



EPEX SPOT INFO

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Impact of the Law on Renewable Energy (“EEG”) on EPEX Spot German/Austrian Auction

Executive summary:

- From January 1, 2010, the German TSOs will be required to sell all the power from renewable sources, based on the predicted feed-in that is available on the previous day, via the exchange’s Day-Ahead auction. For any differences between volumes already sold via the auction and the feed-in based on the intraday forecast, TSOs will be required to balance them via the exchange’s intraday market (purchase and sales);
- Depending on the behaviour of the buy-side, this influx may cause more volatility and deep negative prices, in certain circumstances;
- Epex Spot will automatically run a second auction in case of hourly price(s) below -150€ (or above 500€) and at the same time the Phelix Base price significantly deviant from the reference price of the OTC. However this may not always prevent from very low prices and curtailment situations at -3.000€.
- Epex Spot points out the risks market participants can run in case of imbalances and curtailments, and thus the risks associated with strategies leading to price independent bids on the auction.
- Epex Spot calls for members to make more use of the price flexibility offered by bidding instruments especially on the buy side. This would allow for an improved resilience of the market in the negative prices area, would reduce the risk of unbalances and offer low-price purchases to the buyers.

We would like to provide you with some facts about this new law to make sure all members of the German/Austrian Auction share the same information and are able to adapt their bidding strategy accordingly.

1- What will be the main changes?

- a. Current organisation



- Renewable power is currently purchased from producers at fixed feed-in tariffs by Transmission System Providers (TSOs)
- TSOs provide every month power suppliers with a schedule of renewable energy to be delivered each day of the month.
- TSOs then trade on the exchange each day (on Day-Ahead and Intraday) to balance this fixed schedule against the actual renewable energy production (buying missing energy or selling surpluses).
- TSOs are compensated by the suppliers (and at the end by end-consumers) for the costs associated to the daily balancing of renewable energy.

b. Organisation as of January 1st 2010

- **TSOs will be required to sell directly on the exchange's day ahead auction the total quantity of power they have to purchase from renewables producers (based on the predicted feed-in that is available on the previous day).**
- A nation-wide compensation account will allow the balancing of profits and losses at a global level and a uniform levy will be charged to end-consumers.
- This levy will take into account the spread between fixed purchase tariffs and actual market prices at which energy will be sold, as well as operational costs incurred by the TSOs.

2- Impacts on the Auction

In 2010, it is forecasted that the total renewable power generation concerned by the EEG law should amount to more than 90 TWh.

It is expected that TSOs are required to send price-independent bids to maximize their chance of having their bids executed.

In the short term, the influx of renewable energy sales will most likely have a significant downward effect on auction prices with negative prices occurring more often than they do today depending on how quick the (potential) buyers adapt to the new conditions. In case of big wind in northern Germany, there is even a significant risk of prices fixed at -3000€ involving curtailment of sales bids.

Price volatility will also increase, first because of the variability of renewable energy influx in the grid but also because it is unclear how the buy-side will react to these changes.



3- Impacts for members

a. Second Auction

EPEX Spot has recently taken the resolution not to publish curtailed prices without having called for a Second Auction first. In case of curtailment, or if hourly price(s) is/are below – 150 €/MWh (or above 500 €/MWh) and baseload price differ significantly from OTC prices (when available), then exchange members will be informed of the situation and will have the opportunity to modify their bids correspondingly in short time. Second Auctions are launched after the EMCC volume coupling process approximately at 12:35 am. **We therefore recommend all traders to be attentive to any message sent by EPEX Spot as long as prices are not published, especially on week-ends.**

However, it must be clear that Second Auctions does not always lead to a significant change in the order book and that it can happen that, especially in case of high unbalances, no significant modification of the bids is observed and prices remain unchanged.

b. Price-independent bids

Sellers must be especially cautious when entering price-independent bids because of high financial risks associated with highly negative prices. More generally, all participants are recommended to make the most of bidding instruments provided by the exchange and to include price steps in their bids. Price-dependent bids are an efficient contribution to market price determination and ensure that market prices are a faithful representation of market conditions.

Epex Spot would like to encourage members with flexible generation or sourcing to place buy bids along the price curve in the negative and low price area. In case of negative or low prices, these bids will be executed limiting the risk of curtailment and providing opportunities to the buyers.

c. Available information

- **More complete information regarding the implementation of the law can be found on the pages of the Federal Association of the German Energy and Water Industries (Bundesverband der Energie- und Wasserwirtschaft e.V. / BDEW). The address of the web site (in German only): www.bdew.de.**
- Information can also be found on the web site published in common by the four German TSOs on www.eeg-kwk.net.
- On EEX transparency platform (www.transparency.eex.com), wind and solar energy forecasts for the following day are made public every day at 6:00 pm for each TSO area.



- A more complete version of this note is to be found in the resources center of EPEX Spot elearning platform <https://www.elearning.epexspot.com/>

Yours faithfully,

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