matching quantity in the auction is displayed for the contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Trade Value</u>: It displays the total matching value of the auction for the relevant contract. The unit of the value is TL.
- <u>Last Trade Price</u>: It displays the matching price of the last matching in the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Last Trade Quantity: It displays the matching quantity of the last matching in the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Matching Indicators Min. Price</u>: It displays the minimum matching price of the matchings in the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Matching Indicators Max. Price**: It displays the maximum matching price of the matchings in the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Matching Indicators Min. Quantity**: It displays the minimum matching quantity of the matchings in the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Matching Indicators Max. Quantity**: It displays the maximum matching quantity of the matchings in the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Auction Start Time: It displays the auction start time for the relevant contract.
- **Auction End Time**: It displays the auction end time for the relevant contract.

### 4.1.2. My Default Auction Orders

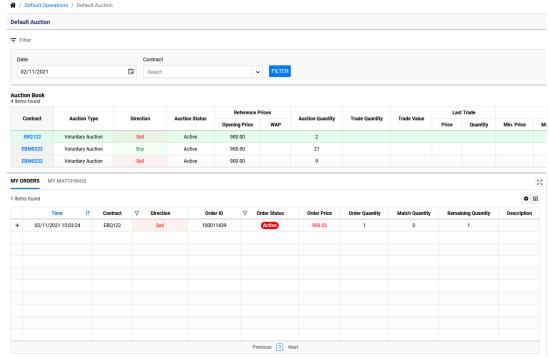


Figure 166: My Default Auction Orders

It displays the orders and matchings data for the selected date and contract in the "My Default Auction Orders" section.

- **Time**: It displays the time for the latest status of the auction order.
- <u>Contract</u>: It displays the contract that the relevant order is saved for the auction. The contract selected from the Default Auction Book is displayed.
- <u>Direction</u>: It displays the direction of the order submitted to the auction.
- **Order ID**: ID of the order submitted to the auction is displayed.
- Order Status: It displays the status of the order submitted to the auction. Order Status: Active, cancelled, matched, partially matched, expired. The status of the order can be changed if it is applicable for the current order status.
- <u>Order Price</u>: It displays the price of the order submitted to the auction. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Order Quantity: It displays the quantity of the order submitted to the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Match Quantity</u>: It displays the match quantity of the order submitted to the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Remaining Quantity**: It displays the remaining quantity of the order submitted to the auction. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Description**: It displays the description written in the order entry pop-up window of the auction.

### 4.1.3. My Default Auction Matchings

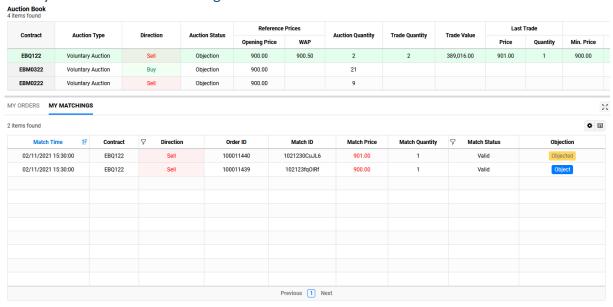


Figure 167: My Default Auction Matchings

- It is the section where the default auction matchings are displayed and objection is made for the matching.
- Match Time: It displays the match time of the matching.
- **Contract**: It displays the contract that the relevant order is matched in the auction. The contract selected from the Default Auction Book is displayed.
- <u>Direction</u>: It displays the direction of the order matched in the auction. There are two directions: Buy and

Sell.

- Order ID: ID of the order matched in the auction is displayed.
- Match ID: Match ID of the matching is displayed.
- <u>Match Price</u>: Match price of the matching is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Match Quantity</u>: Match quantity of the matching is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Match Status: It displays the current status of the matching. There are two match statuses: "Valid" and "Invalid". If the matching is valid, then the match status is displayed as "Valid". If the matching is invalid, then the match status is displayed as "Invalid".
- Objection: It is the section where the user makes an objection to its auction matching. If the status of the auction is "Object", an objection can be made for the matching. "Object" button will be active. Objection for a matching can be made by clicking the button and entering the objection description. If an objection is made, "Object" button changes into "Objected". Answer for the auction objection should be monitored in the "Objections" page.

