

CROATIAN POWER EXCHANGE

Trading Appendix 2.b

Intraday Market Regulations

CROATIAN POWER EXCHANGE Ltd.

INTRADAY MARKET REGULATIONS

1. INTRODUCTION

- **1.1.** Intraday Market consists of Intraday Continuous Market and Intraday Auctions Market. Intraday Continuous Market is a market for continuous Trading of hourly products and 15minute products. Transactions are matched automatically when concurring Orders are registered in the ETS. Transactions may be registered up to 30 minutes prior to Delivery. Intraday Auctions Market is a market for implicit auctions where collected orders are matched, and cross-zonal capacity is allocated simultaneously for different bidding zone borders, determining clearing prices for each bidding zone.
- **1.2.** These Intraday Market Regulations contain detailed provisions on Orders and Transactions in the Intraday Market and are part of the Trading Rules and each Membership Agreement which in Annex 1 stipulates that the Member participates on Intraday Market.
- **1.3.** The Products tradable in the Intraday Market and their applicable Trading Hours and 15-minute intervals are listed in the Products Specifications.

1.4. Provisions of part B. of these Intraday Market Regulations (Intraday Auctions Market) shall become effective as of 13.6.2024.

A. INTRADAY CONTINUOUS MARKET

2. ORDERING

2.1. Quoting

- 2.1.1. Orders may only be of the Order Types allowed by the Products Specifications and must relate to a specific Product.
- 2.1.2. The Order Prices shall denote the price in Euro per MWh. For example, an Order quoting 22.60 means that the Order Price is Euro 22.60 per MWh.
- 2.1.3. The Order Volume denotes the maximum volume to be bought or sold in MW.
- 2.1.4. An Order shall specify the following in order to be valid:
 - a. The Member making the Order;
 - b. Whether the Order is a Bid or an Offer;
 - c. The applicable Order Type;
 - d. The applicable Contract Code;
 - e. The applicable Energy Volume Limit (in MW);
 - f. The applicable Order Price Limit (in Euro/MWh); and

g. If applicable and/or desirable: Any additional information as mandated and/or allowed by (i) the Trading Rules (including the Market Conduct Rules) and/or (ii) the prevailing functionality of the ETS.

2.1.5. An Order shall be valid from the time of registration in accordance with this Section 2, subject to Section 6. of the Trading Rules – General Terms and until it is matched, cancelled or amended as specified in bellow Section 2.3. or deadline for trading with the Product stipulated

in the Order has expired.

2.2. Ranking of Orders

- 2.2.1. Orders are ranked as follows:
- 2.2.2. a. Orders are ranked in order of Order Price.
- 2.2.3.b. Orders with the same Order Price are ranked based on which Order was registered first in ETS.
- 2.2.4. Block Orders that cannot be matched may be by-passed by lower ranked Orders that can be matched.

2.3. Registration of Orders and Matching

- 2.3.1. Orders shall be submitted to CROPEX through the ETS. Transactions are matched automatically as soon as concurring Orders are registered in ETS. Transactions resulting from Orders being matched in the ETS are automatically and mandatory registered for Settlement.
- 2.3.2. Amendments to or cancellations of an Order in the ETS become effective when registered in ETS, provided that the Order has not been matched in accordance with Section 2.3.1 by the time of registration of the amendment or cancellation.
- 2.3.3. In situations where ETS is not working properly or is not accessible to the Members, CROPEX may in its sole discretion approve that the Member may recall its Orders or submit its Orders in alternative Order forms, as well as to submit changes to or cancellations of Orders as further set out in Section 6. of the Trading Rules General Terms. For avoidance of any doubt, all restrictions on registration of Orders through TTS stipulated in Trading Rules General Terms (necessity to confirm CROPEX's confirmation of the Order, CROPEX's right to delete the Order, binding time of the Order, Member's liability for the Order and exclusion of CROPEX's liability for registration of Orders) shall apply in this case.
- 2.3.4. In the case of a general suspension of Trading, all Orders in ETS will automatically be inactivated. With the return to normal operations, Members will have to re-activate all orders from their inactive state. Orders which are not re-activated by the end of the relevant Trading Day will be removed.

3. SUSPENSION OF TRADING

- **3.1.** CROPEX may suspend Trading in ETS or TTS if CROPEX deems necessary, including if there are technical errors or maintenance in ETS or disturbances in the electricity system.
- **3.2.** CROPEX shall, to the extent possible, inform Members of suspensions in Trading.
- **3.3.** All Orders in ETS will automatically be inactivated before ETS is reopened but will remain stored in the ETS to the extent this is technically possible by applying commercially reasonable efforts.

