MFG170 - M7 Auction - Bidder Handbook

M7 Auction 5.0

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Terminology

Term	Explanation
Call Phase	Phase, during which bids can be submitted, i.e. while the auction is in phase "Running"
DBAG	Deutsche Börse AG
Finished Auction	Auction that is in "Finished" or "Rejected"
Freeze Phase	Phase, during which bids can no longer be submitted but the auction is not finished yet, i.e. while the auction is in phase "Closed"
GUI	Graphical User Interface
Live Auction	Auction that is in "Published", "Running" or "Closed" phase
XML	Extensible Markup Language

Table 1: Terminology

1 Introduction

1.1 M7 Auction

M7 Auction Service offers single-sided auctions for the various markets with a dedicated quantity to be auctioned on behalf of the selling or buying entity.

This document provides Bidder users with a functional overview of the M7 Auction, which is the platform where the auction for various products is conducted. The M7 Auction is technically operated and hosted by DBAG.

The Service is a web-based solution accessible via the internet with an internet browser.

2 GUI Overview

2.1 Functional Overview

The M7 Auction provides Bidders with trading functionality via a Graphical User Interface (GUI).

The M7 Auction supports these user roles which have different set of rights:

- **Bidder** has full access to the trading functionality

- **View User** has only read access to the trading functionality. This user can view the bids placed by other Bidders assigned to the same member(s) however not able to place, modify, or cancel any bids.

The Reporting Engine provides the M7 Auction user with a reporting tool. The reporting engine generates reports based on the information available in the data store.

2.2 Graphical User Interface (GUI)

The GUI provides the user with an interface to the M7 Auction and allows the user to interact with the M7 Auction. The service is configurable for multiple languages on the instance level.

The users are not required to install any additional software on their workstations and do not need any detailed IT know-how. The M7 Auction GUI is simple and easy to use.

2.3 Menu Structure of M7 Auction GUI

Upon successful login, the M7 Auction GUI is displayed. In the menu on the left the user can find the Auction and Messages items and in the bottom there is the user's icon. Below this icon the user can find options for logout (power symbol), for getting the Market Operator contacts (symbol of business card) or for changing the password (key symbol).
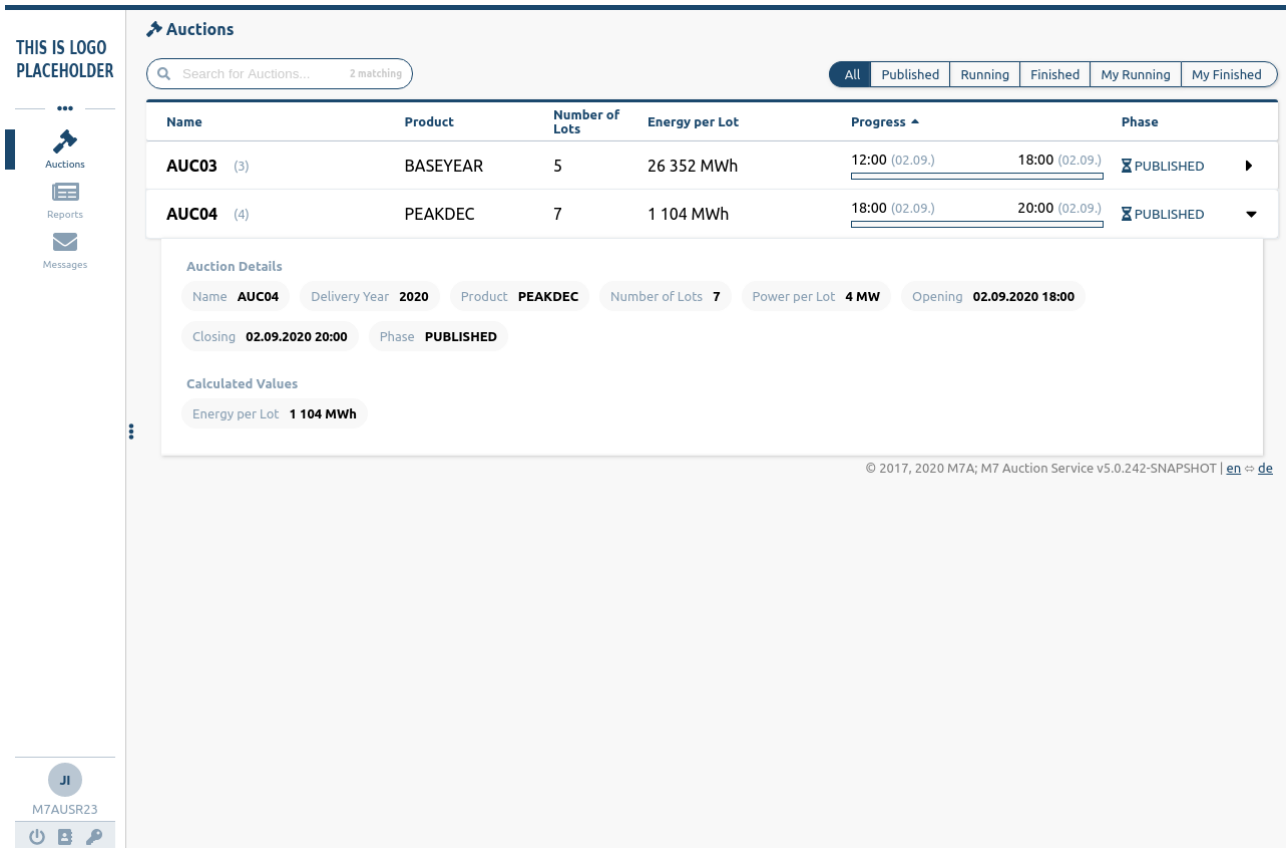
Figure 1: Menu structure

2.4 Login

In order to start the M7 Auction GUI, the user must first open the M7 Auction login web page.

To access the system, the M7 Auction user needs to enter a valid user name and password on the login page.

Figure 2: Login Screen

The user (login) ID must have at most 8 characters in length and contain only characters 'a'-'z', 'A'-'Z', '1'-'9'. Special characters are not allowed.

The password must be at least 8 characters long and contain one or more characters from at least three groups listed below:

- 'A'-'Z'

- 'a'-'z'

- '0'-'9'

- Special character(s)

  - ;,@#$%^&+=

  - an underscore sign

Additionally, the password must be different from the last 10 passwords used for this user account.

