

# Making Connections

Our major connections engagement strategy, workplan and performance outputs

Incentive on Connections Engagement (ICE)  
Ofgem Submission  
May 2019



WINNER



SP ENERGY NETWORKS



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# Introduction: CEO Foreword

**Welcome to SP Energy Networks' 2019/20 ICE report. I'm proud of the level of engagement with customers and stakeholders across the connections marketplace over the last 12 months. Based directly on the feedback received from our customers and stakeholders we have developed a range of real, tangible actions that cover the topics that matter most to them.**

A key element of our 2019/20 plan is to increase the level of engagement with local government stakeholders. As we move towards a network with a greater reliance on local energy management I see local government as a key driver in the move towards a low carbon economy. By ensuring alignment of objectives between local authorities, private enterprise and the Distribution Network Operator (DNO) we are committed that the transition to the network of the future is delivered in an effective and efficient manner.

Actions in this area include developing the strategy for connection of homes of the future, as well as supporting the roll-out of electric vehicle charging points – two areas where SPEN are already leading the way for the UK energy sector.

In order to embrace the challenges of developing the network of the future, I launched the "Year of Innovation" in 2019. This initiative will promote flagship projects such as FUSION, FITNESS and CHARGE; as well as unlock the potential from smaller projects to deliver benefits to our customers and stakeholders. We have introduced an operational excellence framework for customer facing projects to ensure that these initiatives result in a consistent service level improvement across all business areas.

I continue to challenge my management team to ensure that the actions detailed in this plan are realised to deliver the improvements that will make a real difference for our customers and stakeholders. We recognise that our energy landscape is changing; our business is focussed on remaining agile and responsive; whilst continuing to drive commercial innovation in the industry. It is important to us that our customers and stakeholders join us on that journey as we transition to a Distribution System Operator (DSO) and into our next regulatory period in 2023.

**Frank Mitchell**  
CEO of SP Energy Networks

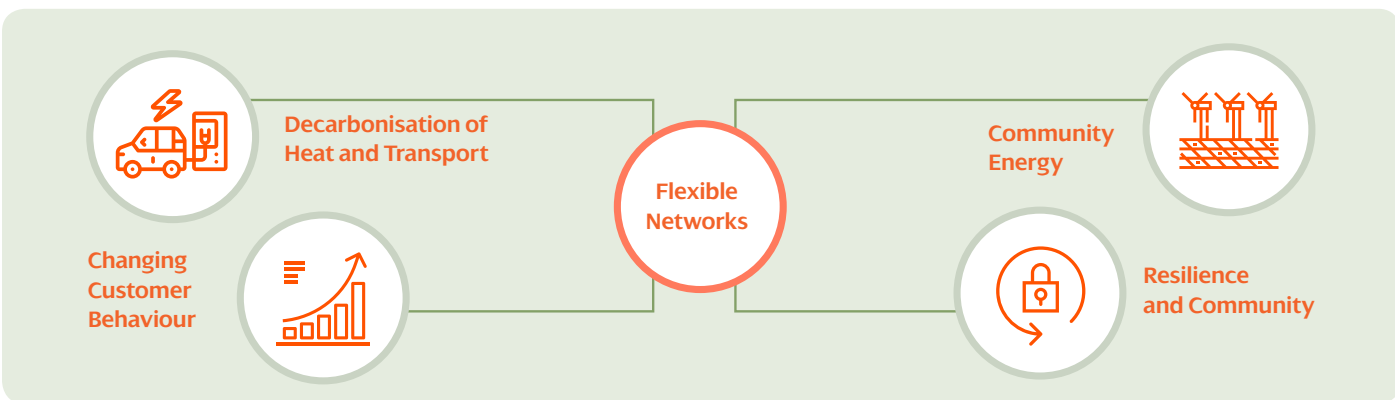





# Changing Energy Landscape

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.

Our stakeholders have told us it is important to them that we keep them informed in this area. Therefore our 2019/20 ICE stakeholder engagement approach focuses heavily on creating a platform to support and promote opportunity to our customers and stakeholders on this pathway to decarbonisation.



## 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 natural facilitator of an open and accessible market for network services, a DSO will enable competitive access to markets and the optimal use of Distribution Energy Resources (DER) on distribution networks to deliver security, sustainability and affordability in the support of the 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 greater customer service.



