Dear Sirs,
Statnett SF welcomes the opportunity to respond to the public consultation about the influence of existing bidding zones on electricity markets. Norway has long experience using bidding zones and has currently five bidding zones. In our opinion the bidding zone configuration is an important element in achieving a well-functioning market design. Here we present our view on bidding zones as a measure to manage major congestions efficiently and avoid shortages in energy supply. We believe that our experience is relevant for other regions as well.

**Bidding zones provides an efficient way to handle major grid congestions**
Statnett considers bidding zones as an important tool for secure and efficient system operations. In our experience, bidding zones does not eliminate the need for redispatch actions or investments in transmission infrastructure, but when system operations or market outcome are significantly influenced by congestions bidding zones are the the appropriate tool. The price differences resulting from bidding zones provides clear incentives for power producers and potential investors to act according to the needs of the power system as a whole. These incentives are lost when using redispatch actions, which may augment the negative effects of the congestions.

Congestions with a major impact on the efficiency of the power market should be solved by investments in new transmission infrastructure. Bidding zones may then provide a secure and efficient solution until sufficient investments are in place.

The Norwegian transmission capacity is highly utilized, and transmission capacity in certain corridors limits power flow severely, e.g. the connection between eastern and middle Norway. The five Norwegian bidding zones provide a significant contribution to security of supply and market efficiency. In addition, an efficient handling of internal congestions has been important in enabling interconnectors, such as the HVDC cables to Denmark and the Netherlands, and to keeping this capacity available to the market.

**Bidding zones are instrumental in avoiding energy shortages**
Bidding zones have played an important role in minimizing the risk of energy shortages in the Norwegian power system. As a hydro dominated system, only a certain amount of energy may be produced each year varying with the reservoir level at the start of the year and the inflow during the year. Bidding zones provide the necessary price signals to encourage power imports and saving hydro resources when future shortage situations otherwise would be likely to happen. In the last three years price areas has been an important factor in preventing local energy shortages in both middle Norway (winter 2010/2011), and in western Norway (early spring 2013).
Regional variations in power balances influence the location of predominant congestions in the Norwegian grid. This requires the bidding zone configuration to be flexible. The Norwegian configuration of bidding zones has been changed eight times since 2000, and has varied between two and five bidding zones. This dynamic approach to the configuration bidding zones has been important to ensure an efficient utilization of the hydro system and transmission network over this period.

**Small or no adverse effects for the power market**
The Nordic power market has had a steady increase in the traded volumes in the last ten years. The price differences within Norway have generally remained small, but have deviated in periods of significant differences in hydrological conditions. By giving producers the right incentives and thus maximizing the flows between the surplus and shortage areas, the bidding zone configuration have contributed to increased welfare.

In the Nordic power system hedging of both power prices and price differences may be accomplished by trading financial power products at NASDAQ OMX. Statnett believe these products provide sufficient opportunities to counter the increase in local price uncertainty stemming from the bidding zones.

We do not believe that defining bidding zones based on objective criteria with the aim of increasing security of supply or increasing the utilization of the available transmission capacity constitutes discrimination against any market participants.

**Flow based market coupling may amplify the benefits of price areas**
The Nordic TSOs are currently exploring flow based market coupling. By allowing a more correct representation of the transmission grid at the power exchange, the flow based method can improve the utilization of the power system. The bidding zones are essential to the flow based market coupling, and as such the gain from using bidding zones, and from defining new ones, is expected to increase.
Yours faithfully
Statnett SF

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