On the login page the user has also an option for reseting his/her password in case it was forgotten. When the user clicks on the 'I forgot my password' link he/she is asked for entering the user ID. After the confirmation the user receives an email with an URL link where a new password can be set up. The URL link is valid for 30 minutes. If the password is not reset within this timeframe the user needs to request the password reset again.
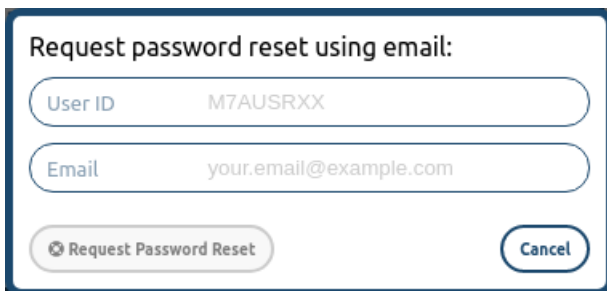
Figure 3: Reset Password Screen

2.5 Single Login

Single login allows each authorized user to login to the M7 Auction one time per User ID. If a user is already logged into the system, a second login attempt with the same User ID will be successful, however the first login will be automatically terminated.

2.6 Change Password

The "Change Password" icon with the key symbol is placed in the bottom left hand corner below the user's icon. When the user clicks on "Change Password" menu item, the user is navigated to a "Change Password" screen that allows the users to change their password. User has to provide the old password (for security reasons) and type the new password twice (to avoid typos). There is also an option to display the password policy described above.
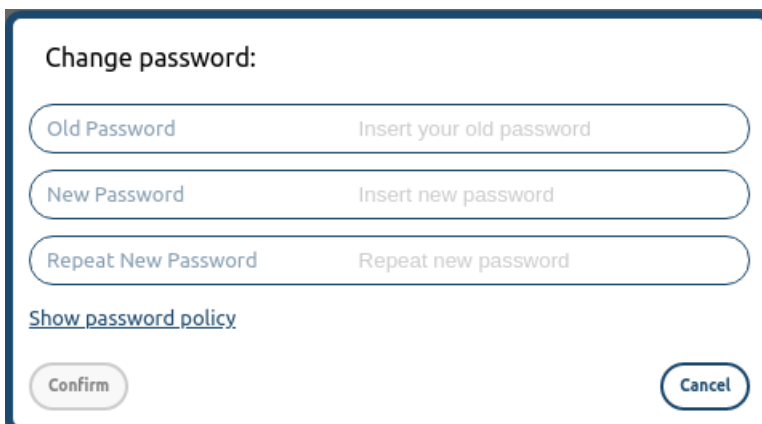
Figure 4: Change Password Screen

2.7 Reset Password

In case a user forgets the password, the account is locked due to inactivity or the user submitted an incorrect password for 3

times, the user can set up new password and renew his/her account by clicking on the 'I forgot my password' link available on the initial login page, see chapter Login.

2.8 Logout

The Logout icon is placed in the bottom left hand corner below the user's icon. Upon successful logout the M7 Auction login web page is displayed.

2.9 Messages

In the menu of the application, there is a "Messages" link which leads to Messages section.

The Messages section shows:

- all status changes of the auctions (as well as all Auction Details updates).

- the announcements sent by Market Operator

All messages from the last 3 months can be viewed on the Messages screen.

Figure 5: List of Messages

The most recent message is also displayed to a logged in user as a "Info Notification" on the top of the application screen. The users have an instant overview of what happens in the system which makes it harder for the users to overlook any important announcement.

3 Auctions

The menu item "Auctions" gives the Auction Bidder users an overview of the auctions.

3.1 Auction Overview

The Auctions section allows the Bidder to view the auctions sorted by Name, Product, Number of Lots and auctioned Energy per Lot. The users can also see the phase of all listed auctions. The auction in the running phase has a countdown timer placed above the progress bar. The users can see how much time remains until the end of the auction. Both the progress bar and the countdown timer are also available on the bidding screen. Auctions can also be sorted according to Opening times and Phases. The Auction detail appears whenever the user clicks on the particular auction item from the list. By default, all available auctions are displayed in the auction list. However, the user is able to search for specific auctions by entering any auction detail into the search field. The user can also choose whether to view only auctions in a specific phase. To do so, filter located in upper right-hand corner can be applied. Following options are available:

- **All** (default)

- **Published**

- **Running** - all auctions in phase "Running" or "Closed"

- **Finished** - all auctions in phase "Rejected" or "Finished"

- **My Running** - all auctions in phase "Running" or "Closed" in which the user has a bid

- **My Finished** - all auctions in phase "Rejected" or "Finished" in which the user has a bid.

Figure 6: List of Auctions

3.2 Auction Lifecycle

An auction can go through several phases:

- Published

- Running

- Closed

- Finished

- Rejected

As soon as an auction is "Published", it is visible for Bidders. During the **Published** phase the Bidder can view the available information for the auction: Name, Product, Number of Lots, Energy per Lot, Opening and Closing Time. In the detail of the auction there are other auction related attributes.
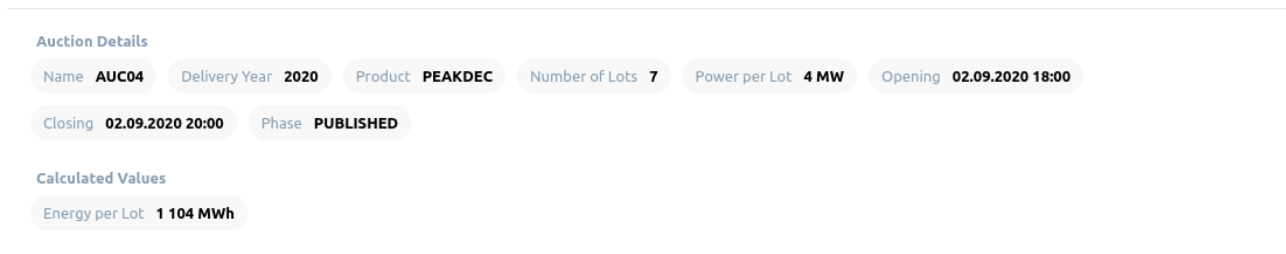
Auction Details

Name **AUC04**   Delivery Year **2020**   Product **PEAKDEC**   Number of Lots **7**   Power per Lot **4 MW**   Opening **02.09.2020 18:00**

Closing **02.09.2020 20:00**   Phase **PUBLISHED**

Calculated Values

Energy per Lot **1 104 MWh**

Figure 7: Published Auction

The start of the **Running** phase denotes also the start of the auction (also known as the "Call Phase"). During the "Call Phase", the users can submit, modify or cancel bids. All bids that were submitted for an own member, regardless by which user, are visible for the Bidder and can be modified or cancelled.

