

Pekka Vile 18 September 2013

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The influence of existing bidding zones on electricity markets

## FORTUM'S RESPONSE TO PUBLIC CONSULTATION

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## MAIN POINTS OF THE RESPONSE

- Large enough bidding zones are essential for market efficiency and credibility
- Grid investments should be the primary measure to remove congestions
- TSOs should contract adequate balancing reserves and use them for redispatching
- Cross-border resources should also be used for redispatching when possible

Response Public

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## ANSWERS TO THE CONSULTATION QUESTIONS

The answers are general and not related to any specific price zone.

1) How appropriate do you consider the measure of redefining zones compared to other measures, such as, continued or possibly increased application of redispatching actions or increased investment in transmission infrastructure to deal with congestion management and/or loop flows related issues? What is the trade-off between these choices and how should the costs attached to each (e.g. redispatching costs) be distributed and recovered?

We consider it important to have large, also cross-border bidding zones, and thus zones should be merged when possible. E.g. the bidding zones of Finland, Estonia and northern Sweden, and of Latvia and Lithuania, could well be merged to increase market efficiency. Different zones should be kept only where major structural congestions cannot be eliminated by grid investments based on cost-benefit analysis.

New transmission investments should be the primary long-term measure in removing grid congestions, as they also give additional benefits for market efficiency and credibility.

Redispatching actions can be increased based on wider resources through crossborder market integration and through increased contracting of location-specified balancing reserves when needed. Cross-border resources should always be used for redispatching when economic and when possible based on the available grid capacity after the day-ahead market closure.

Loop flows can in many cases be controlled by remedial measures on grid topology or by installing phase-shifting transformers or by corresponding redispatching measures. Future DC lines can provide an additional measure to control grid flows.

Cost distribution between the TSOs can be based on e.g. cost-benefit analysis on socio-economic welfare gains. In many cases simple methods (e.g. 50/50 or each TSO covering own costs) are however sufficient, too. Costs can be recovered through normal grid tariffs. Locational grid tariffs can be used where structural surplus and deficit areas exist.

2) Do you perceive the existing bidding zone configuration to be efficient with respect to overall market efficiency (efficient dispatch of generation and load, liquidity, market power, redispatching costs, etc.) or do you consider that the bidding zone configuration can be improved? Which advantages or disadvantages do you see in having bidding zones of similar size or different size?

The existing bidding zone configuration in Europe is mainly appropriate for today's power market. In the future, merging of some bidding zones could improve market efficiency. The size of zones should be based on structural bottlenecks and thus the zones could be of different size. Small zones could however often be merged to another zone by implementing relatively simple grid investments.



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3) Do you deem that the current bidding zones configuration allows for an optimal use of existing transmission infrastructure or do you think that existing transmission infrastructure could be used more efficiently and how? Additionally, do you think that the configuration of bidding zones influences the effectiveness of flow-based capacity calculation and allocation?

The current zone configuration, together with widening cross-border redispatching, would as such allow for quite optimal use of the infrastructure. However, in some cases (e.g. on the Danish - German border) the TSOs restrict the available cross-border capacity in a non-transparent way e.g. based on wind power forecasts. In such cases it remains unknown for market participants if the redispatching resources are fully used or not. The restrictions of cross-border capacity should be transparently reported and reasoned.

The coming flow-based calculation is intended to further optimise the use of the cross-border infrastructure. Thus no further delimitations of the current bidding zones should be made before adequate experience has been gathered from the operation of the flow-based calculation and allocation in the Continental market.

4) How are you impacted by the current structure of bidding zones, especially in terms of potential discrimination (e.g. between internal and cross-zonal exchanges, among different categories of market participants, among market participants in different member states, etc.)? In particular, does the bidding zones configuration limit cross-border capacity to be offered for allocation? Does this have an impact on you?

The bidding zone configuration cannot be considered as an obstacle for non-discriminated market access. With large enough bidding zones and adequate use of remedial measures, the TSOs can provide equal market access for all market participants. Based on redispatching costs etc., the TSOs also have a financial incentive to invest in additional internal transmission capacity when needed.

5) Would a reconfiguration of bidding zones in the presence of EU-wide market coupling significantly influence the liquidity within the day-ahead and intraday market and in which way? What would be the impact on forward market liquidity and what are the available options to ensure or achieve liquidity in the forward market?

The integration of the European day-ahead and intraday markets is currently in an important phase to reach the target of an EU-wide integration. Possible reconfigurations of bidding zones could seriously hurt and delay this process. The day-ahead prices are also an important price reference for the retail electricity market moving to full competition and hourly pricing options to utilise wider demand response resources. Smaller bidding zones would lead to more complicated retail pricing and could thus remove liquidity from the day-ahead markets.