4. MARKET INFORMATION

- **4.1.** CROPEX shall continuously throughout every Trading Day supply Members with information on all Orders and Transactions registered in ETS on an anonymous basis. Such Transaction Information will be made available through ETS and/or such other information facilities as CROPEX in its sole discretion decides, and consideration for such information is included in the fees set in the Fee Schedule.
- 4.2. The Transaction Information shall include information on prices and volumes of Orders and

Transactions, the ranking of Orders and the time at which a Transaction was concluded.

5. NOMINATIONS

- **5.1.** Members are obliged to accurately and timely include all purchase and sale volumes from the concluded Transactions on Intraday Continuous Market within their daily physical nominations, in accordance with the applicable Croatian energy legislation.
- **5.2.** CROPEX is not liable for any damages, costs or expenses connected with Member's physical nominations, and Members will do anything in their power to exculpate CROPEX of any responsibility if any of the claims arising from obligations regarding physical nominations regarding the Transaction entered into by the respective Member are directed against CROPEX and will reimburse CROPEX for any and all damages and expenses which may arise for CROPEX regarding physical nominations.

B. INTRADAY AUCTIONS MARKET

2. **REGISTRATION OF ORDERS**

2.1. Order Form

- 2.1.1. Orders in the Intraday Auctions Market shall be submitted using CROPEX's standard Order form and shall be transmitted to CROPEX per electronic communications as specified by CROPEX or manually entered in the ETS.
- 2.1.2. CROPEX may, in situations where specified communication according to Section 2.1.1. above is not working, decide that an alternative order form as specified by CROPEX, e.g. as a file in e-mail or copy of Order from a previous day, may be used. CROPEX may in such situations restrict the number of Price Steps in the Orders and the number of Block Orders and may restrict the time until CROPEX will receive such Orders. An Order submitted through such alternative order form is only considered registered when CROPEX confirms the registration of the Order in the ETS to the Member through the TTS or otherwise in writing. After receiving such confirmation, the concerned Member's Trading Responsible or Trader appointed for Intraday Auctions Market must confirm the Order as it is contained in CROPEX's confirmation of registration of the Order to CROPEX through TTS or otherwise in writing. If the Member does not confirm the Order in such way until ten (10) minutes before the Gate Closure, CROPEX has the discretionary right to delete the Order from the ETS and shall in such case notify the Member. If the Member expressly dis-confirms the Order in such way until ten (10) minutes before the Gate Closure, CROPEX will delete the Order from the ETS and notify the Member. Any Member's late confirmations or dis-confirmations can be taken into consideration depending on sole discretion of CROPEX. The Order becomes binding on the Member from the time of registration regardless of the time of confirmation. The Member shall be responsible for the correctness of all Orders submitted through TTS, and Parties exclude liability of CROPEX for registration of Orders. A Member cannot invoke mistake in registration of Orders entered by CROPEX if such mistake was evident from confirmation on registration of Order and the Member did not expressly dis-confirm such registration of Order to CROPEX until ten (10) minutes before the Gate Closure.
- 2.1.3. The Order form must be properly completed in order to be taken into consideration at the Intraday Auction. In case the Order form is not properly completed it will not be taken into the consideration and the Price Report received by the Member from CROPEX will declare that no Transaction is concluded.
- 2.1.4. The Members are responsible to check that the Orders submitted are properly completed, correct and valid, without delay. This also includes situations where manual handling of the Orders by CROPEX has been found necessary. A Member cannot invoke mistake in registration of Orders if they did not warn CROPEX of such mistake as soon as possible, or if they did not expressly dis-confirm the registration of Order to CROPEX until ten (10) minutes before the Gate Closure in situations envisaged in Section 6.3. of the Trading Rules General Terms or in Section 2.1.2. above when the mistake was evident from CROPEX's confirmation on

registration of Order. It shall be considered that it was possible to check the correctness and validity of the registration of an Order as soon as details of registration of an Order became available to the Member concerned.

