# **Chesterfield Main**



## **Scheme description**

A constraint is predicted to occur for the loss of the Chesterfield-Grassmoor No.2 33 kV circuit, which results in the Chesterfield-Grassmoor No.1 33 kV circuit picking up the entire aggregate demand of Grassmoor, Biwater and Danesmoor Primaries. Proposed reinforcement is to install two new 33 kV circuits to Grassmoor. These new circuits can then be used to feed Grassmoor (and later Wingerworth), with the existing circuits being unpicked and used to feed Biwater and Danesmoor.



Constraint Season Winter



Flexibility Product **Secure** 



#### Justification for decision

Flexibility procurement is necessary to manage this constraint. Cost Benefit Analysis indicates flexibility is the optimum solution until at least 2026 under WPD Best View and 2024 under all scenarios.

## **Constraint management timeline**

2022 H2 Procurement
2022 H1 Procurement
2021 H2 Procurement
2021 H1 Procurement
2020 H2 Procurement
2020 H1 Procurement

# Estimated flex utilisation required per year (MWh):

	2022	2023	2024	2025	2026
BV	5.72	17.23	40.39	100.68	277.15
СТ	10.42	34.70	92.89	251.43	
LTW	12.35	45.43	105.81		
ST	1.15	3.43	5.02	8.76	15.15
SP	0.55	1.94	2.30	2.74	3.24



