

Day-ahead Market Regulations

Nord Pool AS

NO2 Market

DAY-AHEAD MARKET REGULATIONS – NO2 MARKET

1. INTRODUCTION

- 1.1 These Day-ahead Market Regulations contain detailed provisions on Orders and the calculation of Prices in the NO2 Auction and are part of the Rulebook.
- 1.2 The NO2 Auction provides the possibility of Trading based on all Orders submitted to the relevant Auction by Participants and received prior to the relevant Gate Closure.
- 1.3 Following Gate Closure, all volume and Orders received are stacked and a market equilibrium is calculated. Based on the price and volume market equilibrium, each Participant's rights and obligations regarding the sale and purchase of electricity for the relevant Delivery Periods are determined as further set out herein.
- 1.4 All Transactions resulting from Orders matched in the Trading Platform shall be automatically registered for Clearing.

2. HANDLING OF ORDERS

2.1 Order Form

- 2.1.1 Orders in the NO2 Auction shall be submitted using such standard order forms as Nord Pool may specify from time to time and be transmitted to Nord Pool through such communication methods as Nord Pool may specify from time to time.
- 2.1.2 Participants normally using other electronic communication than Nord Pool trading system User Interface (UI) in accordance with Section 2.1.1 above, shall use Nord Pool trading system User Interface (UI) as a backup in case their ordinary means of communications are not working.
- 2.1.3 Nord Pool may, in situations where specified communications pursuant to Sections 2.1.1 and 2.1.2 are not working and in addition to what is stated in the Rulebook in respect of the Trading Desk, decide that an alternative order form as specified by Nord Pool e.g. as a file in e-mail or copy of Order from a previous day, may be used. When using e-mail, Nord Pool may restrict the number of Price Steps in the Hourly Orders and the number of Block Orders.
- 2.1.4 The order form must provide complete information to be valid. Invalid order forms will be rejected.

2.2 Quoting

- 2.2.1 Subject only to Section 2.5 all Orders are binding and are available to be matched in accordance with these Day-ahead Market Regulations for the NO2 Market.
- 2.2.2 Orders shall be quoted using the Order Types allowed by the Product Specifications, 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 Energy Volume Limits and Order Price Limits must be within the technical limits and applicable Price Range set out in the Product Specifications.

- 2.2.4 Each Order represents an individual and independent Order for the Delivery Period(s) to which it relates. Except as specifically mandated by the Order Type used and subject to Section 3.4 and the Linked Block Orders described in Section 3.2.2. Each Order shall represent an individual offer to purchase or sell independent of any other Orders submitted by or on behalf of each Participant to the same Auction with respect to such Delivery Period(s).
- 2.2.5 Each Day-ahead Price Calculation relates to the following day starting from 00:00 CET.
- 2.2.6 Orders can be submitted from the time Nord Pool opens any given Delivery Day for submission of Orders and until Gate Closure.
- 2.2.7 Nord Pool may in its sole discretion, but shall have no obligation to, contact Participants by telephone or e-mail and offer that the Participant may submit an Order should Nord Pool have reason to believe that the Participant erroneously has failed to submit an Order.
- 2.2.8 Orders from Client Representatives shall be specified for each Client and for the Client Representative.

2.3 Price Range

- 2.3.1 Nord Pool shall for each NO2 Auction set a Price Range within which all Order Prices for that Auction must be submitted. Participants shall be informed of the Price Range prior to the opening for Orders for each Auction. In the absence of any explicit notice by Nord Pool of the Price Range, the Price Range as specified in the relevant Product Specifications shall be deemed to apply.
- 2.3.2 Nord Pool may change the Price Range set by giving at least 4 (four) days' notice. In case of a change of the Price Range for any NO2 Auction following the opening of Orders for that Auction, all Orders submitted prior to such change will automatically be deleted.
- 2.3.3 Prices for Orders are to be quoted in a currency approved by Nord Pool. The maximum number of decimals that can be quoted in each currency is determined by Nord Pool.

2.4 Gate Closure

- 2.4.1 Orders received after Gate Closure will be considered null and void regardless of cause unless otherwise decided by Nord Pool in its sole discretion. For the avoidance of doubt, this also applies to Orders received after Gate Closure by reason of Force Majeure Event or any communication failure (howsoever caused and irrespective of whether the Participant is in any default).
- 2.4.2 Participants experiencing technical difficulties when submitting Orders to Nord Pool must inform the Trading Desk about this immediately.

2.5 Errors in Orders

- 2.5.1 Each Participant is responsible for ensuring that the Orders it submits (and any amendments thereto) and which are received by Nord Pool are correct and valid, including in situations where manual handling of the Orders by Nord Pool has been found necessary.
- 2.5.2 If a Participant in an NO2 Auction becomes aware of any error in Order(s), it shall notify the Trading Desk immediately of such errors.
- 2.5.3 Following receipt of a notice pursuant to Section 2.5.2, Nord Pool shall consider in its sole discretion whether any measures can be taken to avoid or mitigate any potential losses to the Participant without conflicting with the NO2 Price and the interests of the NO2 Market, other Participants, or any obligations of Nord Pool.