### 4.1.4. Default Auction Trade History

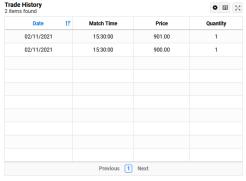


Figure 168: Default Auction Trade History

- It is the section where all the matchings are displayed for the selected contract.
- **Date**: It displays the date of the matching on the relevant contract.
- <u>Match Time</u>: It displays the match time of the matching on the relevant contract.
- <u>Price</u>: It displays the matching price of the matching. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **Quantity**: It displays the matching quantity of the matching. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.

### 4.2. Default Management Matchings

### 4.2.1. Default Management Matchings (Market Participant Screen Who is not in Default)

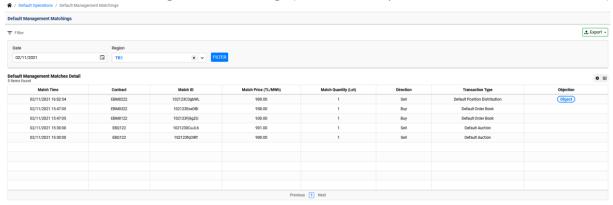


Figure 169: Default Management Matchings (Market Participant Screen Who is not in Default)

- Organization's default auction, default order book and default position allocation matchings are displayed for the selected date.
- The market participant is able to object its default position allocation matching in this page.



Figure 170: Default Management Matchings Filter

- 1- Date is selected for displaying the default management matchings on the relevant date.
- 2- Region is selected for displaying the default management matchings for the relevant region.
- 3- Default management matchings are displayed for the selected date and region filters.
- 4- The icon exports the data displayed in the "Default Management Matchings" section.



Figure 171: Default Management Matches Detail

- It displays the number of items listed in the "Default Management Matches Detail".
- icon enables to drag and pin the columns displayed in the "Default Management Matches Detail" section.
- icon enables to hide or add columns displayed in the "Default Management Matches Detail" section.
- Match Time: It displays the match time of the matching.
- **Contract**: It displays the contract that has matching.

- **Match ID**: Match ID of the matching is displayed.
- <u>Match Price</u>: Match price of the matching is displayed. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Match Quantity</u>: Match quantity of the matching is displayed. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Direction**: It displays the direction of the matching.
- <u>Transaction Type</u>: It displays the transaction type of the matching. There are three transaction types: Default Auction, Default Order Book and Default Position Allocation.
- **Objection**: It is the section where objection is made for the default position allocation matching. Result of the objection is viewed in the relevant section. Market Operator's answer to the objection is displayed in the "Objections" page.

# ### Control Management Interface Transport | Control Management Interface Tra

### 4.2.2. Default Management Matchings (Market Participant Screen Who is in Default)

Figure 172: Default Management Matchings (Market Participant Screen Who is in Default)

- If the organization is in default on the selected date, the default management matchings are displayed in the "Default Management Matches Detail" section.
- If the organization is not in default on the selected date, the organization's matchings which occured within the default management process of the default market participant are displayed in the "Default Management Matches Detail" section.
- If the organization is in default on the selected date, "You Are Default On The Selected Date" warning is displayed. If the organization is not in default on the selected date, warning is not displayed.
- If the organization is in default and has open physical position, orders are submitted to DAM and IDM for the following delivery day. If there are orders submitted to DAM and IDM, order details are displayed.

