

National Grid ESO awards contracts to maximise renewable generation and deliver consumer savings worth millions of pounds

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- **Contracts awarded to reduce constraint costs on key English/Scottish border in 2023/24**
- **10 companies with 15 generating units, including windfarms and battery storage, to respond in 150 milliseconds to support system conditions when a network fault occurs**
- **Service expected to deliver annual savings worth tens of millions of pounds**
- **Key step to enabling 100% zero carbon grid operation**

Savings on constraint costs, estimated at tens of millions of pounds, are set to be delivered following a successful tender process announced by National Grid ESO today.

The successful companies, which operate windfarms and battery storage facilities, will be connected to constraint management equipment to maximise renewable generation on the system and reduce constraint costs across the key B6 English/Scottish border. Initial estimates suggest annual savings of £20m to £40m* could be delivered by the service.

The contracts are part of the ESO's Constraints Management Pathfinder project and will enable renewable generation to continue on the system, rather than being pre-emptively curtailed. Instead of paying constraint costs to turn off generation when there is the risk of a fault, this technology provides an option of allowing generation to continue for longer. This results in reduced constraint costs which would ultimately be paid for by consumers.

Julian Leslie, Head of Networks at National Grid ESO, said:

"These services give our control room more flexibility, enabling renewable generation to stay on the system for longer and taking us another step closer to 100% zero carbon operation.

They're part of the ESO's wide-ranging 5-point plan which will allow us to manage constraints on the system more effectively in the years ahead, reduce balancing costs and ultimately save consumers millions of pounds."

Pathfinder projects are designed to find new ways of operating the system to reduce costs for consumers. This service is an innovative way of managing the risk of very rare network faults.

Currently, the main mechanism to constrain generation is to bid generators off the system. This approach is used by system operators around the world, but it can be expensive as it is done prior to a fault occurring.

This project, which procured 1.7GW of transmission connected generation, will see up to 800MW available to be tripped off at any one time.

When the ESO identifies a constraint on the B6 boundary, the generation is armed to be ready to reduce output in the event of a fault. Should a fault occur, the generating units respond quickly, reducing their output within 150ms. The ESO will then reconnect the units to the system as quickly and safely as possible.

The Constraints Management Pathfinder project is part of National Grid ESO's 5-point plan to manage network constraints in the years ahead.

ENDS

Notes to editors

- The initial contracts will run from October 2023 to September 2024. The service will be procured annually.
- *Estimated savings of between £20m to £40m will depend upon system conditions and the generation background driving the constraint, i.e. savings are likely to increase with rising gas prices.
- Details of the contracted generation is available here - <https://www.nationalgrideso.com/future-energy/projects/pathfinders/constraint-management/noa-constraint-management-pathfinder-phase-1>
- Payments for this service will include:
 - Arming payment (£/per settlement period) – for when the inter trip service is armed
 - Tripping fee – single payment when the fault occurs for all units that had been armed and disconnected.
- Generators in Scotland interested in participating in this B6 service in 2024/25 should respond to the Expression of Interest which has recently been published by National Grid ESO shortly and closes on 22nd April 2022 (<https://www.nationalgrideso.com/electricity-transmission/future-energy/projects/pathfinders/constraint-management/noa-constraint-management-pathfinder-phase-1>).
- Details of National Grid ESO's 5-point plan to manage network constraints can be found here - <https://www.nationalgrideso.com/news/our-5-point-plan-manage-constraints-system>
- More than 50 generating units expressed an interest in providing this service in 2023/24

Contact details

For media enquiries about National Grid ESO, please contact [John Cook](#) (07815 025350).

Additional quotes from contracting parties

Lindsay McQuade, CEO of Scottish Power Renewables, said:

“This industry leading new service is driven by the flexibility of our wind portfolio. It will reduce network costs for consumers and increase the generation of renewable energy across the country, improving the UK's green energy security. We believe renewables will play an increasing role in managing the complex operation of the grid network through technical and commercial innovation that will benefit consumers and help the UK get to Net Zero faster.”

James Basden, Co-founder and director of EV fleet and battery storage specialist Zenobē, said:

“We’re excited to be the first in the world to provide a battery for an ESO constraint management contract, accelerating the transition to a reliable, renewable energy network. Zenobē’s battery in Wishaw is Scotland’s first transmission-connected battery and will act as a flexibility tool to manage constraints, securing the supply of power for Glasgow and demonstrating the essential role of new technologies in enabling integration of renewables on the grid.”

Rod Wood, Managing Director of Community Windpower, said:

“We are delighted that our Aikengall II and our recently constructed Aikengall Ila Community Wind Farms have won a tender to be part of the ESO’s Constraints Management Pathfinder Project. The ‘quick trip’ being fitted at Aikengall II and Ila will provide energy security and flexibility by supporting the system when a network fault occurs. At a time when the consumer is seeing rising energy costs coupled with the need for energy security across Europe it is time to put cheap green renewables to the forefront, driving down costs and taking a key step towards 100% net zero grid operation.”

Piero Maggio, Asset Operations Director, EDF Renewables, said:

“We’re pleased to be signing some of our largest windfarms up to this inter-trip scheme, giving the ESO another tool in their kit. The benefits to the end consumer and the UK’s net zero targets made this tender exercise all the more worthwhile and we look forward to working together on future Pathfinder projects.”

Graham Pannell, Head of Energy Systems & Regulation at Fred. Olsen Renewables, said:

“We are really pleased to be taking a leading role in this flagship project. This initiative will maximise existing grid capacity, exporting more of Scotland’s vast renewable energy potential, whilst also helping consumers to save on their energy bills. We hope that this project complements efforts to bring forward new infrastructure, supporting the UK’s net zero ambitions.”