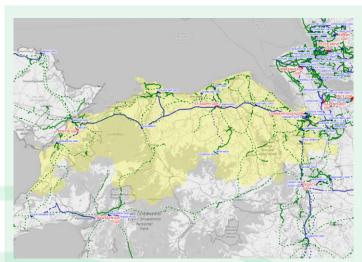
## Connah's Quay 132kV reinforcement



## Reinforce, supported by flexibility



The Connahs Quay/St Asaph/Pentir Grid Supply Point (GSP) group supplies the Flintshire, Deeside, Deeside industrial area, Connahs Quay, Prestatyn, Rhyl, Bangor, Caernarfon and St Asaph area in the SP Manweb network. The group supplies ca. 200,000 customers.

Constraint	THERMAL and SECURITY OF SUPPLY  The demand growth in this group is expected to exceed network capacity during the ED2 period. Additionally, fault level headroom will be created by the proposed scheme.				
Decision	Reinforce, supported by flexibility Install new 132/33kV 60MVA grid transformer at Deeside Park and new 132kV bus-section circuit breaker at Connahs Quay to enable reconfiguration of Connahs Quay Grid Supply Point (GSP) to 2+2 supergrid transformer operational arrangement. Swap the Sixth-Avenue grid transformer with RAF Sealand circuit, and set bus-section reactor at Hawarden to normally open. Flexible Services will be procured to manage the network risk during the delivery of the proposed scheme.				
Justification for decision	Insufficient flexibility to defer reinforcement so works are being progressed. Flexibility will support management of the constraint in the interim. Other reinforcement options were ruled out due to relatively high cost / low Net Present Value (NPV) and for not creating additional fault level headroom.				
Flexibility product	SUSTAIN/SECURE	28%			
Constraint season(s)	Winter	Flexibility			
Guide price	Availability fee up to £45/MW/hr Utilisation fee up to £55/MWh	procured			
Reinforcement timescale	2027/28				

Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)	-	-	-	450	453
Flexibility required (MW)	-	-	-	11.9	31.3
Flexibility procured (MW)	-	-	-	30	-
Flexible MW capacity met (%)	-	-	-	252%	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