

How are we helping manage consumer energy bills?

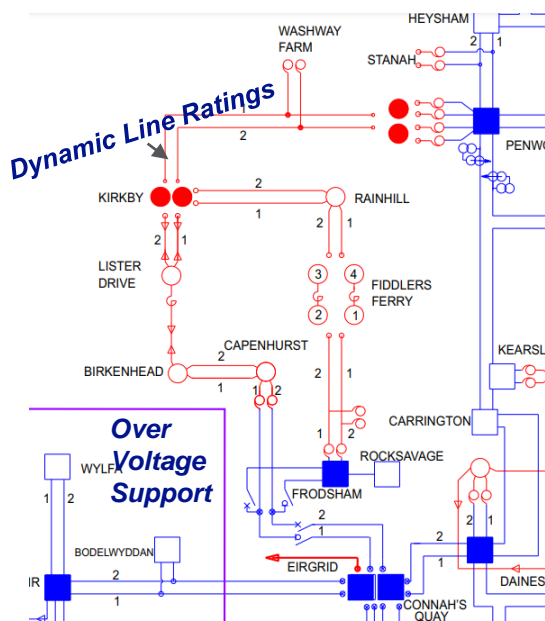
Constraint Costs



SO:TO ODI Total Constraint Savings:

£39.4m

Over the past 12 months, working in partnership with the Electricity System Operator (ESO), we have offered a number of enhanced services in order to reduce constraint costs by £39.4m



In 2020, constraint costs on the GB transmission network £700 million, in 2021, this number rose to £1 billion. The ESO forecast that costs could peak in 2026 at an estimated £2.25 billion per year.

In 2021, Ofgem announced the trial of the SO:TO Optimisation Output Delivery Incentive (SO:TO ODI). The incentive encourages NGET to deliver alternative innovative solutions to functional problems, optimising what actions NGET can take on the transmission network to reduce consumer constraint costs. This exists in parallel with how we continue to manage constraint costs on the electricity network.

The collective effort of colleagues in; Engineering & Asset management, TNCC, Asset operation and Network Development has resulted in a first year constraint saving of over £39.4m. A huge achievement for the first year of the trial.

Throughout the first year of the ODI, NGET has explored a number of services to help ESO reduce constraint costs, these include:

- Agreeing to operate our assets beyond their nominal rating to manage the transmission network following a significant network event
- The use of Dynamic Line Ratings (DLR) where the wind can be modelled as a cooling effect on an overhead line increasing its rating
- Operating our assets in new ways, activating cooling ancillaries pre-fault to allow for a higher rating

Constraints on a transmission system occur when not enough generation can travel across a system boundary in order to meet demand. In this scenario ESO will incur constraint costs where generators on the limiting side of the boundary are paid not to generate electricity, and additional generators are brought on below the boundary.

Whilst NGET is proud of the success achieved during the first year of the trial, we continue to strive for new opportunities across the coming year. Ofgem's trial is set to close in March 2023 and we hope to continue to demonstrate the value we can achieve on the network before that.

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