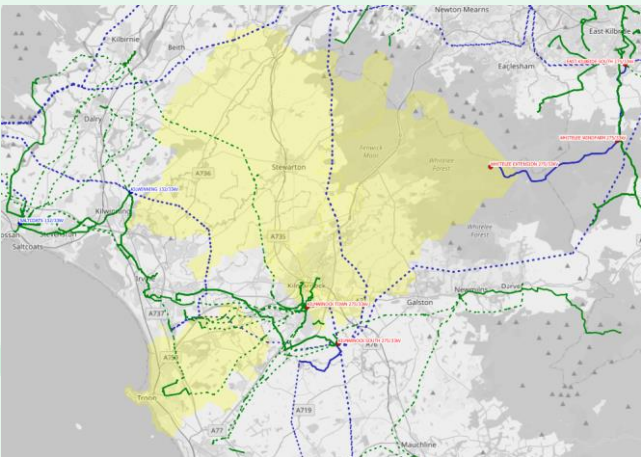


Kilmarnock Town GSP Fault Level Mitigation

Reinforce without flexibility



The Kilmarnock Town demand groups supply ca. 45,000 customers and is geographically located in the Ayrshire region of SP Distribution (SPD) licence area. The GSP supplies six 11kV primary substations; Grassyards, Kilmarnock Main, Langlands St, Queens Dr, Stewarton and Troon

Constraint

FAULT LEVEL
The peak make and RMS Break fault level at the Kilmarnock Town GSP 33kV switchboard exceeds the network design limit. During RIIO-T2 preparation we worked collaboratively with SP Transmission to undertake a whole system approach to identify the most economic and efficient solution. It was identified that a reduction in fault levels to a value less than the network design rating can only be achieved with transmission works.

Decision

Reinforce without flexibility
SPT will replace both existing 120MVA 275/33kV supergrid transformers. The new transformers will have dual 33kV windings (60MVA + 60MVA) to supply the “A” and “B” 33kV switchboards and limit the fault level infeed from the transmission system to each switchboard.

Justification for decision

Due to the predicted increase in fault levels, operational management is not an enduring solution. Flexibility would not relieve fault level constraints.

Flexibility product

N/A

Constraint season(s)

Year round

Guide price

Competition closed

Reinforcement timescale

2024/25



Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)					
Flexibility required (MW)					
Flexibility procured (MW)					
Flexible MW capacity met (%)					

Flexibility Tendering

Closed

We are not currently tendering for flexibility services at this location.

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: systemdesignsteam@spenergynetworks.co.uk