

Project ID	DIP039		
Long Title	Flexible Networks for a Low Carbon Future		
Short Title	Flexible Networks		
Keywords	Community; Multi-sector/Grid; Electricity; Power Quality & Grid Integration; Active Network Management; LV Grid Monitoring		
Location (Town, Region, Country)	3 Locations (see below)		
Latitude and Longitude	n/a		n/a
OSGB code	n/a		
Status	Complete		
Start Date	2012		
End Date	2014		
Description	<p>Flexible Networks for a Low Carbon Future aims to create a faster, lower cost, DNO-led solution to increasing the capacity of the network. The proposed solution will facilitate an increasing demand on the electricity network, as customers make the transition to a low carbon economy and increase their dependence on electricity for heating, transport and other applications. The project will also enable future network trends to be identified and managed in a forward looking manner with faster delivery of appropriate and cost-effective solutions.</p> <p>The solution will provide a 20% increase in network capacity through a number of innovative measures. This will create customer benefits enabling more customers to make the transition to new generation and demand technologies.</p> <p>Objectives: The project involves enhanced monitoring and analysis in to precisely determine existing performance, and the deployment of novel technology for improved network operation, including flexible control and dynamic rating. To ensure representative and replicable outputs, the project involves three carefully selected trial areas across SP Distribution and SP Manweb, covering various network topology and customer demographics: St Andrews in Scotland, Wrexham in Wales and Whitchurch in England.</p>		
Sectors	Multi-sector/Grid		
Funding Sources	Low Carbon Network Fund		
Budget £	£6.36 million		
Partners	SP Energy Networks, University of Strathclyde, TNEI, Nortech		
Energy vectors	Electricity		
Scale (lab/site/small /community/region/national)	Community		
Technologies demonstrated	Active network management, network data acquisition		
Economic models demonstrated			

Other concepts demonstrated	Grid constraint mitigation
Industry engagement	
Consumer engagement	
Project Reports (incl. links)	Extensive library, including closedown report, at project website. Paper: <a href="https://strathprints.strath.ac.uk/57913/">https://strathprints.strath.ac.uk/57913/</a>
Datasets (incl. links)	
Website/social media	<a href="https://www.spenergynetworks.co.uk/pages/flexible_networks_for_a_low_carbon_future.aspx">https://www.spenergynetworks.co.uk/pages/flexible_networks_for_a_low_carbon_future.aspx</a>
Information sources	<a href="http://www.smarternetworks.org/project/spt2003">http://www.smarternetworks.org/project/spt2003</a>