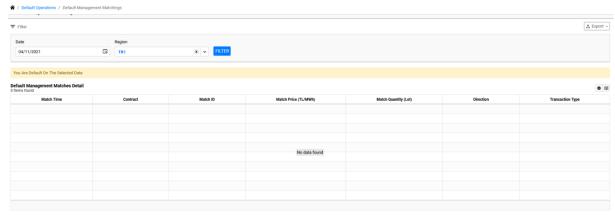


Figure 173: Default Management Matches Detail

- icon enables to drag and pin the columns displayed in the "Default Management Matches Detail" section.
- icon enables to hide or add columns displayed in the "Default Management Matches Detail" section.
- If the organization is in default, the matchings within the default management are displayed.
- "Default Management Matches Detail" section's headings have the same properties for the market participants who are in default and not in default.



Figure 174: DAM/IDM Matching Results

- icon enables to drag and pin the columns displayed in the "DAM/IDM Matching Results" section.
- icon enables to hide or add columns displayed in the "DAM/IDM Matching Results" section.
- <u>Hour:</u> It displays the hour information of the relevant delivery day regarding the submitted order on behalf of the default organization.
- <u>PFM Quantity</u>: It displays post-default matching open position quantity of the default organization. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>PFM Open Position Price</u>: It displays post-default matching open position price of the default organization. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- **PFM Direction**: It displays post-default matching open position direction of the default organization.
- **DAM Quantity**: It displays the cleared quantity of order submitted to DAM on behalf of the default organization. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **DAM MCP**: It displays the DAM market clearing price for the relevant delivery day's hour. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.

- <u>DAM Direction</u>: It displays the direction of the order submitted to DAM on behalf of the default organization.
- <u>IDM Quantity</u>: If the order submitted to DAM within the default management is curtailed, the remaining quantity is offered to IDM. It displays the matched quantity in the IDM. The unit of the quantity is "Lot".

  1 Lot equals to 0,1 MW.
- <u>IDM Weighted Average Match Price</u>: It displays the weighted average match price of orders submitted to IDM within the default management. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>IDM Direction</u>: It displays the direction of the order submitted to IDM on behalf of the default organization.
- **Remaining Quantity**: It displays the remaining quantity calculated by substracting the DAM and IDM quantities from PFM quantity for each hour. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.



Figure 175: IDM Hourly Matching Detail

- If the order submitted to DAM within the default management is curtailed, the remaining quantity is
  offered to IDM. Curtailed hours in the DAM, IDM contracts for the relevant hour and matching details
  are displayed.
- The order submitted to IDM is displayed based on the default organization(s).
- icon enables to drag and pin the columns displayed in the "IDM Hourly Matching Detail" section.
- icon enables to hide or add columns displayed in the "IDM Hourly Matching Detail" section.
- Match Time: It displays the match time of the submitted order within the default management.
- **Contract**: It displays the IDM contract of the order submitted to IDM.
- <u>Organization Name</u>: It displays the name of the default organization that the order is submitted to IDM within the default management.
- <u>Match Quantity</u>: It displays the match quantity of the submitted order within the default management. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- **Match Price**: It displays the match price of the submitted order within the default management. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>Direction</u>: It displays the direction of the order submitted to IDM within the default management. There are two directions: "Buy" and "Sell".

### 4.3. Reports

### 4.3.1. Default Management Detail



Figure 176: Default Management Detail

- It displays the details of default management in terms of voluntary/mandatory auctions, default order book and default position allocation transactions for the organization who is not in default.

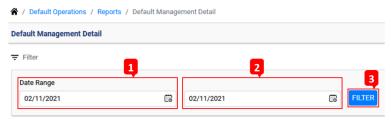


Figure 177: Default Management Detail Filter

- 1- In order to display default management details within the date range, start date is selected.
- 2- In order to display default management details within the date range, end date is selected.
- 3- Default management details are displayed for the selected date or date range.