2.2. Quoting

- 2.2.1. All Orders, subject to this Section 2. and to Section 6. of the Trading Rules General Terms, are binding. All Orders which are in accordance with conditions set in these Intraday Market Regulations, Trading Rules and Membership Agreement are available for acceptance.
- 2.2.2. Orders shall be quoted using the Order types as further specified in Section 3. below. Each Order must specify whether it is a Bid or an Offer, where Bids are denoted by positive Energy Volume numbers and Offers as negative Energy Volume numbers.
- 2.2.3. Order Price Limits must be within the Price Range specified by CROPEX at all times.
- 2.2.4. Member is allowed to quote Orders so that the sum of all Orders quoted on all CROPEX Markets on which the Member participates does not exceed the amount (value) of the Collaterals posted to CROPEX for that Member, in accordance with the Clearing and Settlement Rules, Membership Agreement and the Trading Rules. Any quoting of Orders above the posted Collaterals shall be considered as a Non-Compliance Event envisaged by the General Terms and will not be accepted by CROPEX and will be deleted from the ETS and/or TTS.
- 2.2.5. Each Order to each Intraday Auction represents an individual and independent Order for the Delivery Period(s) to which it relates. Except as specifically mandated by the Order Type used, such as the Linked Block Orders, each Order shall represent an individual offer to buy or sell independent of any other Orders submitted by, or on behalf of, each Member to the same Intraday Auction during that Delivery Period(s).
- 2.2.6. Each Intraday Auction always relates to the following day starting from 00:00 CET, except for IDA3 which relates to the same day starting from 12:00 CET. Orders can be registered from the time they are made available for Trading and until Gate Closure.
- 2.2.7. CROPEX may in its sole discretion, but shall have no obligation to, contact Members by telephone or e-mail and offer that the Member may submit and/or correct an Order should CROPEX have reason to believe that an Order submitted by the Member is erroneous, or that the Member erroneously has failed to submit an Order. CROPEX shall under no circumstances be liable for errors made by Members in submission of Orders, regardless of whether CROPEX decided to or had a chance to react as provided in this Section 2.2.7.

2.3. Price Range

- 2.3.1. CROPEX shall for an Intraday Auction set a Price Range within which all Order Prices in the Intraday Auctions Market must be for that Intraday Auction.
- 2.3.2. CROPEX may change the Price Range set by giving at least four (4) days' notice. In case of a change of the Price Range for any Intraday Auction following the opening of Orders for that Intraday Auction, all Orders submitted prior to such change will automatically be deleted. CROPEX is not liable for any costs or expenses directly or indirectly incurred by Members because of the change in Price Range.
- 2.3.3. Prices for Orders are to be quoted in EUR. The maximum number of decimals that can be quoted is determined by CROPEX.

2.4. Gate Closure

- 2.4.1. By no later than Gate Closure each day the Member shall submit its Orders for Products depending on the type of IDA.
- 2.4.2. Orders received following Gate Closure will be considered null and void regardless of cause. For the avoidance of doubt, this also applies to Orders received after Gate Closure by reason of Force Majeure or communication failure and irrespective of whether or not the Member is in

any default.

2.4.3. Members experiencing technical difficulties when submitting Orders to CROPEX must inform CROPEX about this immediately.

2.5. Order Amendments

- 2.5.1. Orders which have been submitted are canceled if the Member submits a new Order covering the same Delivery Period. In case of several Orders submitted by the same Member for the same Delivery Period, the Order last received by CROPEX will consequently always be the only Order which is deemed valid.
- 2.5.2. The Members are responsible to check that the Orders (and any amendments thereto) submitted and received by CROPEX are correct and valid and are correctly entered into the ETS.

3. ORDER TYPES

3.1. 15 minutes Orders

- 3.1.1. 15 minutes Orders are the Member's statement of its willingness to purchase or sell a specified Energy Volume in an Intraday Auction at a specified price in a given Delivery Period of the applicable Delivery Day.
- 3.1.2. In each Order, the Member shall submit a set of Order Price and Energy Volume specifications for the applicable Delivery Period, starting with the Energy Volume at the lower Order Price Limit and ending with the Energy Volume at the upper Order Price Limit. Additional Price Steps may be specified as set out in the Products Specifications.
- 3.1.3. The Energy Volume given in an Order for sale (Offer) must be constant or increasing with increasing Order Prices. The Energy Volume given in an Order for purchase (Bid) must be constant or decreasing with increasing Order Prices.
- 3.1.4. To create an Order curve, CROPEX will upon reception of an Order interpolate the values between each Price Step in the Order by means of linear interpolation, and the Order will be deemed to apply to each interpolated value on the resulting Order curve.

3.2. Block Orders

- 3.2.1. Each Block Order must include details of such Block's Order Price Limit, the volume, and the start and stop time on block products. The Energy Volume may be different in each Delivery Period of the block.
- 3.2.2. Each Linked Block Order must specify the order of priority between the blocks comprised in such Linked Block Order. CROPEX may, in its absolute discretion, specify the maximum number of permitted priority levels with respect to any Linked Block Order and the maximum number of permitted Block Orders at each priority level. The maximum number of permissible priority levels and Block Orders may be changed by CROPEX at any time prior to closure of the Intraday Auction on not less than one (1) day's written notice.

4. MATCHING

4.1. Information on Matching Process

4.1.1. The calculation process in which Orders are matched is described in the Public description of the PCR Market Coupling algorithm Euphemia available on CROPEX website.

