

Public documentation

NETTING OF COUNTERTRADE BEFORE TRADING IN INTRADAY

As described in Energinet's methodology for procurement of countertrade energy approved by the Danish Utility Regulator 28 June 2022 (DUR j.no. 21/01999) netting of opposite directed countertrade requests within the same bidding zone is performed prior to the procurement of countertrade energy in the intraday market.

To enable the market to understand the netting process applied, this document provides further details and examples of the netting and publication of netted countertrade volumes.

In accordance with the methodology for procurement of countertrade energy, the trading in the affected MTUs is paused for a minimum of 10 minutes each time new countertrade energy data is published on NUCS.

Countertrade energy can result from structural or unexpected requests at different points in time. Structural requests are handled at defined deadlines at the start of, or during, the structural trading slot. Whereas unexpected requests are handled when they emerge and can be traded until intraday gate closure time ("ID GCT").

Structural countertrade requests submitted before the request deadline prior to the trading slot will be netted before trading in intraday, and in these cases the published net countertrade volume will be equal to the volumes that Energinet will aim to procure in the intraday market. The publication adds the latest structural and unexpected requests to one total net number in MW per delivery area. Given that the actual traded volumes depend on the timing of previous countertrade requests as well as price limits and market liquidity, differences in the published net volumes and the traded volumes may occur when countertrade is requested at different times.

Below is a variety of examples of how countertrade ("CT") netting will be performed in these cases. All examples are for countertrade requests in the same bidding zone (e.g. DK1) and for one MTU (e.g. H9(D)). The examples are not exhaustive; other situations can be derived from the logic illustrated below.

Example 1 – all CT requests are received before the structural CT trading slot (both CT requests require energy to be sold)

- TSO 1 requests to sell 100 MW (structural)
- TSO 2 requests to sell 30 MW (structural)

Result: 130 MW to be sold are published for the MTU in this bidding zone

Example 2 – all CT requests are received before the structural CT trading slot (one CT requests requires energy to be bought and the other request requires energy to be sold)

- TSO 1 requests to buy 100 MW (structural)
- TSO 2 requests to sell 30 MW (structural)

Result: 70 MW to be bought are published for the MTU in this bidding zone

Example 3 – an additional CT request is received during the structural CT trading slot (one CT request requires energy to be sold and the other request requires energy to be bought) and trading has been initiated

- TSO 1 requests to buy 100 MW (structural) before the start of the structural trading slot

Result: 100 MW to be bought are published and trading commences during the structural trading slot

- At a later stage during the structural trading slot, TSO 2 requests to sell 60 MW (structural)

Result: the published volume is reduced to 40 MW purchase (published as a second version on NUCS). If less than 40 MW were traded (bought) so far, the residual volume is bought. If more than 40 MW were bought already, the excess volume is sold to get to a total net purchase volume of 40 MW.

Example 4 – CT request is changed during the structural CT trading slot (both CT requests require energy to be sold) and trading has been initiated

- TSO 1 requests to sell 100 MW (structural)
- TSO 2 requests to sell 20 MW (structural)

Result: 120 MW to be sold are published for the MTU in this bidding zone and trading commences during the structural trading slot.

- At a later stage during the structural trading slot, TSO 2 increases its existing request of sell 20 MW to sell a total of 50 MW (structural)

Result: the published volume is updated (increased) to 150MW to sell (published as a second version on NUCS) and the additional volume is added for trading.

Example 5 – an additional unexpected CT request is received after the structural CT trading slot (both CT requests require energy to be sold)

- TSO 1 requests to sell 100 MW (structural)

Result: 100 MW to be sold are published for the MTU in this bidding zone and trading commences during the structural trading slot.

- Only 50 MW was sold by the end of the structural slot. This does not affect the publication of the (requested) countertrade volume of 100 MW.
- After the end of the structural trading slot, TSO 2 requests to sell 200 MW (unexpected)

Result: the publication is updated to 300 MW to be sold. The 50MW of countertrade energy requested by TSO1, which could not be traded in the market and expired at the end of the structural trading slot, is settled between Energinet and TSO1.

- The 200 MW additional unexpected countertrade volume are targeted to be sold before ID GCT.

Result: The publication of 300MW requested in total will not be updated, regardless of whether or not the 200MW unexpected request can be fully traded in the intraday market.

Example 6 - additional unexpected CT request is received after structural CT trading slot (one CT requests requires energy to be sold and the other request requires energy to be bought)

- TSO 1 requests to buy 80 MW (structural)

Result: 80 MW to be bought are published for the MTU in this bidding zone and trading commences during the structural trading slot.

- The full 80 MW is bought by the end of the structural slot
- After the end of the structural trading slot, the same TSO 1 requests to sell 60 MW (unexpected)

Result: the publication is updated to 20 MW to be bought (published as a second version on NUCS). Given that Energinet has already bought 80 MW (published in the first version on NUCS), Energinet will now aim to sell 60 MW before ID GCT.

- The full 60 MW are sold before ID IGC

Result: As in example 5, the publication of 20MW (net) requested is not updated with actual trading volumes (even though in this example 80 MW was bought, and subsequently 60 MW were sold, to achieve the exact net 20 MW which were requested and published).

Example 7 – multiple structural and unexpected CT request are received at different points in time in both directions

- TSO 1 requests to buy 100 MW (structural)
- TSO 2 requests to sell 30 MW (structural)

Result: 70 MW to be bought are published for the MTU in this bidding zone

- At a later stage during the structural trading slot, TSO 3 requests to sell 90 MW (unexpected)

Result: the publication is changed to 20 MW to sell (published as a second version on NUCS). At this stage, 20 MW shall be sold, together with any volume purchased already from the market.

- Still during the structural slot, TSO 1 increases its request from 100 MW to 120 MW buy (structural)

Result: the publication is updated by 20 MW (from 100 MW to 120 MW buy) to a net total of 0 MW (published as a third version on NUCS). Any (net) volume traded (bought or sold) in the market so far, is to be reversed.

- After the end of the structural trading slot, TSO 2 requests a sale of 30 MW (unexpected)

Result: the publication is updated to 30 MW to be sold (published as a fourth version on NUCS). For trading, because the structural trading slot has ended, 30MW shall be sold together with any remaining open volume of TSO 3's previous unexpected request (taking the already traded and netted volumes into account).

- Subsequently, during the unexpected trading slot, TSO 1 submits a request to buy 200 MW (unexpected).

Result: the publication is updated to 170 MW to be bought (published as a fifth version on NUCS). The residual volumes on the other two unexpected requests (from TSO 2 and TSO 3) at this point determine the remaining net volume, which is to be traded in the market.

The publications of countertrade volumes also include historic data on NUCS (version numbers and timestamps) to allow market participants to trace changes over time. Any volumes to be traded in the market remain subject to minimum/maximum prices that can be set by the requesting TSO in accordance with the methodology.