

NASDAQ RESPONSE TO THE NORDREG CONSULTATION:

"MEASURES TO SUPPORT THE FUNCTIONING OF THE NORDIC FINANCIAL ELECTRICITY MARKET"

NordREG has invited market stakeholders to comment on the report "Measures to support the functioning of the Nordic financial electricity market" by THEMA Consulting Group and Hagman Energy. Nasdaq Commodities (hereinafter Nasdaq) appreciate NordREG's consultation and engagement with the industry regarding the functioning of the Nordic financial power markets. Nasdaq has previously submitted comments on a number of specific issues and highlighted the importance that the European NRAs should be given the flexibility to choose their local market's preferred hedging instruments and solutions supporting the existing financial market. For further relevant information please see Nasdaq's response to the public consultation on the provisional REMIT list of organized market places and the public consultation on the HAR FCA attached.

1. Introduction

Nasdaq Oslo ASA is a leading commodity derivatives exchange. The exchange is authorized by the Norwegian Ministry of Finance and supervised by the Norwegian Financial Supervisory Authority. Nasdaq Clearing is the brand name of Nasdaq Clearing AB which is authorized and supervised as a multi-asset clearinghouse by the Swedish Financial Supervisory Authority in Sweden as well as authorized to conduct clearing operation in Norway by the Norwegian Ministry of Finance. Nasdaq Clearing AB provides clearing functions by entering into financial derivatives contracts as a central clearing counterparty, thereby reducing the risk and margin requirements for buyers and sellers.

The Network Code on Forward Capacity Allocation (NC FCA) opens up for the flexibility for the Nordic regulators to choose their local market's preferred hedging instruments and solutions supporting the existing physical and financial market to ensure reliable prices and liquidity. However, support should only be given if the financial market does not provide sufficient hedging opportunities in the concerned price areas.

Nasdaq agree that it is of high importance that the regulators do not choose a model for auctioning of FTRs in the Nordic electricity market that will deteriorate the market and weaken the Nordic market model. Nasdaq is in favor of three of the suggested models; model 1 "Support to the market maker function", model 3 "Auction of EPAD contracts" and model 4 "Auction EPAD Combos". The preferred model may vary depending on the price area in question. Nasdaq is not in favor of model 2 "Guarantee minimum spread" as we believe TSO's should not directly participate as a market maker in the financial market.

Auctions of FTRs referred to in model 5 and 6 are not viable solutions since these introduce new products that are not related to the system price and therefore do not contribute to benefit the Nordic electricity market. We see a risk that the FTR model could reduce the market liquidity and thus reduce the possibility for market participants to manage their electricity price area exposure. According to our knowledge, these are not the products that the market players want to trade and we therefore do not discuss these options further in this document but rather focus on the preferred models, which are the main issues of the study.

Nasdaq can facilitate the implementation of all the proposed models and we are eager to discuss and investigate the models further with regulators, the TSOs and stakeholders. However it must be up to the NRAs following the market consultation to evaluate the efficiency in the price areas and decide which model is preferred. Nasdaq will consider listing EPAD products in price areas that are not listed today if there is any market demand.

2. Comments to the report

2.1. Generally

The report gives a good description of the functioning of the Nordic electricity market and the relevant models for TSO involvement in the EPAD market. However, we would prefer to have included some of the challenges we have with the price area structure and the dynamic price area situation in Norway. Nasdaq stress the need for the NRAs to have further consultations regarding the restructuring of price areas that will contribute to increase the efficiency of the market structure and as a result reduce the need for interventions in the financial markets. Please see more information in Appendix 1.

2.2. Strong link between the Nordic physical and financial market

To further explain the importance of supporting the existing Nordic market model the report should highlight the strong interlink between the financial and the physical market (e.g. Nasdaq and Nord Pool) where the number of common market participants is high on both venues. The Nordic financial electricity market with long term price signals for hedging are just as important as a properly functioning physical short-term day ahead electricity market. From an investment perspective long term price signals show clearly which economic investments make sense and where they should be located. In the medium term, they affect maintenance planning and the disposition of the reservoirs and ensure thereby that power plants are operated efficiently and available when they are needed the most. Exchange traded cash settled derivatives are an essential part of the electricity producers and consumers financial risk management. They usually hedge the long term power production and consumption several years in advance due to the large price variation in the physical market.

The lack of efficient hedging tools may lead market participants not to hedge or revert to more bilateral trading outside transparent and supervised venues and outside CCP clearing. It will increase market concentration, lead to less competition and ultimately to lower the social welfare gains. Such a development would clearly contradict the G20 objectives to create more transparent and resilient derivatives markets. The reduced efficiency will ultimately lead to higher costs for the end consumers.

