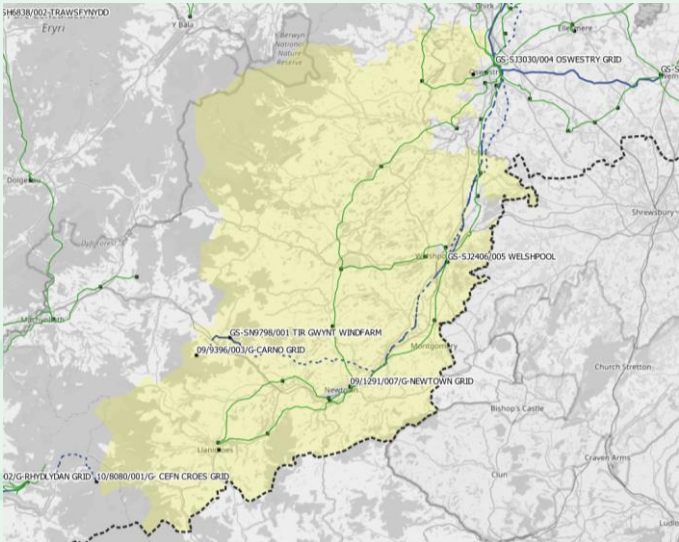


Formby-Southport 33kV reinforcement

Reinforce, supported by flexibility



Formby - Southport 33kV grid group is located within the Kirkby 132kV Grid Supply Point (GSP) group and provides supplies to 44,750 customers across the Sefton coastal regions of Ainsdale, Birkdale, Formby and Southport.

Constraint

THERMAL
Demand growth in this group is expected to exceed network capacity during the ED2 period. Detailed network studies have identified a thermal constraint on the two outgoing circuits from Formby Grid substation due to thermally limiting overhead line sections.

Decision

Reinforce, supported by flexibility
Install conventional build solution involving a new 33kV interconnector circuit between Formby and Southport grid substations. Requires board extension at Formby grid substation; refurb and use the existing spare circuit breaker at Southport grid substation.

Justification for decision

Insufficient flexibility to defer reinforcement so works are being progressed. Flexibility will support management of the constraint in the interim. All viable reinforcement options were considered, and the highest Net Present Value (NPV) option was selected. Flexibility tenders will continue to be run to explore the market to meet the required level of flexibility in this group to mitigate the thermal issues of the group and defer the reinforcement need.

Flexibility product

SECURE

Constraint season(s)

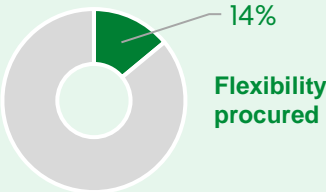
Winter

Guide price

Availability fee up to **£410/MW/hr**
Utilisation fee up to **£500/MWh**

Reinforcement timescale

2025/26



Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)	1.0	1.5	6.5	36.0	135.5
Flexibility required (MW)	1.4	2.2	3.2	6.3	10.6
Flexibility procured (MW)	0.1	0.1	0.2	1.3	1.6
Flexible MW capacity met (%)	4%	4%	5%	21%	40%

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: systemdesignsteam@spenergynetworks.co.uk