Apart from the standard auction attributes, the Bidder can also see the Maximum Accepted Price of the running auction. However, this attribute is only available in the auctions which have been enabled by the Market Operator. The Maximum Accepted Price is displayed within the Auction Result. If it is not available, then Auction Result is not displayed at all.

Auction Details

Name **AUC06**   Delivery Year **2020**   Product **BASEYEAR**   Number of Lots **7**   Power per Lot **4 MW**   Opening **01.09.2020 15:18**

Closing **02.09.2020 16:00**   Phase **RUNNING**

Calculated Values

Energy per Lot **35 136 MWh**

Auction Result

Maximum Accepted Price **43.12 EUR**

[ ] Show Bids List
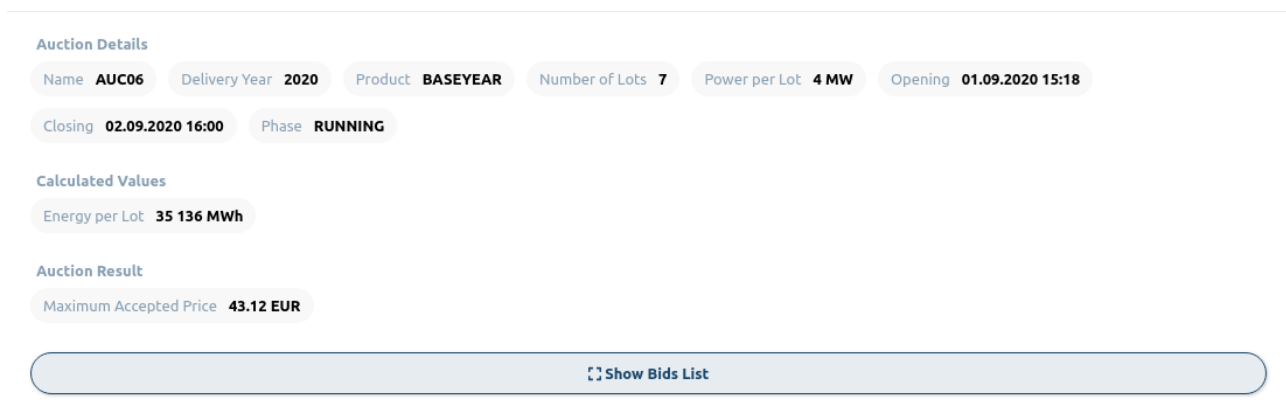
Figure 8: Running Auction

When the specified time of the auction is over the auction goes to phase **Closed** and thus the "Freeze Phase" starts. During this time the bidder can view the bids for the own Member but cannot modify or cancel them. During the "Freeze Phase" Market Operator can decide whether the auction should be reopened, accepted or rejected. If an auction is reopened it goes back to phase "Running", if it is accepted it goes to phase **Finished** and if it is rejected to phase **Rejected**. However, auctions can be also automatically accepted. In this case the "Closed" phase is completely missing and auction goes directly to phase "Finished".

Auction Details

Name **AUC18**   Delivery Year **2020**   Product **BASEY**   Number of Lots **5**   Power per Lot **4 MW**   Opening **01.09.2020 15:20**

Closing **01.09.2020 15:21**   Phase **FINISHED**

Calculated Values

Energy per Lot **35 136 MWh**

Auction Result

Average Accepted Price **44.28 EUR**   Maximum Accepted Price **45.62 EUR**

(🖽 Download Reports)

([ ] Show Bids List)

Figure 9: Finished Auction

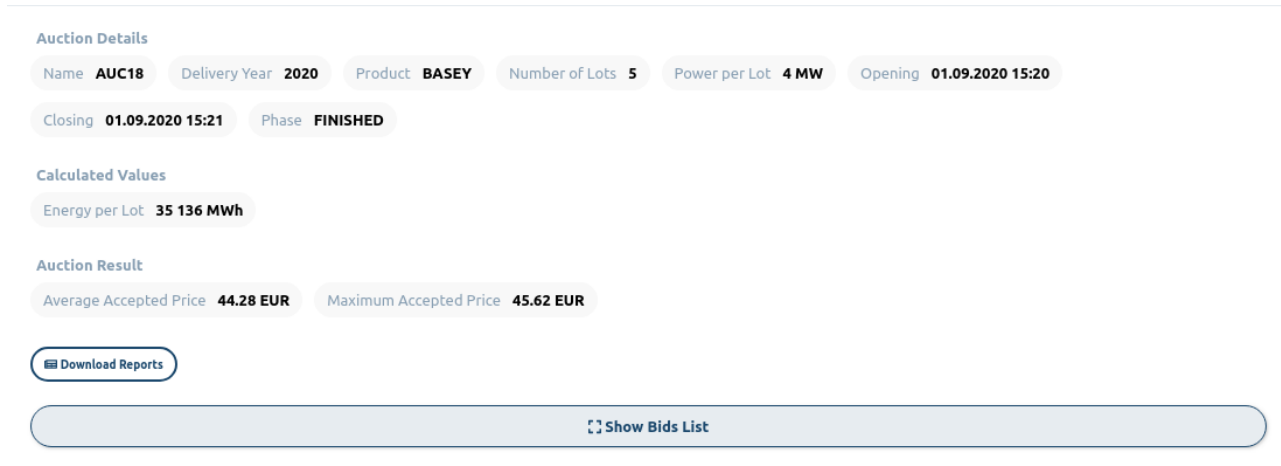Similarly, the Auction Result is available for the finished auction only if the Market Operator enabled it. If so, the users are able to see not only the Maximum Accepted Price but also the Average Accepted Price.

If the auction is rejected no bids are executed.

4 Bids

The "Bids List" allows the Bidders to view, submit, modify and cancel bids. It is displayed after pressing the button "Show Bids List" available in the bottom of the auction detail. The "Bids List" is available for auctions in any phase except Published.