2.3. Costs for the TSOs and market participants

In general, well-functioning financial markets with transparency, tight spreads and high liquidity will reduce cost for all market participants. The use of existing products is the most cost efficient and simple way as all market players are familiar with the products and have the necessary infrastructure in place for both trading and clearing. An additional setup will require significant investments and a need to post further collateral etc. The small and medium sized participants are an essential part of the market. They would not be able to participate in an additional set up due to additional investments and resources required which would lead to less competition and increase the concentration of participants. Fewer large participants would control both the sell and buy side as we see is the case in other European electricity markets (e.g. UK electricity market). The objective should be to facilitate hedging possibilities for all market participants with the ability to compete on equal terms.

Today, Nasdaq has market makers in the System, Swedish, Finnish, Danish and Latvian EPAD contracts and will consider contributing with additional financing of market makers in cooperation with the TSOs in order to increase liquidity and facilitate for a well-functioning Nordic electricity market. This could reduce the total cost for the TSOs.

The loss of congestion rent "revenues" as a result of auctioned FTRs should also be considered as a cost for the TSOs. According to the report "Profit or loss from sale of LTRs" by EC Group, Statnett may lose as much as 25% of the congestion revenue by offering all its capacity between price areas (five internal in addition to links with Netherlands, Denmark West and three Swedish areas). This is mainly due to the fact that the TSOs are obliged to sell and the buyers (limited amount of buyers) will have an opinion on what price they are willing to pay. In addition there is no efficient secondary market for FTRs which may naturally result in a lower market price for FTRs due to few participants and low transparency. The existing EPAD products have an established and transparent secondary market with numerous market participants and will therefore most likely be a more profitable choice.

3. Comments to the preferred models

Moving ahead, Nasdaq recommend three models and are willing to support any of these solutions following the NRAs decision.

3.1 Model 1: "Support to the market maker function"

Market makers will contribute to increase liquidity and transparency in the EPAD market allowing both consumers and producers to execute their sale and purchase orders at competitive and fair market prices. The TSOs should see this as an opportunity to further develop and improve the electricity market in the Nordic region. A more liquid EPAD will promote competition and improve the electricity price formation for all market participants, including lower prices for end users in the relevant price areas.

We recommend the TSOs to invite eligible participants through a tender process to apply for market maker status in the relevant EPAD areas. Certain obligations must be evaluated such as eligible products (weeks, months, quarter and years), market maker spreads, minimum quotation volume and quoting time. The market maker program should be limited for a certain time period in order to evaluate the efficiency and performance. One but preferably two market makers in each EPAD and System contract could be appointed (less risk with two or more market makers). Market makers should be compensated when fulfilling their obligations (spread/volume obligations etc.). Nasdaq recommends market maker applicants are selected by the following criteria:

- Experience
- Resources and capability to fulfill obligations
- Financial solidity and capital
- Technological and operational infrastructure

Selected applicants would be required to enter a market maker agreement with the TSO and/or the exchange (e.g. Nasdaq Oslo ASA). The exchange has tools in place to monitor the market maker's performance and obligations. As Nasdaq has competence in establishing well-functioning market maker programs, we will be happy to further discuss or advice how to define an appropriate program for market making.

3.2 Model 3: "Auction of EPAD contracts" and model 4: "Auction EPAD Combos"

If the TSOs choose to establish a Nordic primary market for auction of transmission capacity the auction product should be EPADs (single EPADS or EPAD COMBO) since these instruments are today the preffered hedging products in the Nordic region. The auctioned EPAD products should be equal to the existing secondary market product. The secondary market price will contribute to price transparency in the aution. Market participants in the secondary market will have direct access to the EPAD autions through the same trading and clearing system used for trading these products.

Nasdaq auction experience

For almost a decade, every 3 months Nasdaq hosted Virtual Power Plant auctions for the Danish energy producer Dong Energy. For information regarding the VPP power auctions please see Dong's VPP web page <u>http://www.elsamvpp.com</u>.

Nasdaq is an experienced operator of exchange auctions in both energy and other financial markets such as sovereign and corporate debt. The financial market auctions are held within the operative and technical solutions as prosed for the potential EPAD auctions.

Recommendations

Nasdaq would welcome the opportunity to discuss and evaluate the previously mentioned solutions in order to contribute to the best solution for all parties; TSOs, regulators, market participants and electricity markets, both physical and financial.

Appendix 1

Concern with many price areas in the Nordic region

Nasdaq's recommendation is to further consider reducing the number of price areas in the Nordic region. From a competition and liquidity point of view, the optimal situation is to have as few price areas as possible since it is easier to create an even more efficient competitive market. If the market is not capable of creating a competitive environment regulators need to consider the market structure and the competition authorities need to consider the competitive landscape in each of the 12 price areas. Fewer price areas would improve the function of the financial market and lead to increased liquidity in the EPAD market. Price areas where the prices are insignificantly similar could be revised. In addition the dynamic price areas in Norway are a challenge as market participants are insecure whether a price area change will take effect in the future. Even a minor movement of the area borders may change the supply and demand balance within both areas and thereby affect area prices, which further reduces the efficiency of long term price signals. Therefore the market would profit from fewer price areas with stable borders, giving them increased liquidity and a higher degree of certainty.