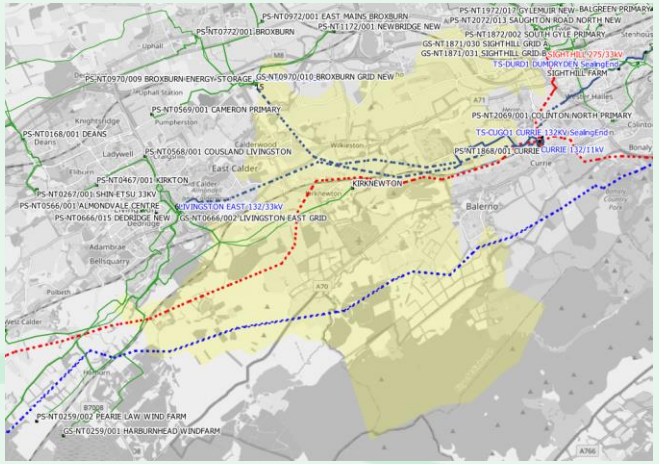
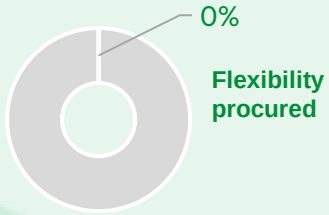
Kirknewton Primary Reinforcement

Reinforce, supported by flexibility



The Kirknewton demand group supplies ca. 2,700 customers and is geographically located in the Central & Fife region of SP Distribution (SPD) licence area.

Constraint	**THERMAL** Our Baseline View forecasts a peak demand of 12.7MVA by 2028, including an expected uptake of up to 1,022 electric vehicles and 511 heat pumps. This exceeds the 10MVA firm capacity of Kirknewton primary demand group by the end of RIIO-ED2. Additionally, for the Kirknewton/West Calder demand group, the Baseline View scenario forecasts a peak demand by 2028 of 22.0MVA, with an expected uptake of up to 1,923 electric vehicles and 1,465 heat pumps. This exceeds the groups firm capacity of 20.06MVA within the ED2 period.
Decision	**Reinforce supported by flexibility** The proposed option for this scheme is to replace the existing 10MVA transformers with new 20MVA units and provide a dedicated connection to Kirknewton 33/11kV substation by installing two new 33kV UGC circuits and associated comms infrastructure from the Livingstone East GSP to the tee off points at Oakbank.
Justification for decision	Insufficient flexibility to defer reinforcement and remain EREC P2/8 compliant so works are being progressed. Flexibility will support management of the constraint in the interim.
Flexibility product	**SCHEDULED UTILISATION**
Constraint season(s)	**Winter**
Guide price	Availability fee up to **£410/MW/hr** Utilisation fee up to **£500/MWh**
Reinforcement timescale	2024/25



Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)	6.5	28.0	108.5	139.0	181.0
Flexibility required (MW)	0.4	1.3	2.8	3.5	4.3
Flexibility procured (MW)	0.0	0.0	0.0	0.0	0.0
Flexible MW capacity met (%)	0%	0%	0%	0%	0%

Flexibility Tendering

Open

We are tendering for flexibility services at this location.

More information is available on the **PICLO Flex website**

Technical Appraisal

More detailed technical information on the nature of the constraint, network impacts, solutions considered and selected intervention are available in this scheme's **Engineering Justification Paper**

To ensure that our plans and publications cover the needs of our stakeholders, customers, and the communities we serve, we welcome ongoing feedback.

Feedback can be emailed to: systemdesignteam@spenergynetworks.co.uk

Last updated: 26/04/24