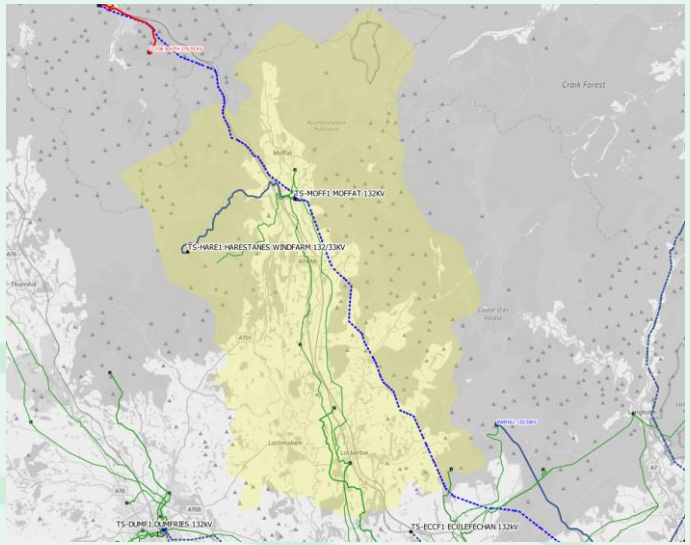
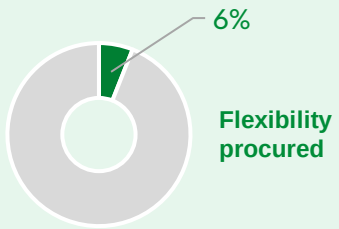
New Moffat GSP

Reinforce, supported by flexibility



Chapelcross 132/33 kV Grid Supply Point (GSP) is in the Dumfries and Galloway District of the SP Distribution licence area, near the Scottish Border. Via eight primary substations it supplies ca. 22,000 customers, about 7,300 of which are supplied by the Lockerbie/Kirkbank/Moffat primary demand group. This network is rural, and infrastructure is relatively sparse.

Constraint	**THERMAL and VOLTAGE** Peak demand in the Lockerbie/Kirkbank/Moffat demand group is forecast to exceed the firm capacity within the RIIO-ED2 period. The group is supplied via long 33kV overhead line circuits from Chapelcross Grid Supply Point (GSP). The forecast demand growth puts the network at risk of steady-state voltage excursions outside of statutory limits, with primary transformer at the limits of their tap operation.
Decision	**New 132/33kV GSP substation** The new GSP will utilise an existing 60MVA transformer near Moffat primary and a second 132/33kV 60MVA transformer will be installed by SP Transmission. Moffat and Kirkbank primary substations will then be connected to the new GSP substation, which is in closer proximity to the demand centre, consequently improving the voltage profile of the network.
Justification for decision	Insufficient flexibility to defer reinforcement so works are being progressed. Flexibility will support management of the constraint in the interim.
Flexibility product	**SECURE**
Constraint season(s)	**Winter**
Guide price	Arming fee up to **£34/MW/hr** Utilisation fee up to **£41/MWh**
Reinforcement timescale	2027/28



Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)	-	-	0.5	2.5	4.0
Flexibility required (MW)	-	-	0.1	0.4	0.6
Flexibility procured (MW)	-	-	0.8	-	-
Flexible MW capacity met (%)	-	-	>100%	0%	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