## Leading the Transition to a Distribution System Operator (DSO)

### Actions we achieved this year

- ✓ **NEW: Appointed a new dedicated Head of DSO** – to drive strategic direction.
- ✓ **NEW: Launched 'Year of Innovation' campaign** – to promote innovation culture within SPEN, paving the way for DSO – based on benchmarking outside industry, with Barclays (Digital Eagles), Cisco and Telefonica.
- ✓ **NEW: One of only two DNOs to run competitive flexibility tenders as part of the PICLO Flex platform** – providing new trial platform for customers.
- ✓ **NEW: Two new UK first DSO demonstrator project areas** – launched in Levenmouth and Ellesmere Port, targeting two hard to reach and fuel poor communities.
- ✓ **NEW: Single largest and most capable active network management project in UK launched** – it allows us to monitor and match network capacity with local generation output for distributed energy resources of all sizes – in both Dumfries and Galloway and North Wales.
- ✓ **NEW: IT infrastructure project** – to facilitate a local and flexible marketplace.
- ✓ **NEW: Globally innovative trial of Solid State Transformers** – enhancing network flexibility and releasing additional capacity for the connection of low carbon technologies.

## The Benefit this Delivers to Customers and Stakeholders

- 116MW of flexibility options offered through new tender process – avoiding or reducing the need for reinforcement of network leading to lower system costs and consumer bills.
- Active Network Management in Dumfries and Galloway will help to achieve a reduction in CO<sub>2</sub> emissions of 522k tonnes by 2031 – equivalent greenhouse gas emissions from 110,000 diesel/petrol vehicles being driven for a year.
- The benefits from solid state transformers could represent a saving of £62m by 2030.



## The feedback that inspired this initiative

“Innovation and the use of new and emerging technologies is critical and you need to ensure the network is ready to support this.”

Quote from Strategic Stakeholder Panel

We have a deep knowledge of our local networks and the customers we serve. We already have significant infrastructure in place to deliver excellent customer service. We can move to the new model quickly and at the best value to customers. A recent Baringa report estimated that the DNO becoming the DSO will avoid up to £3.5bn in costs by 2030 and up to £21bn by 2050.

Our integrated operations in Distribution and Transmission means our Operational Control Centre is already equipped to begin this journey. This is why we have taken a leading role in the industry Open Networks Project.

We are already demonstrating benefits of system operator through transport planning, digital substations and artificial intelligence in our active network management and sequence switching schemes, as well as our new market-making flexibility tools.

We carried out extensive engagement with our Strategic Stakeholder Panel and other expert stakeholders on five options of what our future world might look like, to spark debate on how the system will look, helping us build their priorities into future strategies and plans.





## 2019 Year of Innovation

Our energy system is changing dramatically; therefore it is important that SP Energy Networks responds to the opportunities that are created by the growth in demand and supply from low carbon technologies. This initiative places innovation at the core of our business, embedding a forward thinking culture that will deliver benefits to our customers and stakeholders.

### Project CHARGE

CHARGE is our innovative Electric Vehicle (EV) project, which aims to accelerate the wide-scale adoption of electric vehicles and help meet the UK Government's ambitious climate change and air pollution targets in our SPM licence area. The project will also benefit our SPD licence area as we integrate the learnings from the project across both areas of our business.

This Network Innovation Competition (NIC) funded project will be trialled in Merseyside, Cheshire, North Shropshire and North Wales; the project's learnings will also be extended to our SPD licence area of central and southern Scotland as the project progresses.

To achieve the UK's Road to Zero environmental targets it is essential that the transport sector moves quickly to decarbonise.

CHARGE will, for the first time in Britain, merge transport and electricity network planning to create an over-arching map of where EV charge points will be required and where they can be accommodated by the electricity grid.

DNOs need to be at the heart of ensuring the timely and optimised connection of EV charging infrastructure to avoid delays, and CHARGE will help us develop clear guidance and connection standards to expedite the uptake of EVs.

Where there is transport capacity, it does not necessarily mean there is electrical capacity as these networks have, in the past, developed entirely independently of each other.

CHARGE aims to forge these two networks together and find an optimal solution for EV drivers.

The increasing demand from EVs on the electricity networks accelerates the need to develop new connections solutions and improved ways to deliver network flexibility.

CHARGE will merge the disciplines of transport and electricity network planning to discover where EV charging points will be required and how the network would be impacted by them. This will facilitate better planning of electricity networks and will provide vital information for all sectors involved in helping the transition to low carbon transport and create a cleaner, greener environment for us all.

We have developed a full governance framework for the project with external stakeholders invited to join CHARGE governance review meetings. In addition, we will be disseminating further information on this exciting new project at our engagement events and workshops in 2019/20, where we look forward to working with all stakeholders and customers as we prepare for the electrification of the transport system across the UK.

"DNOs need to be at the heart of ensuring the timely and optimised connection of EV charging infrastructure to avoid delays, and Charge will help us develop clear guidance and connection standards to expedite the uptake of EVs."

Scott Mathieson,  
SP Energy Networks Director of Network  
Planning and Regulation

"Liverpool City Council is delighted to be named as a key partner with SP Energy Networks for their innovative project CHARGE. More people are realising the benefit of electric vehicles as well as recognising the impact their choice of travel has on us all.