Figure 178: Default Management Detail

- icon exports the data displayed in the "Default Management Detail" section.
- icon enables to drag and pin the columns displayed in the "Default Management Detail" section.
- icon enables to hide or add columns displayed in the "Default Management Detail" section.
- **Date**: It displays the date of the default management details for the relevant contract.
- **Contract**: It displays the relevant contract regarding the default management details.
- **Delivery Period**: It displays the delivery period of the relevant contract.
- **Default Quantity**: It displays the default position quantity on the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Direction</u>: It displays the direction of the default position on the relevant contract. There are two

- directions: "Buy-Long" and "Sell-Short".
- <u>Allocation Method</u>: It displays the method of position allocation in case the position allocation is applied to the position on the relevant contract. There are two allocation methods: "Contract-All" and "Market-All".
- **MOQ/MSOQ**: It displays the calculated minimum order quantity (MOQ) or the minimum sell order quantity (MSOQ) of the relevant contract for the market participant who is not in default. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Voluntary Auction Matched Quantity: It displays the organization's matched quantity in the voluntary auction of the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Voluntary Auction WAP: It displays the organization's weighted average price of its matchings in the voluntary auction of the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Mandatory Auction Matched Quantity: It displays the organization's matched quantity in the mandatory auction of the relevant contract. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Mandatory Auction WAP: It displays the organization's weighted average price of its matchings in the mandatory auction of the relevant contract. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- Order Book Matched Quantity: It displays the organization's matched quantity on the relevant contract in the order book. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Order Book WAP: It displays the organization's weighted average price of its matchings on the relevant contract in the order book. The unit of the price is TL/MWh. It is sensitive to 2 decimal places.
- <u>First UMOQ/UMSOQ</u>: It displays the updated minimum order quantity (UMOQ) or the updated minimum sell order quantity (MSOQ) which is calculated by substracting the voluntary/mandatory auction matched quantities and order book matched quantity from the MOQ/MSOQ of the relevant contract for the market participant who is not in default. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- <u>Last UMOQ/UMSOQ</u>: Last updated minimum order quantity (UMOQ) or the last updated minimum sell order quantity (MSOQ) of the relevant contract is displayed for the organization suitable for position allocation. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW
- <u>Position Allocation Allocated Quantity</u>: It displays the allocated position quantity to the organization on the relevant contract within the default management. The unit of the quantity is "Lot". 1 Lot equals to 0,1 MW.
- Position Allocation Match Price: It displays the match price of the allocated position to the organization
  on the relevant contract within the default management. The unit of the price is TL/MWh. It is sensitive
  to 2 decimal places.

# 5. Settlement Operations

### 5.1. Settlement Notification

### 5.1.1. Settlement Notification Page

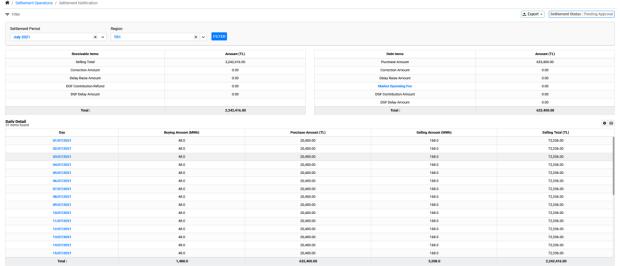


Figure 179: Settlement Notification Page

- It displays all the settlement items of the organization.



Figure 180: Settlement Notification Filters

- 1. Settlement period is selected for displaying the receivable & debt items and the daily detail table for the relevant settlement period.
- 2. Region is selected for displaying the settlement notification of the relevant region.
- 3. Settlement notification is displayed for the selected settlement period and region.
- 4. It exports the data displayed in the "Settlement Notification" page.
- 5. It displays the status of the settlement.

### 5.1.2. Settlement Notification Page Receivable Items

Receivable Items	Amount (TL)
Selling Total	2,242,416.00
Correction Amount	0.00
Delay Raise Amount	0.00
DGF Contribution Refund	0.00
DGF Delay Amount	0.00
Total :	2,242,416.00

Figure 181: Receivable Items Table

- Selling Total: It displays the market participant's selling amount.
- Correction Amount: It displays the market participant's receivable amount as a result of the correction operation.
- Delay Raise Amount: It displays the receivable amount of default interest for the market participant.
- DGF Contribution Refund: It displays the amount of Default Guarantee Fund (DGF) Contribution refund.
- DGF Delay Amount: It displays the receivable amount of default interest for the DGF.
- Total: It displays the total of the receivable items.

