

Mackworth



DNOA Decision

Remove

Constraint description

The firm capacity of the Mackworth primary was limited by the fact that its transformers were not fitted with any automatic on-load tap changers, meaning that the site firm capacity was restricted in order to maintain the 11 kV voltage within statutory limits. The N-1 constraint scenario occurs during the loss of a transformer at Mackworth primary.

Reinforcement description

The reinforcement solution was to upgrade the transformers and replace the 11 kV panel switchboard to prevent a constraint for the N-1 loss of a transformer.



Constraint Season
Winter/Summer



Flexibility Product
Secure



Outage Type
N-1



Justification for decision

Reinforcement works have been completed, resolving this constraint.

Constraint management timeline

2024 H1 **None**
2023 H2 Maintain Active
2023 H1 Maintain Active
2022 H2 Procurement
2022 H1 Procurement
2021 H2 Procurement
2021 H1 Procurement

Time to Reinforce: N/A

Constraint Type: Voltage

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

	2024	2025	2026	2027	2028	2029
Availability	-	-	-	-	-	-
Utilisation	-	-	-	-	-	-



For more information visit: nationalgrid.co.uk/network-flexibility-map-application