The importance of intraday markets has increased over the last few years. Companies trading in the intraday market often use algorithms to trade. In this quarterly newsletter from the Nord Pool Market Surveillance team, we look into the Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) guidance and forthcoming regulatory changes relevant to compliance in the intraday market. This newsletter is particularly aimed at companies which have recently started, or recently ramped-up their intraday trading activity.

Intraday market

The intraday market[1] allows market participants to trade continuously close to delivery hour. As power systems see an increasing share of renewable energy, the intraday market gains importance, allowing market participants to take the latest forecasts and availability into account. With the increasing importance of the intraday market, we also see an increasing number of intraday orders and transactions.

As the market evolves, so does the regulatory framework around it. The summary below is derived from Nord Pool Market Surveillance's expert views on REMIT and its guidance, along with the close contact we have with active market participants.

Main REMIT risks in intraday

REMIT applies to all wholesale energy markets. However, each market has a different market design and thus specific types of market manipulation that may occur. In this section, we highlight the main types of market manipulation which could constitute a compliance risk for market participants in the intraday market.

Transmission capacity hoarding

The ACER Guidance[2] defines transmission capacity hoarding as a "*practice that involves (i) the acquisition of all or part of the available transmission capacity (ii) without using it or without using it effectively*".

Transmission capacity hoarding first became a very important topic when the Danish NRA[3] published two decisions on cases involving this practice in 2018. That same year ACER also published a separate Guidance Note, explaining the concept more closely. Market Surveillance has also previously published videos explaining transmission capacity hoarding.

During 2023 this topic has received a lot of media attention, resulting in two relevant publications:

- ACER REMIT Quarterly Q1 2023, a regular publication from ACER, and
- Danish NRAs *Vejledning om handel med sig selv på engrosmarkedet for el (Guidance on self-trades on the wholesale energy market for*

[1] The most common intraday market is the SIDC (Single Intraday Market Coupling)

[2] Here and further, ACER Guidance refers to 6th Edition, published on 22 July 2021

[3] National Regulatory Authority, the entity responsible for enforcing REMIT

electricity), clarifying the concept, with more examples.

We invite interested readers to study the guidance mentioned above. Based on our experience, the most import considerations can be summarised as:

- Cross-border wash trades acquiring a significant part of scarce transmission capacity may be market manipulation when they secure prices at an artificial level or send false or misleading signals.

- When there is a need to balance a portfolio in different bidding zones, it should first be assessed if this can be done with external counterparties, rather than internally.

- Market participants shall avoid placing orders *designed* to match internally cross-border, unless this is done for a legitimate reason. A legitimate reason could be to trade two portfolios in different bidding zones *into* balance, not out of balance.

- Trading based on individual price expectations in individual bidding zones, which occasionally may result in cross-border wash trades, is unlikely to represent manipulative transmission capacity hoarding. Orders placed on independent strategies are just as likely to match with externals. It is recommended to be able to document the indifference you as a market participant have over the outcome of the trade, whether the matching happens internally or externally, cross-border.

Layering and spoofing

Another type of market manipulation is layering / spoofing. The ACER Guidance defines layering as *"issuing multiple non-genuine orders to trade at different price levels (layers) on one side of the order book, in order to enter into one or multiple transactions on the other side of the order book"*.

Spoofing is defined as *"issuing a single large or multiple non-genuine orders at the same price level on one side of the order book, in order to enter into one or multiple transactions on the other side of the order book"*. Both practices involve issuing so-called non-genuine orders – orders that are instrumental in achieving (or attempting to achieve) a better transaction price on the other side of the order book. To counter this we recommend:

- When designing an algorithm for the intraday market, consider incorporating a "layering" protection – a mechanism for protecting your algorithm from reacting to changes in the order book that are not supported by fundamentals. For example, not reacting to a single, or few orders at unusual price levels.

- When having several algorithms active in the market at the same time, consider whether together they can create a layering or spoofing pattern.

- Make sure that your algorithms are independent and not "instrumental". Each algorithm should achieve the profit itself and not improve the profitability of other algorithms.

Interaction with the balancing market

The third area to highlight is the interaction of an intraday trading strategy with the balancing market, or other TSO markets, happening after the intraday market.

