

BiTraDER

Breaking down barriers: the new world of energy flexibility trading

\ge Boosting revenue and connectivity

We know that the constraints on the electricity distribution network can make it frustrating at times for people needing to connect.

At the moment, customers are offered a non-firm connection to allow them to connect more quickly, at a lower price. However, this connection can be curtailed by the distribution network operator without any consideration of on-the-day conditions. It can limit the times a generator can export, or the capacity that can be exported. There is less risk with a firm connection, but they can involve longer wait times to connect.

> Introducing BiTraDER

BiTraDER is an entirely new way of working, bringing opportunities for customers to trade flexibly between themselves, while generating income.

For those on a non-firm connection, it offers the option to trade their position in the curtailment order with another customer (subject to certain conditions). This would allow businesses to stay connected for longer or avoid curtailment altogether when it's really needed for operational reasons. It would also allow customers with a firm connection to sell their 'spare' network capacity and take a position in the curtailment order, generating additional revenue.

BiTraDER offers customers the opportunity to boost revenue and connectivity. It should also help to facilitate the roll-out of renewables by reducing risk, and reduce whole system costs by more efficient use of the existing network.





\gg Moving to a more flexible market

The distribution network operator (DNO) will provide an initial list of resources/customers in the order they will be curtailed if there are any network constraints, called the 'merit order stack'. This order is determined automatically by the DNO's active network management system (ANM). Customers will then trade between each other, in line with pre-determined trading rules, altering the order in which customers will be curtailed, to form the order stack for execution in real time.

This project will also work alongside the electricity system operator (ESO) to examine how BiTraDER could be used to resolve conflicts. In many instances, the contractual terms between flexible resources and the ESO prevent them from participating in other markets, such as DNO flexibility services. BiTraDER could potentially solve this conflict by providing a more transparent marketplace.

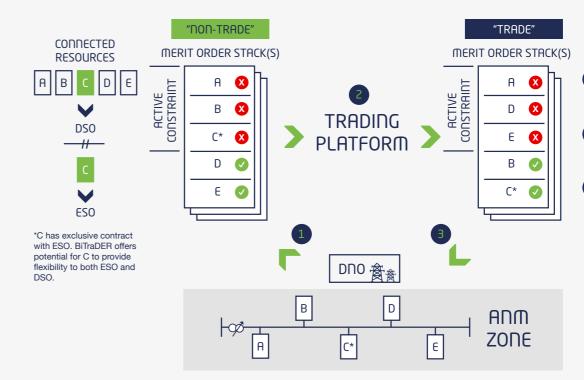
\ge BiTraDER roll-out

In the first two years of the project, the bilateral trading platform will be designed and built, with feedback and input from customers taking part in the trial.

In the third year, the trading platform will be initially deployed in a simulated environment to develop, implement and test a core set of trading rules in the market platform – and refine them as appropriate.

Next, the trading platform will be tested on a limited part of ENWL's distribution network for a live network trial. The full end-to-end process of the bilateral trading market will then be tested, taking real output data from the network and allowing customers to trade their curtailment obligations.









Delta-EE are leading on the customer engagement activities throughout the project. Delta-EE will be available throughout the project to provide support to all those taking part in the project.

If you have any questions regarding the BiTraDER project, please contact <u>BiTraDER@delta-ee.com</u>

You can also visit the ENW website for further information: www.enwl.co.uk/go-net-zero/ innovation/key-projects/bitrader/

STEP:

Merit order stack presented to commercially available trading platform.



Near real time trades based on new rules developed as part of BiTraDER.



Traded merit order stack presented back to DNO.







Celectricity north west