The Bidder can view all bids submitted by a user which member is assigned also to him/her. However, the bids can be filtered in the table according to the member for which they were submitted. On the basis of the selected Member, the values within the Bid Overview are calculated. The values are calculated only based on the bids in the table below. The bids can be also sorted by any available attribute in the table. In the case that all of the bids cannot fit into the window, a scroll-bar is available.

The "Bids List" also shows the overall Bid ranking if "Show Ranking" is turned on for the auction. The Bidder is then able to see how his/her bid compares to others.
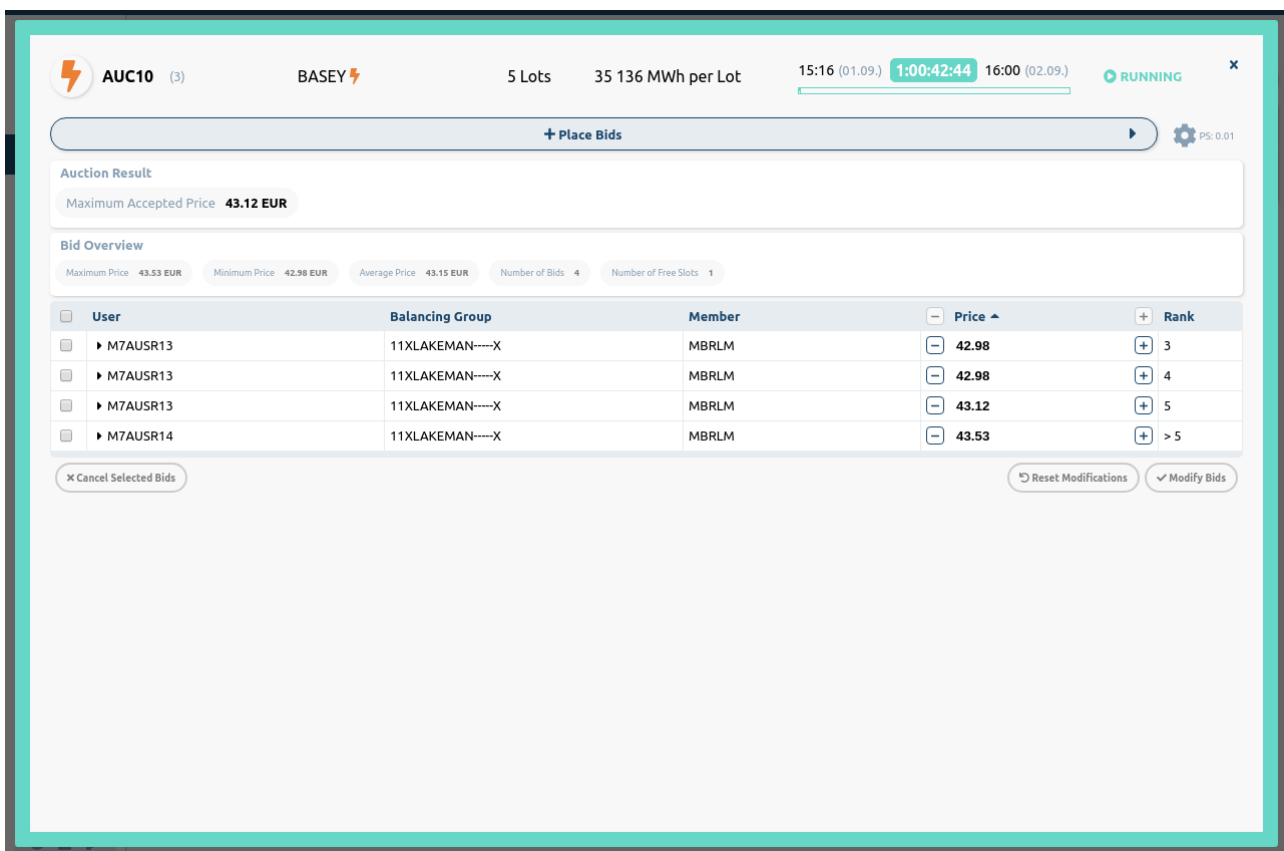

Figure 10: Figure List of Bids

4.1 Submitting Bids

The Bidder can only submit bids during the Running auction phase. In order to submit a new bid, the user must click on "+ Place Bids" button and enter values for the required fields:

