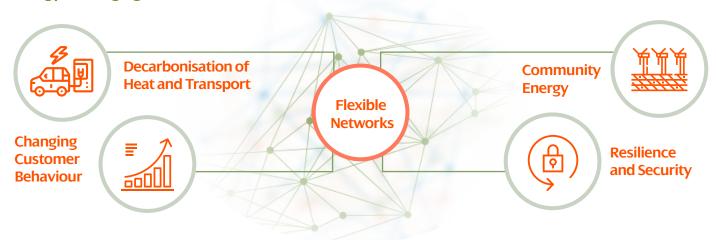


Changing Energy landscape

Our energy landscape is evolving at pace as the global community takes action on climate change. To meet ambitious government carbon reduction targets, the way we generate, distribute and use energy is changing.



This month has seen two exciting developments that support SP Energy Networks ambition to become a Distribution System Operator, managing distributed demand and generation across our network in real time, and enabling our customers to benefit sooner from the uptake of low carbon technologies like electric vehicles, whilst also helping to deliver Government carbon reduction targets.



An independent study by Baringa Partners, commissioned by the Energy Networks Association (ENA) Open Networks project, shows that DNOs are best placed to deliver this better future more quickly and also at the lowest overall cost to end customers. A summary of the report and consultation is available at <u>link</u> and we will be encouraging our stakeholders to support the findings.

The Scottish Government has published a Networks Vision, which sets out their views on the future pivotal role of network companies in delivering both devolved and UK government carbon reduction targets across transport and heat. The Scottish Government vision is available here, and Scott Mathieson (Director Network Planning and Regulation) thoughts on this vision are published here.

What is a DSO? _

A Distribution System Operator (DSO) has a role to monitor, control and actively manage the power flows on the distribution system to maintain a safe, secure and reliable electricity supply.

As a neutral facilitator of an open and accessible market for network services, a DSO will enable competitive access to markets and the optimal use of DER on distribution networks to deliver security, sustainability and affordability in the

support of whole system optimisation.

A DSO enables customers to be producers, consumers and storers of energy, enabling customer access to networks and markets, customer choice and great customer service.





The Future Worlds independent Impact Assessment Why should the DNO become the DSO?

There are a range of options as to how the future smart energy grid could work, as illustrated in the below graphics. Independent consultant Baringa Partners has reviewed the likely outcomes of each of the five worlds, and provided their own conclusions. The most recent Open Networks project consultation, launched by the ENA, sets out and seeks feedback on those conclusions in order to help shape the next steps in the project.

World A: DSO Coordinates

A world where the DSO (Distribution System Operator) acts as the neutral market facilitator for all Distributed Energy Resources (DER) and provides services on a locational basis to National Grid in its role as the Electricity System Operator (ESO).

World B: Co-ordinated DSO

ESO (Electricity System Operator) procurement and dispatch – a world where DSO and ESO work together to efficiently manage networks through coordinated procurement and dispatch of flexibility resources.

World C: Price Driven Flexibility

A world where changes developed through Ofgem's Reform of electricity network access and forward-looking charges have improved access arrangements and forward looking signals for customers.

World D: ESO Coordinates

A world where the ESO is the counterparty for distribution energy resource (DER) with DSOs informing the ESO of their requirements.

World E: *Flexibility Coordinator(s)*

A world where new national (or potentially regional) third party(ies) act as the neutral market facilitator(s) for DER providing efficient services to the ESO and/or DSO as required.



It is our view that World A and World B provide the lowest overall cost for customers, and provide the benefits in the shortest timescale. These worlds also provide the greatest opportunity for local energy schemes.



So what does this mean for you and why should you get involved?

This new model will ultimately transform our energy network to best meet the needs of all of our future energy consumers. It will allow for radical technological developments, such as two-way grids, smart vehicle charging, and smarter control of gas and electricity flows at the local level. We know our stakeholders have a wealth of experience and breadth of knowledge and viewpoints which can help inform this debate. We need your views to help build the evidence base and provide context from your experience about if, and why, you may participate in this new flexible market.

We'd therefore encourage you to take a look at the independent Baringa report, and would value your feedback in response to the consultation.

Feedback



Feedback from a wide range of stakeholders across the industry is vitally important to the progress, and ultimately the success of the Open Networks project. We'd therefore encourage you to provide your views on:



Baringa's interpretation of the Future Worlds

The pros and cons and ranking of each Future World – do you agree?

The "transition paths" that will lead us to the Future Worlds

What future work you believe would enhance the debate and body of evidence around transitioning to the potential Future Worlds

Consultation Key Dates

Consultation open for responses from 6th March until 1st May 2019











SP Energy Networks Who are we?

We are SP Energy Networks, part of the Iberdrola group, leaders in sustainable innovation. As your Transmission and Distribution Network Operator (DNO) we supply electricity to 3.5m customers, homes and businesses throughout Central and Southern Scotland, North Wales, Merseyside, Cheshire and North Shropshire.

We do this through our network of overhead lines and underground cables which could stretch almost three times around the globe. Our three regulated electricity licences are:

SP Transmission PLC (SPT)

SP Distribution PLC (SPD)

and SP Manweb PLC (SPM)





Delivering excellent customer service

Delivering excellent customer service is our number one priority and we are proud of our customer satisfaction score:



Ranking Top 50 UK Companies. Institute of Customer Service Customer Satisfaction Index –



Our **overall index of 88.4** – above First Direct and John Lewis, ranking us equivalent 1st in the UK.



We are currently seeking **116MW of**

flexibility services

Each year we invest **£775m** into our network with just a **4-5%** return on our investments over the next 45 years

We are committed to supporting the government's ambitious carbon reduction targets and have connected 30% of the UK's wind generation on our networks



We have launched a new £20m Green Economy Fund aimed at kick starting the transformation of the way both transport and heating is powered in Scotland



We provide a **99.9% reliable network** at the cost to an average bill payer of just **30p-35p** a day. That's less than a 2nd class postage stamp!

SP Energy Networks' View | Why should the DNO become the DSO?



1. It's best for security of supply and customer service

We have deep knowledge of our local and regional distribution networks and the customers we serve and already have significant infrastructure in place to deliver excellent customer service.



2. Best value for customers

Simplest and lowest cost transition which also retains focus on customers and local requirements (avoids costs of duplication).



3. We can move to the new model quickly

We are already transitioning through ongoing projects such as Active Network Management in Dumfries and Galloway and demonstrating our ability to offer flexibility services through UK leading pilot projects such as Fusion.

Read more on the SP Energy Networks views in our response to the Future Worlds Consultation here: www.energynetworks.org/assets/files/SPEN.pdf