### 5.1.3. Settlement Notification Page Debt Items

Debt Items	Amount (TL)
Purchase Amount	632,400.00
Correction Amount	0.00
Delay Raise Amount	0.00
Market Operating Fee	0.00
DGF Contribution Amount	0.00
DGF Delay Amount	0.00
Total :	632,400.00

Figure 182: Debt Items Table

- Purchase Amount: It displays the market participant's purchase amount.
- Correction Amount: It displays the market participant's debt amount as a result of the correction operation.
- Delay Raise Amount: It displays the amount of default interest charged for the market participant.
- Market Operating Fee: It displays the market operating fee regarding the market participant's transactions. Clicking on the "Market Operating Fee" opens the pop-up window where the market operating fee items are displayed for the relevant settlement period.
- DGF Contribution Amount: It displays the amount of Default Guarantee Fund (DGF) Contribution amount.
- DGF Delay Amount: It displays the amount of default interest charged for the DGF.

- Total: It displays the total of the debt items.

### 5.1.3.1. MOF Details Pop-up Window

10F Details		
Region TR1	Settlement Period July 2021	
	MOF Items	Amount (TL)
	Transaction Fee	0.00
	Annual Participation Fee	0.00
	Appeal Fee	0.00
	D. C. D. M. C.	0.00
	Default Management Cost	0.00

Figure 183: MOF Details Pop-up Window

- Market Operating Fee (MOF) details pop-up window is exhibited in the figure above. Clicking on the blue colored "Market Operating Fee" button under the "Debt Items" opens the "MOF Details" pop-up window according to the selected region and settlement period.
- Selected region and settlement period are displayed on the top of the window.
- MOF Items:
  - a) Transaction Fee: It displays the total transaction fee amount. Clicking on the blue colored "Transaction Fee" button opens the "Transaction Fee Details" pop-up window which displays the amounts calculated based on the transactions.
  - b) Annual Participation Fee: Annual participation fee is required in order to trade in the Power Futures Market, that amount is added to the market participant's market operating fee.
  - c) Appeal Fee: It displays the fee charged for the objections rejected by the market operator, that amount is added to the market participant's market operating fee.
  - d) Default Management Cost: It displays the default management cost, that amount is added to the market participant's market operating fee.
  - e) MOF Total: It displays the total amount of transaction fee, annual participation fee, appeal fee and default management cost.

### 5.1.3.1.1. Transaction Fee Details Pop-up Window

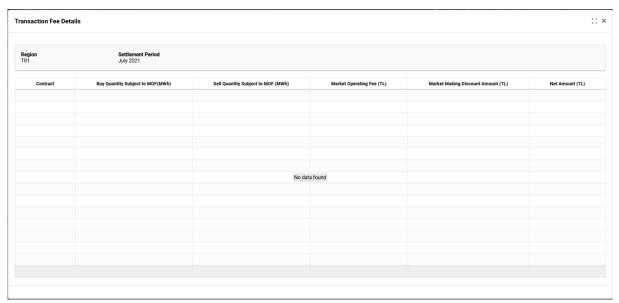


Figure 184: Transaction Fee Details Pop-up Window

- Relevant contract, buy and sell quantity subject to MOF as a result of matchings, market operating fee, market making discount amount and net amount are displayed in the "Transaction Fee Details" pop-up window for the selected region and settlement period.

### 5.1.4. Daily Detail Table



Figure 185: Daily Detail Table

- Buying Quantity (MWh), Purcahse Amount (TL), Selling Quantity (MWh) and Selling Amount (TL) are displayed in the "Daily Detail" table for the delivery days of the selected settlement period.
- icon enables to drag and pin the columns displayed in the "Daily Detail" table.
- icon enables to hide or add columns displayed in the "Daily Detail" table.

- Clicking on the blue colored day button in the "Daily Detail" table opens the "Buying and Selling Hourly Detail" pop-up window displaying the hour details of the relevant day.