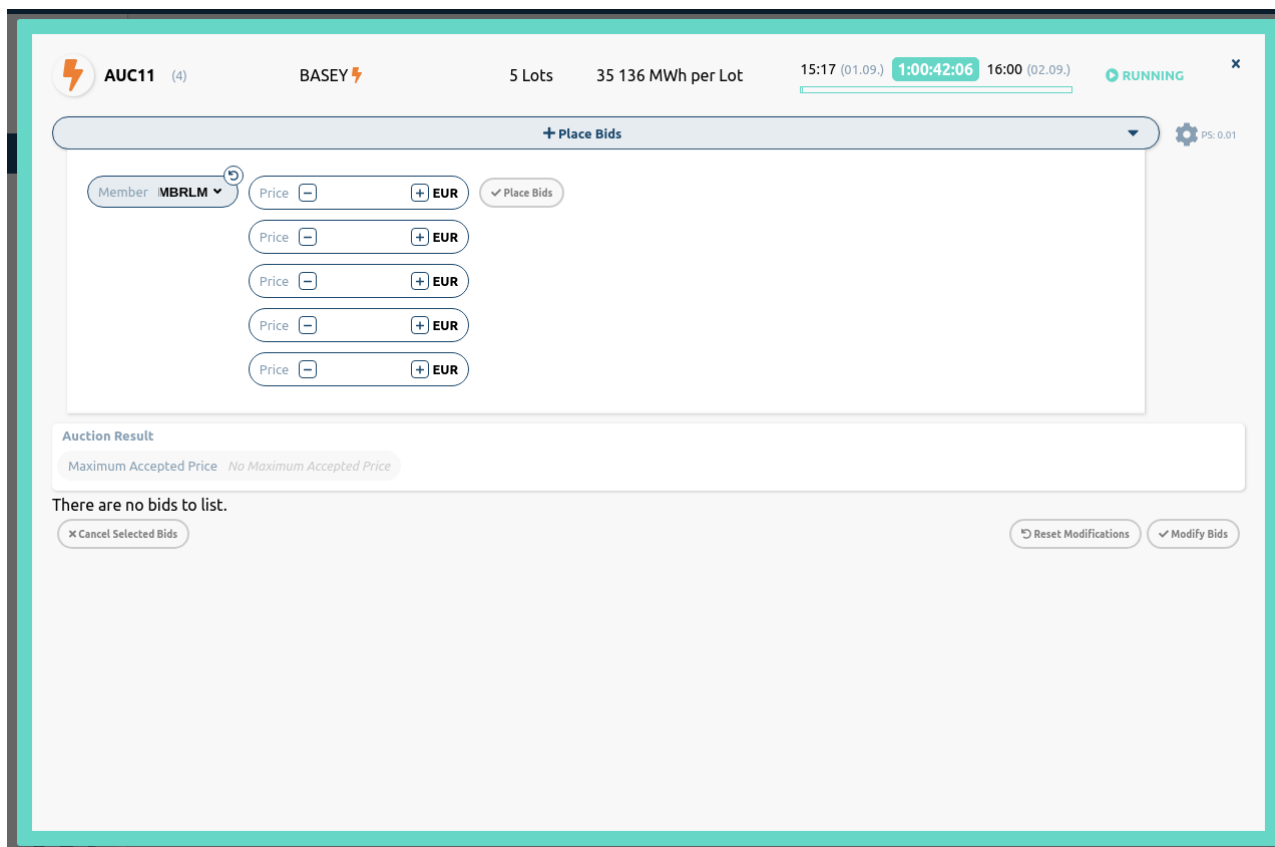- Member, from a drop-down menu

- Price (EUR)

Figure 11: Submit a New Bid

From the drop-down menu "Member", only members assigned to the Bidder can be chosen. This menu is available only if the Bidder has assigned more than one Member.

The user is able to see as many price input fields as there are free slots for the auction. He/she must enter at least one price to submit the bid, however he/she can also place more than one bid at a time by entering more than one price value. The user is allowed to enter as many bids as there are free slots available for the selected member. If there is no free slot, then no bid can be placed for that member.

The Price value can either be entered via keyboard or by using the respective "+" and "-" buttons which are situated next to the field. The buttons "+" or "-" increase, respectively decrease the bid price by the price step. The configuration of the price step can be achieved by clicking the cogwheel icon in the upper right-hand corner of the page. The price of a newly submitted bid cannot be less than the Minimum Price or greater than the Maximum Price if they are set up otherwise, an error message is displayed.

After specifying the required information, the user must press the button "Place Bid" in order to submit the bid. After the submission, the bid is entered in the Bids List and the Member and Price fields will remain pre-filled with values of newly submitted bid.

However, before the bid is fully submitted, the Price of the entered bid is also checked against the expected price range. If the bid is out of this range, the user is warned by a pop-up window. If he/she still wants to place such a bid, he/she needs to confirm it in the pop-up window. However, the placed bids which are above the maximum price limit will be automatically rejected when the auction is closed.
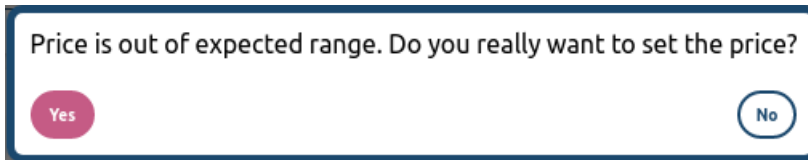
Figure 12: Pop-up price out of range

The system assigns a random globally unique Bid ID with maximum 10 digits to every submitted bid. This ID, together with Bid Creation Time and Bid Last Modified Time, is available in the detail of the bid. The detail of the bid can be accessed by clicking the arrow button beside every bid.

4.2 Modifying Bids

The Bidder can modify the existing bids for the own Member any time during the Running phase. In order to modify one or more bids, the user adjusts their values directly in the Bid table, either using "+" and "-" buttons, or via keyboard. The buttons "+" or "-" increase, respectively decrease the bid price by the price step. The configuration of the price step can be achieved by clicking the cogwheel icon in the upper right-hand corner of the page.
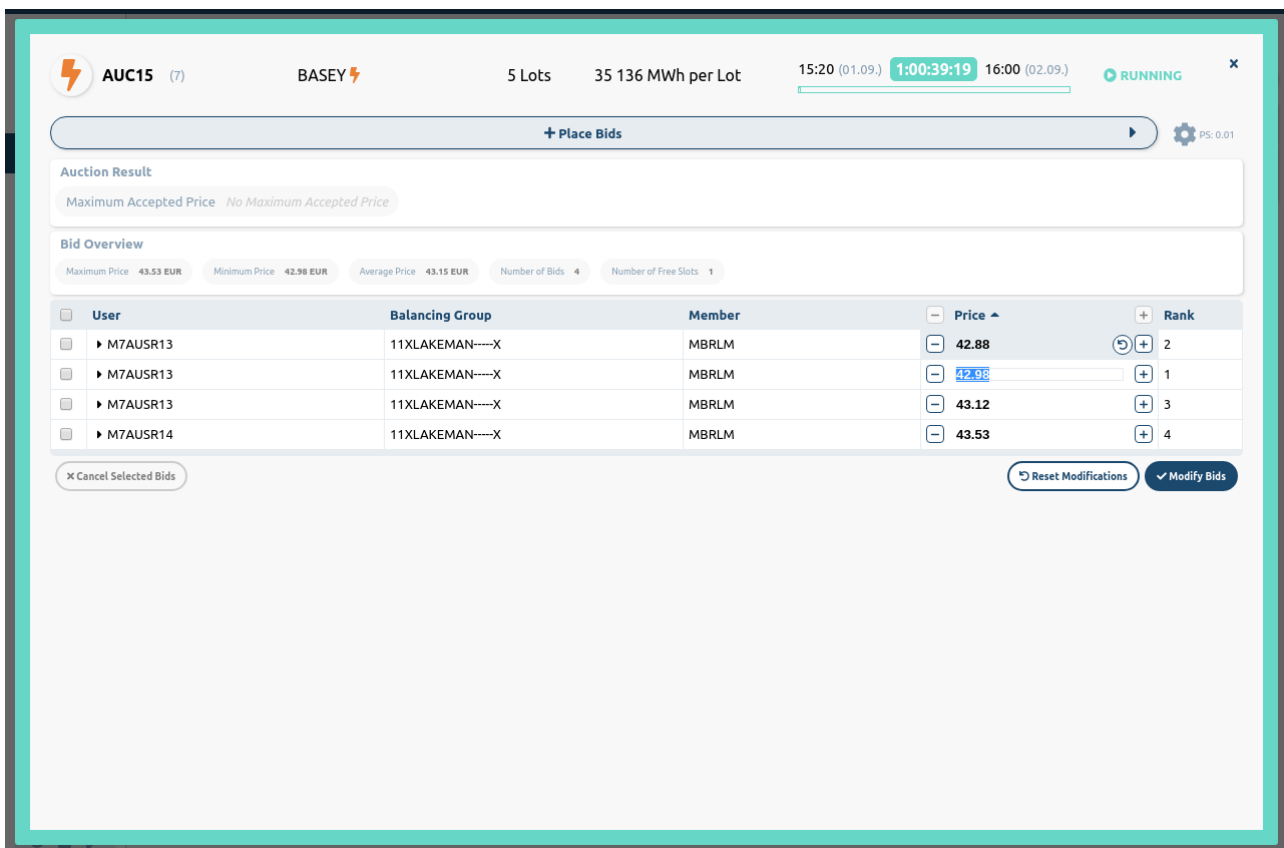

