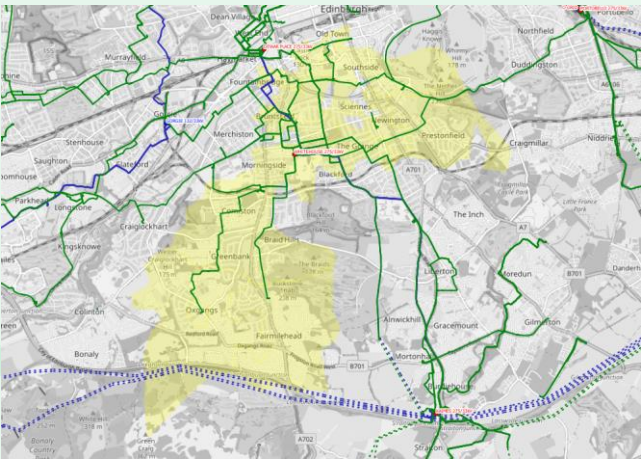


# Whitehouse GSP Fault Level Mitigation

## Reinforce without flexibility



The Whitehouse demand groups supply ca. 36,000 customers and is geographically located in the Edinburgh & Borders region of SP Distribution (SPD) licence area. The GSP supplies six primary substations (George Square Lane, Martin Miller, Maxwell Street, Mortonhall, Oxgang Road and Park Road). It has interconnections to Kaimes and Portobello GSPs.

Constraint

**FAULT LEVEL**  
The peak make fault level at Whitehouse GSP 33kV is above 95% of the switchgear rating, which would prevent connection of future Low Carbon Technologies (LCTs). The peak make rating of this legacy switchgear is considerably lower than the 33kV design limit of 50kA. In addition, this GSP is important for supporting Kaimes GSP in an N-2 situation, which introduces higher fault levels.

Decision

**Reinforce without flexibility**  
The proposal is to replace the existing Whitehouse GSP indoor 33kV ‘A’ and ‘B’ with new indoor 33kV switchboards of 50kA Peak Make and 17.5kA RMS Break, to resolve the existing fault level breach and provide additional headroom for future demand growth and new embedded generation connections.

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

2025/26



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: [systemdesignteam@spenergynetworks.co.uk](mailto:systemdesignteam@spenergynetworks.co.uk)