NORD POOL

Q&A - Intraday Auction Concept
(Revision 25 April 2018):

1) Why is Nord Pool planning to launch intraday auctions?
    a. These intraday auctions have been proposed by ENTSO-E and by a majority of Nord Pool customers – to simplify trading in the short term and to create better transparency, by delivering:
        i. One price.
        ii. Quicker/simpler submitting of orders/trading as it will not be necessary to run 24/7 trading desk.

2) What are the specifications of the Nord Pool intraday auctions?
    a. Area covered is currently: Germany.
    b. There will be two daily auctions with gate closures at 22:00 and 10:00 CET.
        i. 22:00 CET auction covers [00 – 24]
        ii. 10:00 CET auction covers [12 – 24]
    c. Granularity: Hourly products.
    d. Products available: Curve orders, regular block orders and profile block orders.
        i. Products must comply with the same rules as for Nord Pool's day-ahead market.
    e. The system and trading interface will be built on the present Nord Pool Day Ahead Web trading system and Euphemia algorithm.
    f. Orders can be uploaded as Excel spread sheets or directly through the user interface.
    g. Matching is generally as in the day-ahead market
        i. 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.
        ii. In such a case of "vertical overlap", the mid-point is selected as the match e.g.; the minimum sales price is 30€ and the maximum buy price is 50€, then the algorithm will produce a price of 40€.
        iii. As an exception from how the day-ahead market works, a curtailment situation in the intraday auctions will lead to cancellation of the auction.
    h. Price limits will be the same as in the day-ahead market; - 500 €/MWh and + 3000 €/MWh.
        i. Nord Pool strongly advises against submitting orders with highest or lowest price limit unless such prices are expected in the alternative markets such as the continuous intraday market or balancing market.
    i. Trade capture can be done manually from the user interface as downloads of Excel spread sheets or automatically through the CASS API.
        i. Trades are shown for each price area separately.
    j. Gross bidding and API are not currently planned to be available.

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k. Reporting of trades to ACER or RRM using the Nord Pool REMIT transaction service is offered.
l. Prices and volumes will be reported on the relevant Nord Pool web page and through Nord Pool Power Data Services.

3) How is the service cleared?
   a. Trading and settlement fee will be calculated on the net volume in each bidding zone.
   b. Two portfolios will be needed to net sell and buy curve order volume inside the same bidding zone.
      i. Netting fee inside bidding zone is zero.
   c. A minimum one portfolio will be needed in each country to trade in all bidding zones.
   d. Invoicing and settlement:
      i. Default setup is that intraday auction volumes are invoiced on a separate invoice. Customers may get three separate invoices per delivery country depending on whether they trade on all markets (day ahead, continuous intraday and intraday auctions).
      ii. Evening auction D-1 22:00 CET and the morning auction D 10:00 CET results are on the same invoice because our settlement run at 14:30 CET every business day.
      iii. Settlement runs once every Norwegian banking day approximately at 14:30 CET. Payments from net consumers to Nord Pool are due the next banking day and payments to producers are due the banking day after. The schedule is the same as for continuous intraday trading results.
   e. The collateral call will be calculated using the current risk model, based on the netted volume for delivery each day from day ahead, continuous intraday Market and intraday auctions as base.
   f. The market code will be: NPIDA
   g. The product code will be: PHA-20170901-14-1 and PHA-20170901-14-2; product identifier; year; month; date; clock hour, auction (1=22h and 2=10h).
   h. A new function "trade time" will be added to CASS facilitating easy filtering of trades in a particular auction.

4) Nord Pool nominations of trades executed in the intraday auctions to the TSO's
   a. Trades in intraday auctions are nominated aggregated for each product (e.g. each hourly product) together with trades in the continuous intraday market.
   b. Nominations of trades in the intraday auctions are done when the results are available following the quarter hourly cycle of nominations from the continuous intraday market.

5) How will the new auctions interact with the continuous intraday market?
   a. The intraday auctions concept will be additional to the continuous intraday market, which will remain.
   b. Orders and trades in the intraday auctions are <u>not</u> related to orders and trades either in the day-ahead market or in the continuous intraday market.
   c. The continuous intraday market will remain active even while the auction is run.

6) Publishing of intraday auction market results
   a. Results are published on the Nord Pool web page, when the intraday auction results are available latest approximately 10 minutes following gate closure
   b. Market results are available at the FTP server at the same time as on the Nord Pool web page.

7) Key characteristics of the Nord Pool intraday auctions
   a. The system has been designed to operate automatically.
   b. Fallback will be the continuous intraday market
      i. Automatic cancellation 30 minutes past gate closure in case of technical problems, change in transmission capacities from owners of capacity or other issues.

8) How to start trading the new intraday auctions
   a. If you are already trading at Nord Pool please request trading access - otherwise please apply for membership.
   b. Training is available on request.
   c. Testing will be available in the Nord Pool intraday auction member test environment.
   d. Log on will be via Single Sign On (SSO) – using electronic 2 factor authentication
      i. Nord Pool may utilise user details already registered for trading in the intraday market.
      ii. New users must register with Nord Pool.