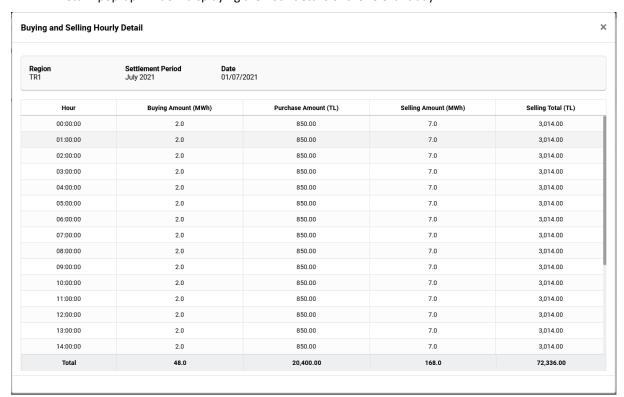


Figure 186: Buying and Selling Hourly Detail Table

### 5.2. Default Monitoring

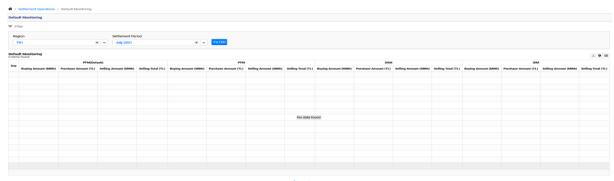


Figure 187: Default Monitoring Page

- Quantity and amount data regarding the default open position and the default management transactions within the PFM, DAM and IDM are displayed for the selected settlement period and region in the "Default Monitoring" page.
- Data is not displayed in the page unless the market participant is in default.

## 6. Inovice Operations

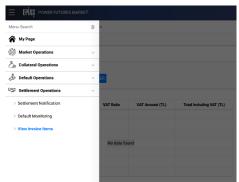


Figure 188: View Invoice Items

- It displays the market participant's invoice items amounts based on the final settlement results.

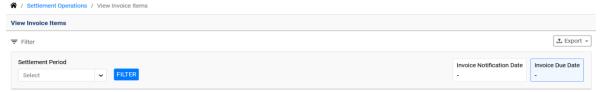


Figure 189: Invoice Items Filter

- Settlement period is selected for displaying the invoice items of the relevant settlement period.
- "Filter" button displays the data regarding the selected settlement period.
- "Export" button exports the data displayed on the screen according to the selected file format.
- Invoice notification date is displayed.
- Invoice due date is displayed.

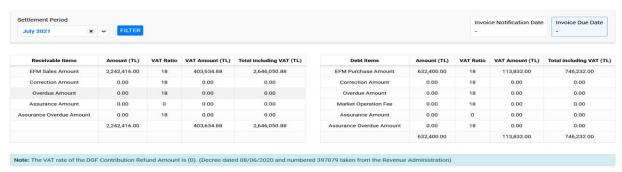


Figure 190: Invoice Items

- A- Receivable Items: It displays the receivable items of the invoice.
  - <u>Amount</u>: It displays the organization's receivable item amounts.
  - <u>VAT Ratio</u>: It displays the VAT ratio to be applied for each receivable item. VAT is not applied to DGF contribution refund item, its VAT ratio is zero (0).
  - **VAT Amount**: It displays the VAT amount for each receivable item.
  - Total Including VAT: It displays the VAT included amount of the receivable item.
- B- Debt Items: It displays the debt items of the invoice.
  - **Amount**: It displays the organization's debt item amounts.
  - VAT Ratio: It displays the VAT ratio to be applied for each debt item. VAT is not applied to DGF

contribution refund item, its VAT ratio is zero (0).

- <u>VAT Amount</u>: It displays the VAT amount for each debt item.
- <u>Total Including VAT</u>: It displays the VAT included amount of the debt item.

# 7. Version Histoy

Version	Değişiklik Tanımı	Prepared By	Date
1.0	Power Futures Market User	Electricity Market Department	01.03.2022
	Manual v.1.0 is prepared.		

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