Radway Green 33kV reinforcement



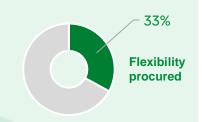
Reinforce, supported by flexibility



The SP Manweb (SPM) network in the Crewe, Weston, Alsager, Sandbach, Radway Green, Nantwich and Coppenhall areas of Mid Cheshire is supplied from Cellarhead Grid Supply Point (GSP). The 33kV network group (Crewe/Coppenhall/Whitchurch/Radway Green) supplies over 80,000 customers which includes eight major industrial customers and a motorway services area.

Constraint	SECURITY OF SUPPLY The demand growth in this group is expected to cause the cyclic rating of the 132/33kV 45MVA grid transformer 1 at Radway Green to be exceeded during an outage of 60MVA grid transformer 2.
Decision	Reinforce, supported by flexibility Replace existing 45MVA 132/33kV Radway Green grid transformer 1 with 60MVA (synthetic ester) unit along with replacement of 45MVA grid transformer 1 transformer tails, existing auxiliary transformer, and neutral earthing resistor. Flexible Services will be procured for 2026/27 year to manage the network risk during the delivery of the proposed scheme.
Justification for decision	Other reinforcement options were ruled out due to relatively high cost / low Net Present Value (NPV) or for not meeting the design requirements.

Flexibility product	SECURE
Constraint season(s)	All year
Guide price	Arming fee up to £270/MW/hr Utilisation fee up to £330/MWh
Reinforcement timescale	2027/28



Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)	-	-	-	333.5	1,783.5
Flexibility required (MW)	-	-	-	6.6	13.1
Flexibility procured (MW)	-	-	-	11.5	-
Flexible MW capacity met (%)	-	-	-	>100%	-

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