Balancing markets are usually wholesale energy markets where REMIT applies. Still, we often experience differences in how the rules are interpreted nationally, based on the approach of specific TSOs.

In particular, imbalances can be viewed differently. For example, in 2021 the German NRA imposed fines on two market participants due to market manipulation related to system imbalances. It stated that selling electricity that was not available, without an intention to procure or generate it, may be seen as a REMIT breach. In other countries imbalances in the direction benefiting the system are welcomed. As stated in recital (17) of the guideline on electricity balancing (EBGL) *"The general objective of imbalance settlement is to ensure that balance responsible parties support the system's balance in an efficient*

way and to incentivise market participants in keeping and/or helping to restore the system balance". It is important to know the rules in the specific country where the algorithm or the trading strategy is active.

It is also important to know that settlement of the imbalance can be seen as a trade. This is relevant, for example, in transmission capacity hoarding, where imbalance settlement can be seen as offsetting trades used to profit from having previously acquired scarce transmission capacity through wash-trades.

New requirements in REMIT revision[4]

The considerations set out here take on even more importance because REMIT is currently undergoing a revision. Among a raft of changes, some of the most significant concern new requirements for market participants engaging in algorithmic trading.

The proposal lays down the requirements for *systems and risk controls* that have to be put in place by the market participant. Further, the proposal puts a requirement on *regulatory reporting* of these.

Broadly speaking, the new requirements for algorithmic trading can be placed in two categories:

1. **Ensuring technical resilience of the algorithm and preventing erroneous orders**
   This requirement means that algorithms shall have effective systems and risk controls to be resilient towards most changes that can occur in the market. Setting up thresholds and limits could be an effective way to limit the algorithm in case of extreme movements of the order book.

   Preventing erroneous orders should be thought through during the design and implementation process – can an algorithm act in a way that would be undesirable for the market participant? For example, if suddenly all liquidity in the order book disappears, would an algorithm be able to place an order at a level that is meaningful and corresponds to the expected bid-ask spread, when liquidity recovers? The proposal also makes explicit the requirements for proper testing and monitoring.

   Finally, there is also a requirement for ensuring business continuity in case market participants' trading systems fail. This means that there have to be effective arrangements in case the algorithms have to be shut down.

2. **REMIT considerations when designing algorithms**
   This requirement states that a market participant shall have effective systems and risk controls to ensure that the trading systems *"comply with [REMIT] and with the rules of an organized market place"*. This requirement can be interpreted as meaning that you must consider *how* the algorithm can manipulate the market, or be manipulated by others, while designing and implementing the algorithm. The main risks in the intraday market (presented above) have to be considered, as well as other potential risks specific to the type and strategy of the algorithm in question.

Further, NRAs may require market participants to provide a description of key compliance and risk controls "on a regular or ad-hoc basis". This means that all arrangements have to be properly documented, and every market participant engaging in algorithmic trading shall have a fitting compliance setup.

Establishing a compliance setup

A compliance setup consists of actions aimed at establishing a clear and effective routine for complying with the relevant regulations and requirements. Here, we focus on REMIT requirements.

The purpose of an established compliance setup is to contribute to a fair and level playing field for trading activities and to protect the trading company and its

[4] The descriptions under this headline is based off the latest draft proposal at the time of writing (26th October 2023). We recommend consulting the final version when published.

employees from sanctions and liabilities. It might also reduce the risk of reputational loss.

In light of the REMIT revision, many aspects of a classical compliance setup will become mandatory for companies engaged in algorithmic trading. However, irrespective of the type of trading – algorithmic or manual – Market Surveillance recommends establishing a compliance setup that is appropriate to the type of company and trading.

The REMIT Best Practice Report provides a sector review of best measures for establishing a compliance setup. A section on algorithmic trading which was added in 2020 further details an appropriate compliance setup.

Conclusion

The intraday market features specific risks which require close attention. As intraday trading becomes more important, we believe it is crucial that all market participants are educated on potential risks and take the necessary precautions when designing and implementing their trading activity.

We strive to ensure that Nord Pool's members are confident in their compliance. In case of any further questions related to the intraday market, trading practices, or related activities, please do not hesitate to contact us.

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market.surveillance@nordpoolgroup.com