# llkeston

### **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 and Summer

Outage Type N-1





#### Justification for decision

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

Constraint management timeline				
2024 H2	Procurement			
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: Demand

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

	2024	2025	2026	2027	2028	2029
Availability	-	-	-	£150 / MWh	£150 / MWh	£150 / MWh
	-	-	-	0.4 MWh	2 MWh	7 MWh
Utilisation	-	-	-	£9,000 / MWh	£9,000 / MWh	£9,000 / MWh
	-	-	-	5 MWh	6 MWh	7 MWh



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