KYOS Energy Analytics

Webinar: Interconnectors in Europe - FAQs



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Can you tell a bit about the work you did for interconnector companies?

Interconnector companies are primarily interested in monitoring the value of their capacity and in forecasting auction outcomes.

A regular report with our valuations for the upcoming Month/Quarter/Calendar products helps them with keeping up to speed with the market and with timing the auctions. This suits well with our statistical approach.

In a few cases, they were interested in investigating the potential changes in value of their asset if some new government policies were to be implemented. It was possible to do so by using our fundamental approach.

Statistical approach] - Do you only work with individual months or also with quarters or calendar products?

What we do with the statistical approach is to value individual months (e.g. Oct-24, Nov-24, Dec-24) and then aggregate our valuation results into Quarters (e.g. Q4-24) and Calendars.

This way, the user is free to directly look at Quarter results only or to dive deeper and look at individual months, while being assured that the averages of settlement prices we use for individual Month products will always match the settlement prices of Quarter and Calendar products.

Statistical approach] - Can you tell us more about the forward price simulations?

The forward price simulations for each of the two individual markets are generated with our in-house Montecarlo simulation engine KySim. The simulation model is a 3-factor model including short term, long term and seasonal volatility

- The calibration of the volatility is based on historical data and we ensure that extreme outliers are excluded (e.g. 2022 volatility).
- The average of all the simulated prices for each product (Month, Quarter, Calendar...) is equal to the end-of-day settlement price of that product.
- The simulated prices are co-integrated between the two markets: if one simulation path sees higher prices than average in one market, it is also likely to see higher prices than average in the other market.
- The simulated prices mean-revert to the end-of-day settlement prices: simulated prices are unlikely to excessively diverge from end-of-day settlements; the more they diverge, the more they are "pulled back" towards the end-of-day settlement.





[Fundamental approach] - How are the weather scenarios generated?

Our "default" weather scenarios correspond to historical weather years. For example, a scenario may be based on weather year 2023; this means that the hourly capacity factors of renewable generation (solar, wind...) projected in the future for each market zone will correspond to those of historical weather year 2023 for that same market zones. Our database of historical weather years goes all the way to 2016, giving us a wide variety of scenarios to base our analyses on.

If needed for a specific what-if analysis, we can also generate new weather scenarios where we can adjust weather forecasts or even load shapes up to hourly granularity for each market zone.

For more information: info@kyos.com

We can share more in a personal conversation or demo, so feel free to contact us: info@kyos.com

Please also check our website, the <u>knowledge center</u> is a great resource for the latest news, where we publish interesting articles and reports.





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