Figure 13: Modify Bids

The user can also adjust Price values of several bids in one direction at once. In order to do so, the user ticks the boxes in front of the respective Bids and presses the "+" or "-" buttons which are situated by the Price title of the Bids table. After that, the Price value will be adjusted in the desired direction, by the value of configured price step.

At this phase, none of the modifications are executed. The Bid adjustments are highlighted. It is only when the user presses the "Modify Bids" button and confirms the modification in a pop-up window, that all displayed adjustments are taken into account. The values lose their highlight, indicating that the modifications have been fully executed. At any time before the modifications are executed, all details of the bids can be reset to their actual values by pressing the "Reset Modifications" button.

During the bid modification, the same validations are performed as during the bid submission. The check of the modified bid price is done against the Minimum and Maximum Price. If the value of the bid price is violated, an error message is displayed.The bid price is also checked against the expected price range. If the bid is out of this range, the user is warned by a pop-up window. Moreover, if the "Limit Bid Modification" is turned on for the auction in which the bid is modified then the user is only able to decrease the price. An error is displayed if the bid is increased above the original value.

After the modifications are fully executed, the Last Modified timestamp of each modified bid is updated.

4.3 Cancelling Bids

The Bidders can cancel the existing bids for their own Members at any time during the Running phase.

In order to cancel one or more bids, the Bidder ticks the boxes in front of the respective Bids. For convenience, the user can select and de-select all displayed bids by clicking on the title of the column with the tick boxes. The user should take into account that whenever a bid is cancelled then it cannot be replaced with a new one because every bid including the cancelled bid consumes one slot. The user is allowed to enter as many bids as there are free slots available for the selected member. The information of available free slots is stated in the Bid Overview. If the user can place bids for more then one member, the member needs to be selected first in the drop down menu on the left hand side. If there is no free slot, then no new bid can be placed for that member.
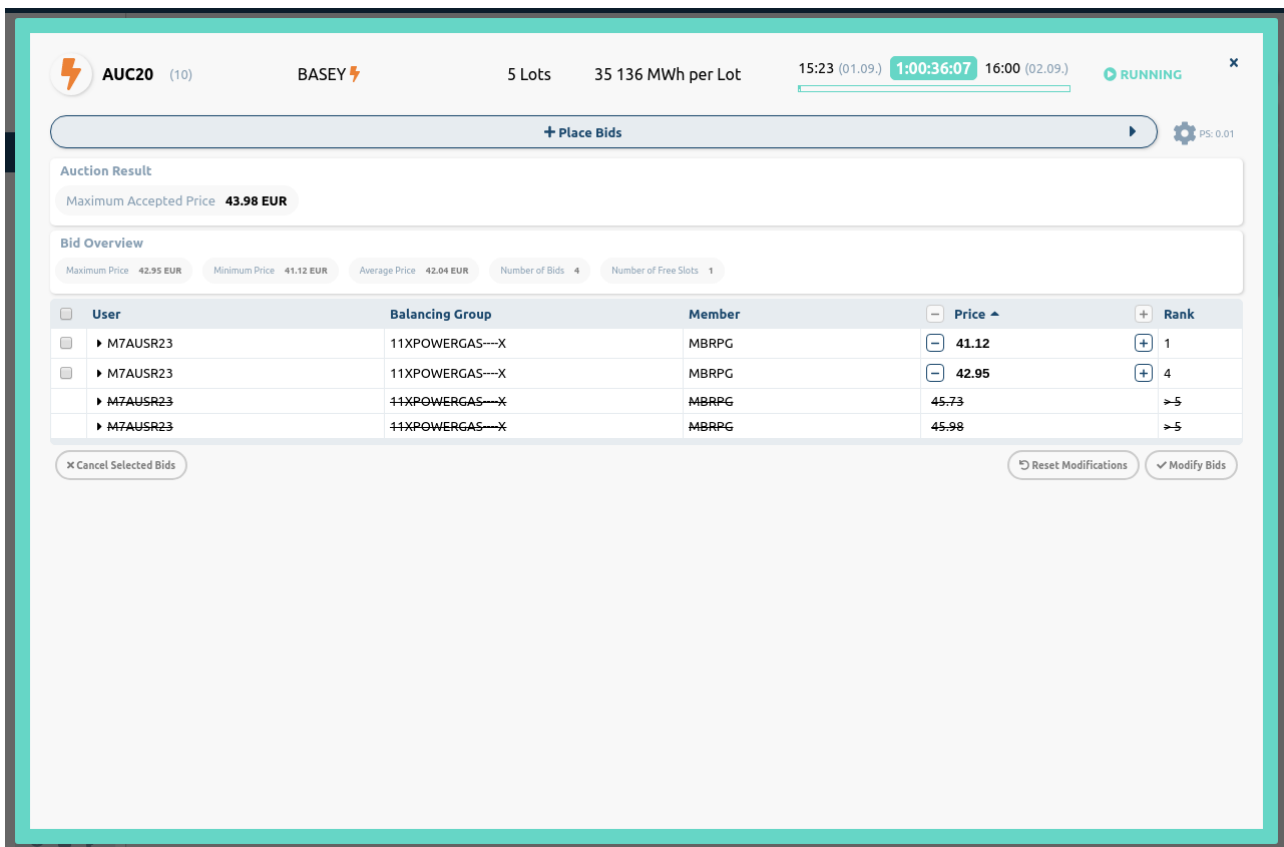

Figure 14: Cancelled Bids

After the bid selection has been made, the user can proceed with the cancellation by pressing the button "Cancel Selected Bids". Afterwards, the user must confirm the cancellation in a pop-up window.

