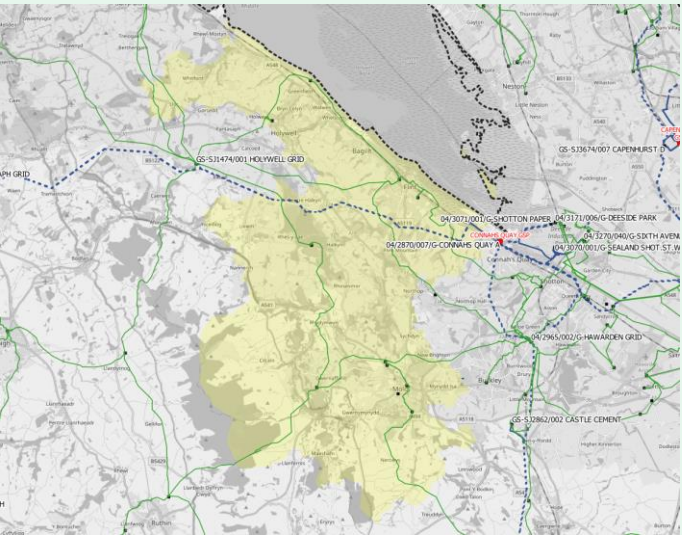


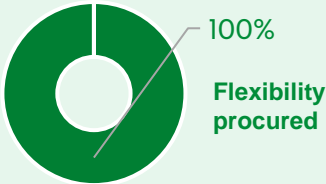
Brymbo/Hawarden/Holywell 33kV reinforcement

Mitigate with flexibility



The Brymbo-Hawarden-Holywell 33kV network group supplies the area in North Wales around Brymbo, Flint, Hawarden and Holywell. It is fed from the Connah's Quay-Pentir- St. Asaph 132kV group from long overhead line circuits. The group supplies ca. 26,300 customers, including two major industrial sites.

Constraint	VOLTAGE The group is presently at voltage limits and suffers from marginal low voltages excursions outside of statutory limits. It is presently operationally managed. The voltage issues need to be mitigated to be able to accommodate additional demand associated with demand growth and LCT uptake in the RIIO-ED2 period.
Decision	Mitigate with flexibility Procure up to 6.3MW of flexibility services from the market to maintain the 33kV steady state voltage within $\pm 6\%$ and to maintain voltage step within $\pm 10\%$.
Justification for decision	Half-hourly time-profile studies have been undertaken to quantify the hours at risk and to define the flexibility services that would be required to manage the constraint. Sufficient flexibility has been procured to defer reinforcement.
Flexibility product	SUSTAIN
Constraint season(s)	Winter
Guide price	Competition closed
Reinforcement timescale	Deferred until RIIO-ED3 using flexibility



Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)	2	23	51	139	159.5
Flexibility required (MW)	4.8	4.8	4.9	5.9	6.3
Flexibility procured (MW)	5.0	5.0	5.1	6.1	6.4
Flexible MW capacity met (%)	>100%	>100%	>100%	>100%	>100%

Flexibility Tendering

Closed

Requirements have been met.

All competitions are now closed for this site.

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