



DUMFRIES & GALLOWAY

Integrated Network Management



WHO ARE WE?

We are SP Energy Networks, part of the Iberdrola Group, leaders in sustainable innovation. As a Distribution and Transmission Network Operator we keep electricity flowing to homes and businesses throughout Central and Southern Scotland, North Wales, Merseyside, Cheshire and North Shropshire.

We do this through the network of overhead lines and underground cables which we own and maintain.

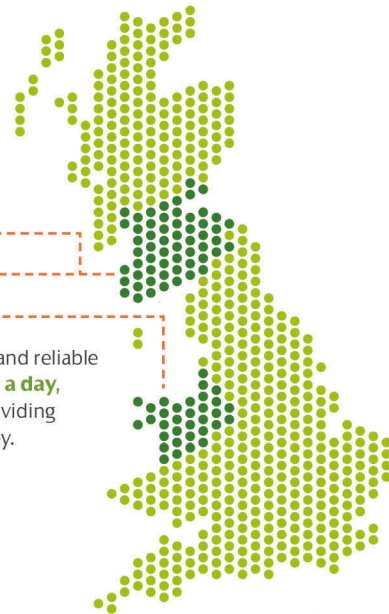
Our three regulated electricity licences are:

SP Transmission (SPT)

SP Distribution (SPD)

SP Manweb (SPM)

Our aim is to deliver a safe and reliable electricity supply **24 hours a day, 365 days a year** whilst providing exceptional value for money.



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Dumfries and Galloway has among the UK's highest proportion of connected renewable generation relative to its demand for energy.

That can present difficulties when it comes to exporting renewable energy back to the electricity grid and connecting new projects.

Currently, 90MW of distributed generation are connected in Dumfries and Galloway, while more than 200MW of additional distributed generation are contracted to connect in the future.

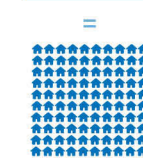
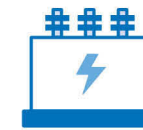
As a result, we are implementing a revolutionary, wide-scale integrated network management zone across the area.

It's the first integrated network management scheme of its kind in the UK and will span 11 grid supply points and interface with the System Operator. The project will help manage transmission network constraints by using an active network management (ANM) system to monitor and manage exports from distributed generation on SPEN's network.

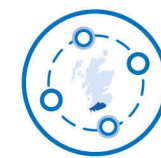
As well as resulting in fewer constraints for existing distributed energy resources, the system will enable the connection of new ones.

By improving access to a heavily congested part of the network, we are directly supporting the move to a smarter flexible network.

An area that has amongst the highest proportion of renewable generation connected within the UK



relative to its own local energy demand.



200MW of additional distributed generation is contracted to connect in the future.

and **11** Grid Supply Points interfacing with the System Operator.



BENEFITS FOR CUSTOMERS

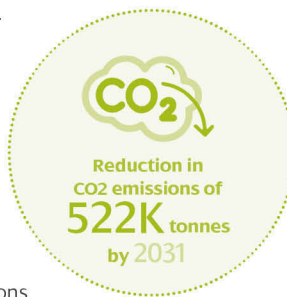
• Improve the service we provide to our customers by reducing constraints on connections.

• More Renewable Generation will be connected to the Electricity Network, bringing benefits of £40m to customers.

• Facilitate the connection of more zero carbon generation. That will contribute to a reduction in CO2 emissions of 522k tonnes by 2031 - the same amount of carbon created by the consumption of 58m gallons of petrol - and advance the transition to a low carbon economy.

• Ensure the Electricity Distribution Network is ready to respond with pace to new customer requirements as we move to a low carbon economy.

• Utilise our existing network assets more efficiently, reducing costs for customers.



TIMESCALE

• Recruitment of dedicated Dumfries & Galloway delivery team

• Procurement process for Central IT solution for wide scale Active Network Management

• Technical Specification of ANM on site equipment

April 2018

• Implementation of central system and integration into existing systems.
• Site specific ANM deployment commences
• Commercial negotiations with customers already connected and those contracted to connect

Ongoing Stakeholder Engagement

• Central system Business as Usual adoption
• Site specific ANM deployment completes for existing customers.
• Full system 'Go-Live'

• Ongoing support arrangements defined and implemented

Alignment with UK System Operator

• Finalising of lasting commercial arrangements with connected customers, SP Energy Networks and National Grid

Alignment with SP transmission solution

March 2023

• Permanent transmission system reinforcements complete and connected
Connected customers move over to post-reinforcement ANM curtailment.

• Commercial process for System Operator-driven Distribution curtailment goes live.

CONTACT US

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