4.4 Executed Bids

In the "Bids List" the user is able to see if his/her bids were accepted or rejected after the auction has finished. The accepted bids are marked green in the last Result column of the bids table.
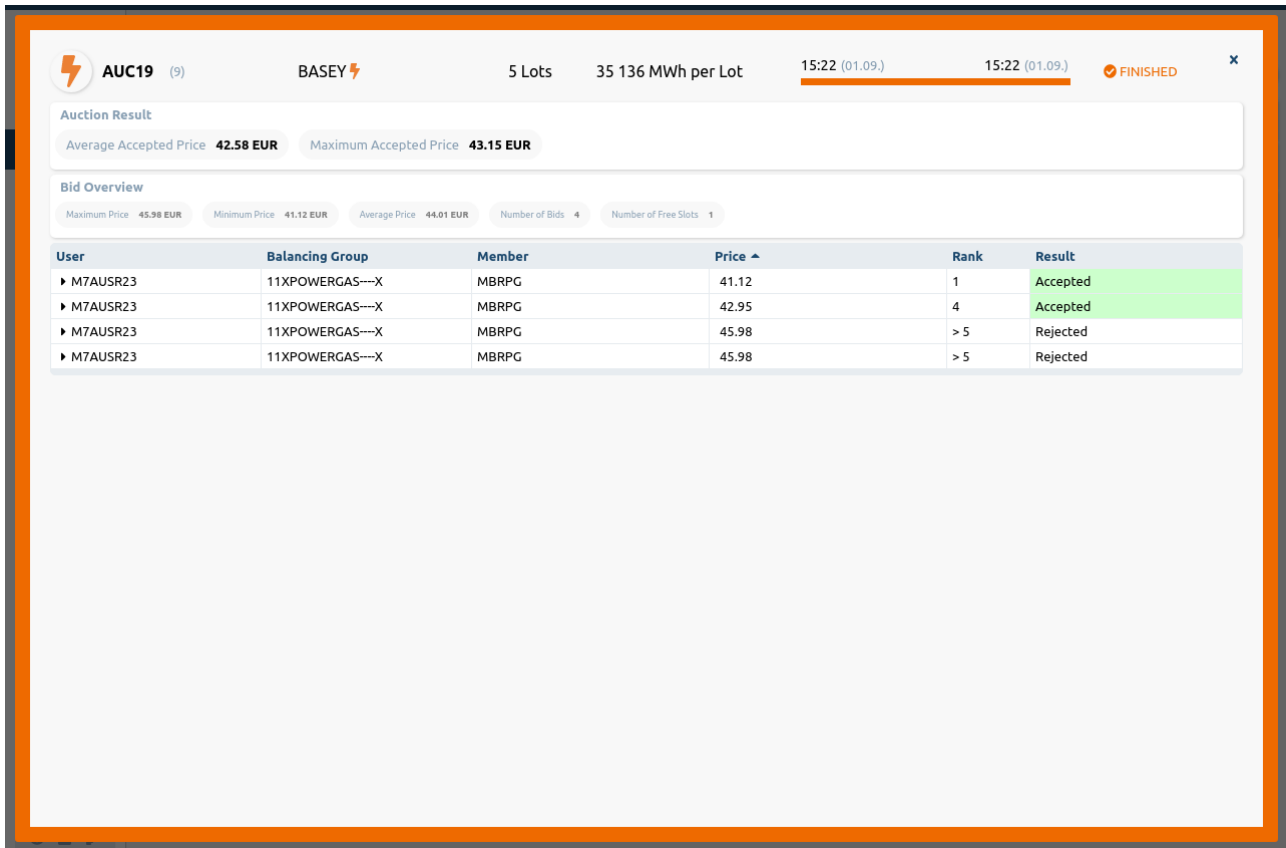
Figure 15: Accepted Bids

5 Reports

The Bidder has access to the following reports:

- All Bids

- Auction Result

5.1 Download a Report

The All Bids reports are accessed from the "Reports" menu. Here, the user can select the Delivery year and format of the report he/she wishes to download. If the Bidder has assigned more than one Member, he/she needs to select also the Member for which the report is going to be generated. The reports are generated on the fly when requested and are available in CSV and CSG format. The appendix describes the structure of the reports and shows an example.
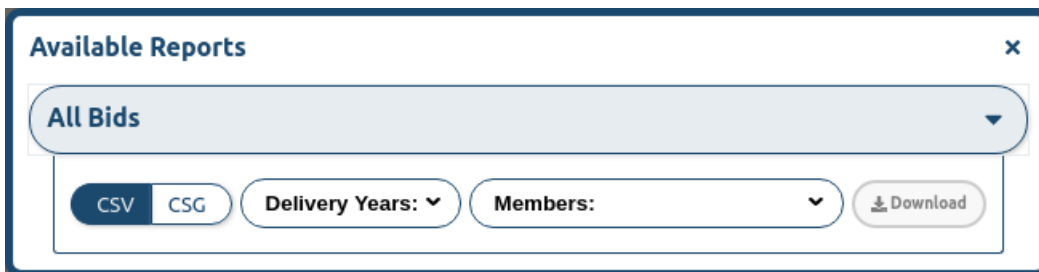