4.2. Matching of Orders and Calculation of Intraday Auctions Market Price and Volume

4.2.1. All Orders submitted for each Delivery Period will be regarded as a point on an Order curve for Offers and Bids respectively, where each Order curve is created by interpolating straight

lines between the Orders on the curve. The point of intersection between the aggregated Offer and Bid curves establishes the Intraday Auctions Market Price and Energy Volume for the respective Intraday Auction for that Delivery Period.

- 4.2.2. Any imbalance between total Offers and total Bids caused by the rounding off, of volumes for each Member when calculating the Intraday Auctions Market Price will be shared between Members whose Orders are accepted in respect of the relevant Delivery Period.
- 4.2.3. All Transactions in the Intraday Auctions Market relating to one Delivery Period will be carried out at the Intraday Auctions Market Price applicable for that Delivery Period.
- 4.2.4. All prices are indicated and matched in EUR.

4.3. Matching of Block Orders

- 4.3.1. Block Orders are activated if they meet the criteria below:
- 4.3.2. A Block Order for sale is matched only if the average Intraday Auctions Market Price for the Delivery Periods comprised in the Block Order is equal to or higher than Order Price specified in the Block Order. A Block Order for purchase is matched if the average Intraday Auctions Market Price for the Delivery Periods comprised in the Block Order is equal to or lower than the Order Price specified in the Block Order. Euphemia algorithm is choosing a combination of block orders that maximizes social welfare. Block Order may cause decrease of total social welfare, regardless of achieved prices. E.g. block order with average price acceptable in relation to hourly prices on market is not accepted (so called paradoxically rejected block). If the Energy Volume in each period of the Block Order differs, the volume weighted average price of the Block Order shall determine whether the Block Order is matched or not.
- 4.3.3. In respect of Linked Block Orders, the normal rules for matching of Block Orders in Section 4.3.2. shall apply, provided that:

a. Any Block Order which does not have the highest priority within its linked Block will only be matched if all the Block Orders with higher priority within the relevant linked Block have already been matched;

b. A Block Order that is not otherwise matched according to Section 4.3.2 may still be matched as part of a Linked Block Order if the matching of such Block Order, together with other Block Orders at lower priority levels of the Linked Block Order, does not result in an overall loss for the Member who submitted such Linked Block Order;

4.4. Procedure in Case of Non-Matching

4.4.1. In case of non-matching between the supply and demand curves in the Intraday Auctions Market, the trading system will curtail either the supply curve or the demand curve, depending on if there is an oversupply or under supply in the area. The total curtailment is divided among all Members whose Orders were taken into consideration in creating supply and demand curves pro rata based on their wish for sale or purchase at minimum or maximum price.

5. REPORTS

5.1. Price Report

- 5.1.1. When the Intraday Auction has been completed a publication will be made of Intraday Auctions Market Prices and corresponding Energy Volumes within Intraday Auctions Market.
- 5.1.2. CROPEX shall inform each Member of its realized purchase/sale position in a Price Report.
- 5.1.3. The Price Report specifies the Intraday Auctions Market Price and Energy Volume for each

Delivery Period in which Order(s) have been matched.

5.1.4. The Price Reports will normally be made available to Members on ETS immediately following the final confirmation of the Intraday Auction results. If the Price Report is delayed, CROPEX shall give the Members notice of such a delay as soon as possible. Price reports will in addition be sent to each Member by communication specified by CROPEX.

5.2. Nominations

- 5.2.1. Members are obliged to accurately and timely include all purchase and sale volumes from the concluded Transactions on Intraday Auctions Market within their daily physical nominations, in accordance with the applicable Croatian energy legislation
- 5.2.2. CROPEX is not liable for any damages, costs or expenses connected with Member's physical nominations, and Members will do anything in their power to exculpate CROPEX of any responsibility if any of the claims arising from obligations regarding physical nominations regarding the Transaction entered into by the respective Members are directed against CROPEX and will reimburse CROPEX for any and all damages and expenses which may arise for CROPEX regarding physical nominations.

6. HANDLING OF ERRORS

- 6.1.1. Notwithstanding the situations envisaged in Section 6.3. of the Trading Rules General Terms and in Section 2.1.2. above, if the Member becomes aware of errors in Order(s), the Member shall notify CROPEX immediately of such errors.
- 6.1.2. Following receipt of a notice pursuant to above Section 6.1.1., CROPEX shall consider in its sole discretion whether any measures can be taken to avoid or mitigate any potential losses of the Member without conflicting with the Intraday Auctions Market Price and the interests of the market, other Members, or any obligations of CROPEX.

Zagreb, 2.4.2024, effective as of 17.4.2024

Director

Ante Mikulić