

Alfreton-Wessington



DNOA Decision

Reinforce with Flexibility

Constraint description

Alfreton Bulk Supply Point supplies Wessington, Ambergate and Ravensdale Park primaries through a pair of 33 kV circuits. Due to high demand and generation growth, the circuits are expected to have thermal and voltage constraints.

Reinforcement description

In order to resolve this constraint, alongside constraints at Ambergate, the proposed reinforcement is to install two new 33 kV circuit from Alfreton towards Ambergate primary, which will remove Wessington from the group and facilitate the future expansion of Wessington primary.



Constraint Season
Winter and Summer



Outage Type
N-1

Justification for decision

Additional constraints have been identified in the area, some of which are not suitable for flexibility. Flexibility can still support in the short term.

Constraint management timeline

2024 H2 Procurement

2024 H1 Procurement

Time to Reinforce: 2 years

Constraint Type: Demand

Estimated flexibility price (£/MWh) and volumes (MWh) per year under Best View:

	2024	2025	2026	2027	2028	2029
Availability	£28 / MWh 1,027 MWh	£33 / MWh 849 MWh	£20 / MWh 1,492 MWh	£13 / MWh 2,158 MWh	£9 / MWh 3,424 MWh	£6 / MWh 4,430 MWh
Utilisation	£1,657 / MWh 70 MWh	£1,973 / MWh 59 MWh	£1,183 / MWh 97 MWh	£773 / MWh 151 MWh	£514 / MWh 224 MWh	£359 / MWh 328 MWh



For more information see the **Alfreton 33 kV NDP report**: <https://www.nationalgrid.co.uk/dso/network-development-plan>