Figure 16: Report Pop-up Window

In order to download the Auction Result report, the user must first choose the auction for which the report should be downloaded and then press the button "Download Reports" located in the bottom left hand corner of the Auction detail:
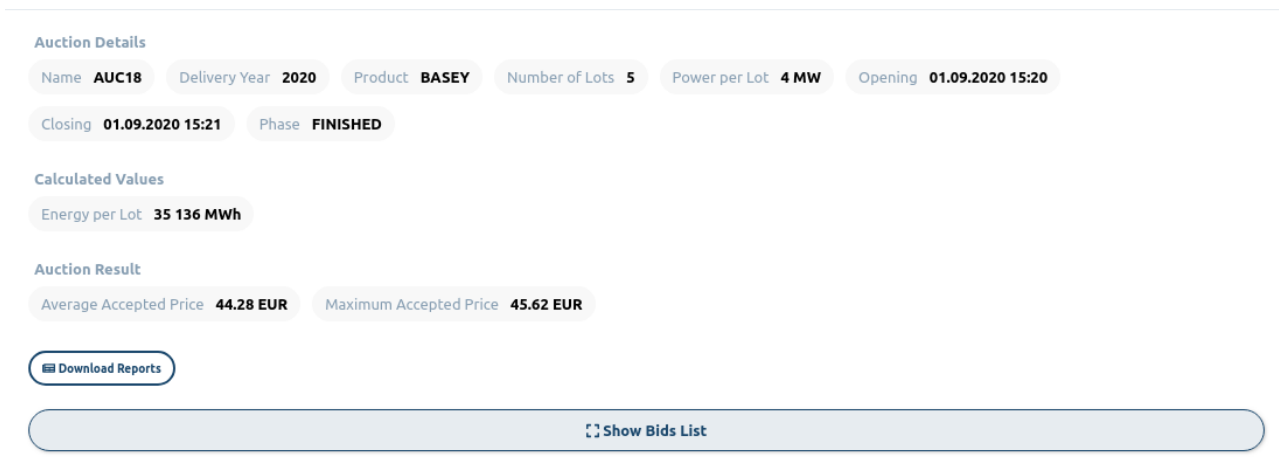
Figure 17: Download Report

As soon as the button is pressed, a pop-up window is displayed where the user can select the type of the report to download. The report is available in PDF format.

5.2 Report Types

5.2.1 All Bids Report

The All Bids Report contains information about all bids placed by the user in all finished auctions for a selected Delivery year. The bids information include not only the balancing group for which the bid was placed, the time when it was placed

and the price but also the bid acceptance status and the ranking. The All Bids Report contains also the overall auction information.

5.2.2 Auction Result Report

The Auction Result is a PDF document which contains all submitted bids and the overall result of a selected auction. The header of the document shows the parameters of the auction and the results of the auction like the average price and the maximum accepted price. The bid information includes the balancing group for which the bid was placed, the time when it was placed, the price and the bid status. The report is available only for finished auctions.

6 Appendix

6.1 All Bids Report

6.1.1 Sample All Bids Report in CSV Format

```
DELIVERY_YEAR;AUCTION_ID;CLOSURE_TIME;PRODUCT;NUMBER_OF_LOTS;POWER_PER_LOT;ENERGY_PER_LOT;BALANCING_GR
OUP_EIC;SUBMISSION_TIME;LAST_UPDATED_TIME;PRICE;RANKING;ACCEPTANCE
    2020;AUC02;16.06.2020 14:00;Base Q1;3;1;2183;11XCOMPTON-----X;16.06.2020 13:43:12.189;16.06.2020
13:43:12.189;45.02;1;Accepted
    2020;AUC02;16.06.2020 14:00;Base Q1;3;1;2183;11XCOMPTON-----X;16.06.2020 13:43:12.189;16.06.2020
13:43:12.189;45.02;2;Accepted
    2020;AUC02;16.06.2020 14:00;Base Q1;3;1;2183;11XCOMPTON-----X;16.06.2020 13:43:27.429;16.06.2020
13:43:27.429;45.98;;Rejected
    2020;AUC01;16.06.2020 14:00;Base Q1;2;2;4366;11XCOMPTON-----X;16.06.2020 13:41:12.518;16.06.2020
13:41:12.518;42.51;1;Accepted
    2020;AUC01;16.06.2020 14:00;Base Q1;2;2;4366;11XCOMPTON-----X;16.06.2020 13:42:23.447;16.06.2020
13:42:23.447;45.67;;Rejected
```

6.1.2 Sample All Bids Report in CSG Format

```
DELIVERY_YEAR;AUCTION_ID;CLOSURE_TIME;PRODUCT;NUMBER_OF_LOTS;POWER_PER_LOT;ENERGY_PER_LOT;BALANCING_GR
OUP_EIC;SUBMISSION_TIME;LAST_UPDATED_TIME;PRICE;RANKING;ACCEPTANCE
    2020;AUC02;16.06.2020 14:00;Base Q1;3;1;2183;11XCOMPTON-----X;16.06.2020 13:43:12,189;16.06.2020
13:43:12,189;45,02;1;Accepted
    2020;AUC02;16.06.2020 14:00;Base Q1;3;1;2183;11XCOMPTON-----X;16.06.2020 13:43:12,189;16.06.2020
13:43:12,189;45,02;2;Accepted
    2020;AUC02;16.06.2020 14:00;Base Q1;3;1;2183;11XCOMPTON-----X;16.06.2020 13:43:27,429;16.06.2020
13:43:27,429;45,98;;Rejected
    2020;AUC01;16.06.2020 14:00;Base Q1;2;2;4366;11XCOMPTON-----X;16.06.2020 13:41:12,518;16.06.2020
13:41:12,518;42,51;1;Accepted
    2020;AUC01;16.06.2020 14:00;Base Q1;2;2;4366;11XCOMPTON-----X;16.06.2020 13:42:23,447;16.06.2020
13:42:23,447;45,67;;Rejected
```

6.2 Auction Result Report

Auction Results

Id: AUC27

# Lots:	5	**Delivery Year:**	2020
Average Price [€ / MWh]:	43.04	**Product:**	Base Year
Maximum Price [€ / MWh]:	43.40	**Date:**	01.01.2020
		Energy per lot [MWh]:	35 136
		Total Energy [MWh]:	175 680

Bal. Group	Submitted	Last Update	Price [€ / MWh]	Bid n.	Status
11XLAKEMAN-----X	01.01.2020 09:00:30.296	01.01.2020 09:00:30.296	42.90	1	Accepted
11XLAKEMAN-----X	01.01.2020 09:00:25.871	01.01.2020 09:00:25.871	43.10	2	Accepted
11XLAKEMAN-----X	01.01.2020 09:00:25.871	01.01.2020 09:00:25.871	43.10	3	Accepted
11XLAKEMAN-----X	01.01.2020 09:00:36.793	01.01.2020 09:00:36.793	44.80	4	Rejected
11XLAKEMAN-----X	01.01.2020 09:00:36.793	01.01.2020 09:00:36.793	44.80	5	Rejected

Figure 18: Auction Result Report