Fostering Flexibility: Empowering Connected Resources through Bilateral Trading for Enhanced Decarbonisation and System Efficiency

Dr Geraldine Paterson
Current challenges

1. Reluctance to accept flexible connections
2. Reluctance to offer flexible services
3. Lack of competition
4. ESO /DSO conflicts

Investigate, develop and trial bilateral trading of curtailment obligations

Reduce barriers for the uptake of RES and choice for connected customers

Encourage use of flexibility and reduce whole system costs

Enable DNOs to meet the challenge of net zero
Working with our project partners we will deliver a functional specification detailing the requirements for facilitating bilateral trading, including platform, market model, data requirements and interface.

*C has exclusive contract with ESO. BITraDER offers potential for C to provide flexibility to both ESO and DSO.
Described solution

Trading Platform

Curtailable connections

Non-curtailable connections

Demand turn-up

"Last resort"

Network Operator

Market Participants

Look Ahead / Merit Order

Dispatch

Trades / Settlement
High-level process

**Customer registration**
- Commercial and technical registration
- Store registration information
- Commercial pre-qualification
- Technical pre-qualification

**Trading**
- Submit bids/offers and baselines
- Match trades and send traded MOL to DNO
- Define matching rules
- Provide look ahead / merit order list

**Trade verification**
- No action
- Verify trades
- No action
- Provide look ahead / merit order list

**Dispatch**
- No action
- No action
- Send dispatch instructions

**Performance verification**
- Submit meter data
- Verify asset performance against trades
- Resolve disputes
- Provide execution reports

**Settlement & payments**
- Make or receive payments
- Provide payment information
- Facilitate payments
- Adjust curtailment index

**Other activities**
- Receive and action dispatch instructions
- Provide execution reports
Benefits

- Significant predicted carbon savings
- Significant financial benefits for customers and networks
- Encourages connection of low carbon technologies by increasing value proposition
- Enables increased competition through a transparent, neutral market
- Increases available flexibility driving down whole system costs
- Provides greater opportunities for connected customers
- Improves efficiency of the network
BiTraDER – project timescales and deliverables

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**Deliverables**

1. BiTraDER Initial Report – Customer Engagement and Scenarios
4. BiTraDER Architecture Build Lessons Learned Report
5. BiTraDER Simulation Trials Report
6. BiTraDER Network Trials Report
7. BiTraDER Functional Specification
8. BiTraDER Final Report
9. Knowledge Transfer
QUESTIONS & ANSWERS

Please contact us if you have any questions or would like to arrange a one-to-one briefing about our innovation projects

- innovation@enwl.co.uk
- www.enwl.co.uk/innovation-strategy
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