- 2.5.4 Nord Pool may in its sole discretion, but shall have no obligation to, contact Participants by telephone or e-mail and offer that the Participant may correct an Order should Nord Pool have reason to believe that the Order submitted by it is erroneous.

3. ORDER TYPES

3.1 Hourly Orders

- 3.1.1 Hourly Orders are a Participant's Bid or Offer submitted in the NO2 Auction with respect to a specified Energy Volume and Order Price for a given Delivery Period of the applicable Delivery Day.
- 3.1.2 In each Hourly Order, the Participant shall submit a set of Order Price and Energy Volume specifications for the applicable Delivery Period, starting with the Energy Volume at the Lower Technical Order Price Limit and ending with the Volume Limit at the Upper Technical Order Price Limit. Additional Price Steps on the Order curve may be specified as set out in the Product Specifications.
- 3.1.3 The Energy Volume given in an Hourly Order for sale of electricity (Offer) must be constant or increasing with increasing Order Prices. The Energy Volume given in an Hourly Order for purchase of electricity (Bid) must be constant or decreasing with increasing Order Prices.
- 3.1.4 To create an Order curve Nord Pool will, upon receipt of an Hourly Order, interpolate the values between each Price Step comprised in such Hourly Order by means of linear interpolation, and the Hourly Order may be matched at any point on the Order curve resulting from such interpolation.

3.2 Block Orders

- 3.2.1 Each Block Order must include details of such Block's Order Price Limit, the hourly Energy Volume, the start and stop time and the applicable Minimum Acceptance Ratio (if less than 100 per cent). If no Minimum Acceptance Ratio is specified, the Minimum Acceptance Ratio will be deemed to be 100 per cent. 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 Block Orders comprised in such linked Block. Nord Pool may, in its absolute discretion, specify the maximum number of permitted priority levels that may be notified 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 Nord Pool at any time prior to closure of the NO2 Auction on not less than one (1) day's written notice.
- 3.2.3 It is not possible to link a Block Order to a Block Order which is part of an Exclusive Group.
- 3.2.4 Each Block Order comprised within an Exclusive Group must specify such Block's Minimum Acceptance Ratio (if less than 100). If no Minimum Acceptance Ratio is specified, the Minimum Acceptance Ratio for such Blocks within the Exclusive Group will be deemed to be 100.

3.3 Order Amendments

- 3.3.1 In any case where a Participant submits more than one Order on the same Trading Portfolio and with respect to the same Delivery Period of the same NO2 Auction, the Order submitted latest in time and not rejected by Nord Pool will over-write and cancel all prior Orders submitted to such NO2 Auction with respect to such Delivery Period.
- 3.3.2 Any Block Order which has been accepted by Nord Pool may subsequently be amended at any time prior to Gate Closure in accordance with the relevant Trading Platform change

procedure for such Order as may be determined by Nord Pool in its absolute discretion from time to time.

4. MATCHING

4.1 Matching of Orders and Calculation of Day-ahead Prices and Volumes

- 4.1.1 All Orders submitted to an NO2 Auction 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.
- 4.1.2 Any imbalance between total Offers and total Bids caused by the rounding of volumes for each Participant when calculating the applicable Price will be shared between Participants whose Orders are matched in respect of the relevant Delivery Period.
- 4.1.3 All Transactions in the NO2 Market relating to one Delivery Period will be matched at the Day-ahead Price applicable for that Delivery Period.

4.2 Non-EUR Denominated Orders

All non-EUR Orders in the NO2 Auction will be converted into EUR before the Day-ahead Hourly Price Calculation is performed.

4.3 Matching of Block Orders

- 4.3.1 Block Orders are activated if they meet the criteria below:
 - a. A Block Order for sale is matched only if the average Day-ahead 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 Day-ahead Price for the Delivery Periods comprised by the Block Order is equal to or lower than the Order Price specified in the Block Order. In addition, the aggregate Energy Volume of the Block Order must be matched with at least the volume corresponding to the Minimum Acceptance Ratio specified for the Block Order. If the Energy Volume in each hour of the Block Order differs, the volume weighted average price of the Block Order shall determine whether the Block Order is matched or not.
 - b. The sum of the acceptance of all Block Orders in an Exclusive Group will be at most 100 per cent. If all blocks in the Exclusive Group have a Minimum Acceptance Ratio of 100, only one Block Order from the group will be matched.
- 4.3.2 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 such other Block Orders at lower priority levels of the Linked Block Order, does not result in an overall loss for the Participant who submitted such Linked Block Order; and
 - c. The Block Order with lower priority within its linked block can be accepted at most to the same Acceptance Ratio as the effective Acceptance Ratio of the Block Order with higher priority.

