

### Constraint description

Ilkeston primary is fed via two transformers, which are currently limiting the firm capacity of the site. Under an N-1 condition (loss of one transformer) the load would be fully applied to the remaining transformer, potentially causing it to overload.

### Reinforcement description

The current reinforcement proposal is to replace the two transformers and the 11 kV switchboard at Ilkeston.



Constraint Season  
Winter/Summer



Flexibility Product  
Dynamic



Outage Type  
N-1

### Justification for decision

Flexibility procurement is required to ensure the needs of the network are met.

### Constraint management timeline

- 2024 H1 Procurement
- 2023 H2 Procurement
- 2023 H1 Procurement
- 2022 H2 Procurement
- 2022 H1 Procurement
- 2021 H2 Procurement

**Time to Reinforce:** 3 years

**Constraint Type:** Thermal

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

	2024	2025	2026	2027	2028	2029
Availability	-	-	£20 / 8 MWh	£81 / 164 MWh	£38 / 925 MWh	£16 / 2,410 MWh
Utilisation	-	-	£1,179 / 2 MWh	£4,843 / 7 MWh	£2,255 / 12 MWh	£976 / 23 MWh



For more information visit: [nationalgrid.co.uk/network-flexibility-map-application](https://nationalgrid.co.uk/network-flexibility-map-application)