Mackworth

Scheme description

The transformers at Mackworth Primary are not fitted with automatic on-load tap changers, meaning that the site firm capacity is restricted in order to maintain the 11 kV voltage within statutory limits. It is proposed to upgrade the transformers and replace the 11-panel switchboard to prevent a constraint for the FCO loss of a transformer.





Constraint Season Winter







Justification for decision

Reinforcement scheduled to be completed in 2023. Flexibility procurement is ongoing to deal with the constraint in the interim and provide additional network security.

Constraint management timeline

| 2022 H2 | Procurement |
|---------|-------------|
| 2022 H1 | Procurement |
| 2021 H2 | Procurement |
| 2021 H1 | Procurement |

Estimated flex utilisation required per year (MWh):

| | 2022 | 2023 | 2024 | 2025 | 2026 |
|-----|-------|-------|------|------|------|
| BV | 21.90 | 46.01 | | | |
| СТ | 32.50 | 76.32 | | | |
| LTW | 34.81 | 89.87 | | | |
| ST | 9.03 | 13.65 | | | |
| SP | 4.80 | 6.78 | | | |