4.4 Price determination

The algorithm used in the NO2 Auction will determine which of the submitted Orders are to be executed and which are to be rejected in order to achieve the following:

- a. The social welfare (consumer surplus + producer surplus + congestion rent between the regions) generated by the executed Orders is maximal.
- b. The power flows induced by the executed Orders, resulting in the net positions do not exceed the capacity of the relevant network elements.
- c. No blocks are paradoxically accepted.

4.5 Curtailment

In order to strike a price at equilibrium between demand and supply in an area with over supply, it may be necessary to curtail the sales bids so that the supply curve shifts to intersect with the demand curve at the Lower Technical Order Price Limit – currently EUR -500.

In order to strike a price at equilibrium between demand and supply in an area with under supply it may be necessary to curtail purchase bids so that the demand curve shifts to intersect with the supply curve at the Upper Technical Order Price Limit – currently EUR 3000.

5. GB PRICE THRESHOLDS

5.1 Reopening in case of exceeding Price Thresholds in the GB Market

- 5.1.1 In the event that the price determined in accordance with Section 4 leads to an applicable Price Threshold for the GB Market being exceeded, Nord Pool will, to the extent reasonably possible, inform all Participants of the Delivery Periods where such Price Threshold has been exceeded. Furthermore, if time allows, Reopening will be announced for the affected Delivery Day. The Reopening under this Section 5.2.1 will be for a period announced by Nord Pool, but for no shorter than 15 minutes.
- 5.1.2 In any case where the Maximum Price Threshold for the GB Market has been exceeded, each Participant shall only be permitted to adjust its Orders in the reopened NO2 Auction by increasing its Offers or decreasing its Bids. In any case where the Minimum Price Threshold for the GB Market has been exceeded, each Participant shall only be permitted to adjust its Orders in the reopened NO2 Auction by decreasing its Offers or increasing its Bids.
- 5.1.3 If, following the procedure in Section 5.1.2, relevant Price Thresholds are still exceeded, then the Orders as submitted to the Trading Platform and the price calculated in the subsequent NO2 Auction will stand.

6. REPORTS

6.1 NO2 Auction Price Report

- 6.1.1 When the NO2 Auction has been completed a preliminary publication will be made of NO2 Auction Prices and corresponding Energy Volumes within and between bidding zones. The NO2 Auction results are then subject to final confirmation in accordance with the applicable NO2 Auction procedures.
- 6.1.2 When the NO2 Auction Prices and Energy Volumes have been calculated, Nord Pool shall inform the Participants of their calculated purchase/sale in a Price Report provided to each Participant on the day preceding the relevant Delivery Day (D-1).

- 6.1.3 The NO2 Auction Price Report will specify the Day-ahead Prices and Energy Volumes for each Delivery Period in which Order(s) have been matched.
- 6.1.4 NO2 Auction Price Reports prepared for Client Representatives shall specify the Day-ahead Prices and Energy Volumes for each Client in addition to those in respect of the Client Representative's own Trading.
- 6.1.5 The NO2 Auction Price Reports will, in respect of the NO2 Market, normally be made available to the relevant Participants immediately following final confirmation of the NO2 Auction results.
- 6.1.6 The NO2 Auction Price Report will, in respect of the CE Market, normally be made available to the relevant Participants after forty-five (45) minutes following closure of the NO2 Auction. The NO2 Auction Price Report is considered preliminary until the NO2 Auction results are confirmed.
- 6.1.7 If the NO2 Auction Price Report is delayed, Nord Pool shall give the Participants notice of such delay as soon as possible.

7. AUCTION DELAY; NORWAY-GB DECOUPLING; AUCTION FAILURE

7.1 Auction Delay

If the NO2 Auction is delayed, Nord Pool shall inform all Participants by publishing an operational message at regular intervals starting no later than 11:00 CET, until such time as the relevant NO2 Auction is successfully completed or is deemed to have failed in accordance with Section 7.3 below.

7.2 NO2-GB Decoupling

In the event of any NO2-GB Decoupling, Nord Pool shall keep all Participants informed by publishing operational messages at regular intervals starting no later than 11:00 CET and Nord Pool shall announce a Reopening for a period determined by Nord Pool in accordance with the relevant operational procedures. During the Reopening any Participant or Client Representative, on its own behalf or on behalf of a Client, may submit or re-submit Orders.

7.3 Auction Failure and Cancellation

- 7.3.1 In the event that Nord Pool is not able to perform the NO2 Auction before 23:00 CET on the day prior to the Delivery Day, the Auction will be deemed to have failed and all Orders submitted to such Auction and not withdrawn will be automatically void. Nord Pool shall have a right (but not an obligation) in its sole discretion, to cancel the NO2 Auction if Nord Pool deems it necessary in order to secure orderly exchange trading or if such cancellation is in the interest of a well-functioning market or is carried out in order to protect the legitimate interests of Participants.

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