The stability of bidding zones is crucial for the financial power market and liquid price hedging options for all market participants. Large enough bidding zones are needed in order to avoid big price spreads and other hedging problems for market participants.



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6) Are there sufficient possibilities to hedge electricity prices in the long term in the bidding zones you are active in? If not, what changes would be needed to ensure sufficient hedging opportunities? Are the transaction costs related to hedging significant or too high and how could they be reduced?

In the Nordic market there are sufficient hedging possibilities. For the Baltic countries, CfD contracts need still to be introduced for Latvia and Lithuania. The Polish financial power market also needs development as Polish forward trading is still mainly done with physical contracts.

Hedging transaction costs can be reduced by having liquid markets based on large bidding zones and financial forward trading.

7) Do you think that the current bidding zones configuration provides adequate price signals for investment in transmission and generation/consumption? Can you provide any concrete example or experience where price signals were/are inappropriate/appropriate for investment?

The current bidding zones configuration is adequate and stable enough to provide adequate market price signals for investments. Large bidding zones are needed for power plants investments so that the zonal power prices will not suddenly change due to local issues.

The power plant locations depend also on the primary energy sources and for CHP plants on the heat demand. Power plants can also get additional income from balancing and redispatching services based on their location. In some countries, e.g. in Sweden and Norway, the grid tariffs have locational components that can give additional price signals for the investments in generation/consumption.

Transmission investments should be done based on cost-benefit analysis and not on price signals only. Within one bidding zone, the redispatching costs can however give a financial incentive for grid investments, while between bidding zones the congestion income must primarily be used for remedial measures or grid investments according to the EU Cross-border Regulation.

E.g. in Finland, the TSO Fingrid has as one of its targets to keep Finland as a united bidding zone, which is also required in the updated Finnish Electricity Market Act, which entered into force on 1 September 2013.

Fingrid is thus investing in strengthening the Finnish north-south transmission, thus enabling bigger cross-border electricity trading as well, see e.g. <a href="http://www.fingrid.fi/en/customers/Customer%20attachments/Seminars/2013/Markkin\_oiden%20tarpeet%20verkkoinvestoinneissa\_en.pdf">http://www.fingrid.fi/en/customers/Customer%20attachments/Seminars/2013/Markkin\_oiden%20tarpeet%20verkkoinvestoinneissa\_en.pdf</a>.



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8) Is market power an important issue in the bidding zones you are active in? If so, how is it reflected and what are the consequences? What would need to be done to mitigate the market power in these zones? Which indicator would you suggest to measure market power taking into account that markets are interconnected<sup>2</sup>? <sup>2</sup> This information would be primarily useful for ENTSO-E when performing the bidding zone review process (Activity 4)

Large bidding zones, integration of day-ahead, intraday and balancing markets, market-based demand response and increasing cross-border interconnection capacities, together with transparent balancing and redispatching services, are important for efficient and competitive power markets, especially taking into account the growing share of intermittent RES generation. No single indicator is thus enough in measuring the competition situation. It is important also to consult all market stakeholders.

9) As the reporting process (Activity 1 and Activity 2) will be followed by a review of bidding zones (Activity 4), stakeholders are also invited to provide some expectations about this process. Specifically, which parameters and assumptions should ENTSO-E consider in the review of bidding zones when defining scenarios (e.g. generation pattern, electricity prices) or alternative bidding zone configurations? Are there other aspects not explicitly considered in the draft CACM network code that should be taken into account and if so how to quantify their influence in terms of costs and benefits?

It is very important that the impacts of bidding zone delimitation on the electricity retail companies and electricity consumers are taken into account. With small bidding zones the market transparency and liquidity would be reduced, which would affect consumer trust and equality in the electricity market. This would also affect the possibilities for distributed RES and CHP generation investments.

10) In the process for redefining bidding zones configuration, what do you think are the most important factors that NRAs should consider? Do you have any other comments related to the questions raised or considerations provided in this consultation document?

The most important factors are the market liquidity and credibility, also from the retail consumer point of view. The NRAs should also check that the TSOs use adequate remedial measures and have contracted enough balancing reserves in order to avoid restrictions on cross-border transmission capacities due to internal grid stability and adequacy. No delimitations of the current bidding zones should be made at least until enough experiment is gathered from the expected benefits of the coming flow-based capacity calculation and allocation. Stability of the bidding zones is crucial for market parties having long-term contract, hedging and investment commitments.