We are looking forward to working with SP Energy Networks to deliver some of the infrastructure for this.

Electric vehicles can play a role in our Let's Clear the Air Liverpool plan to reduce air pollution and make the city a better place, where the environment for walking and cycling is improved as well."

Councillor James Noakes,  
Liverpool City Council Cabinet Member for Air Quality

"I'm delighted SP Energy Networks has succeeded in securing funding for the exciting new project CHARGE.

"We are already working with the Economy Secretary Ken Skates and across government to make sure Wales secures benefits from the transformation of the energy system which is under way. We look forward to partnering with SP Energy Networks to help prepare north and mid Wales for electric vehicles, and develop new approaches which will benefit the whole of Wales and the UK."

Lesley Griffiths, Welsh Government,  
Cabinet Secretary for Energy, Planning and Rural Affairs





# 2019 Year of Innovation

## Fusion

SP Energy Networks is transitioning to become a Distribution System Operator (DSO).

FUSION represents a key element of that transition. As the electricity system changes from a centralised to decentralised model, it enables a smarter and more flexible network to function.

The increase in Distributed Energy Resources coupled with the increasing load demand from low carbon technologies such as electric vehicles has fuelled a need to create an active distribution network capable of managing modern customers' needs.

Our innovative FUSION project is trialling commoditised local demand-side flexibility through a structured and competitive market, based on the Universal Smart Energy Framework (USEF).

FUSION will enable Distribution Network Operators and all market actors to unlock the value of local network flexibility in a competitive and transparent manner. This will be enabled by applying the functions and structure defined in the USEF.

## Benefits for Customers

- FUSION will unlock flexibility in the distribution network: this means it can be procured by a range of market actors. Aggregators will be able to operate to aid the development of the flexibility market. By facilitating this neutral market, network flexibility will be accessible to all parties.
- For the Distribution Network Operators, constraint management will be trialled, alleviating localised network congestion without requiring costly and time consuming network reinforcement. This will provide excellent value for money for customers. The creation of a flexibility market will go beyond existing bilateral trading of flexibility, providing a whole systems approach to realising the value of flexibility.
- Customers will also be empowered to commoditise their flexibility thanks to new routes to market for existing and emerging flexibility providers in the distribution network.
- This smarter use of the distribution network assets means significant carbon and environmental benefits. The system favours renewable energy sources and facilitates the uptake of low carbon technologies.

## LV Engine

We are changing the way we generate, distribute and use electricity. SP Energy Networks recognises the need to facilitate the uptake of Low carbon Technologies (LCTs) such as, electric vehicles, heat pumps, photovoltaics.

LV Engine is a flagship innovation project funded via Ofgem's Network Innovation Competition (NIC). The project will carry out a globally innovative network trial of Smart Transformers to facilitate the connection of LCTs whilst representing value for money for our customers. This innovation is in line with the UK Government's CO<sub>2</sub> reduction targets which are driving the increase in electrification of both heat and transport.

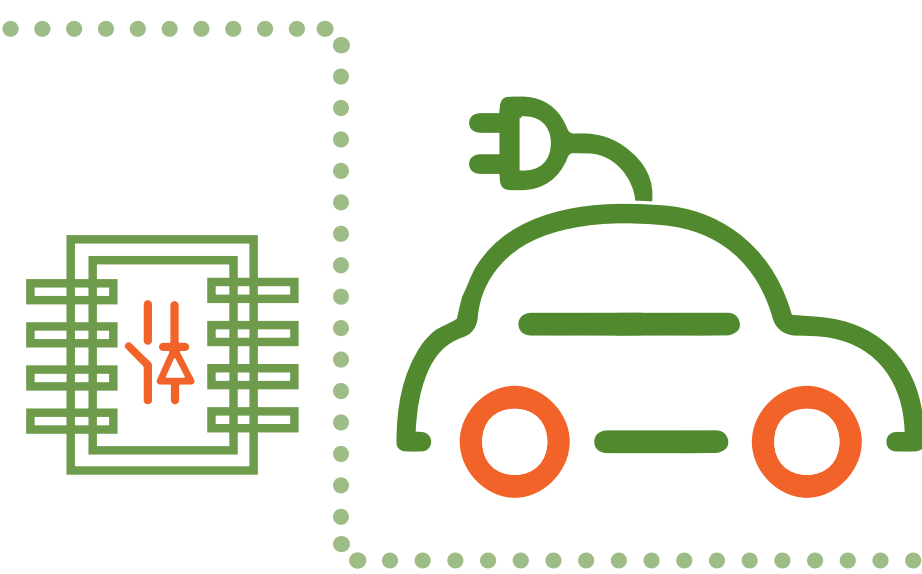
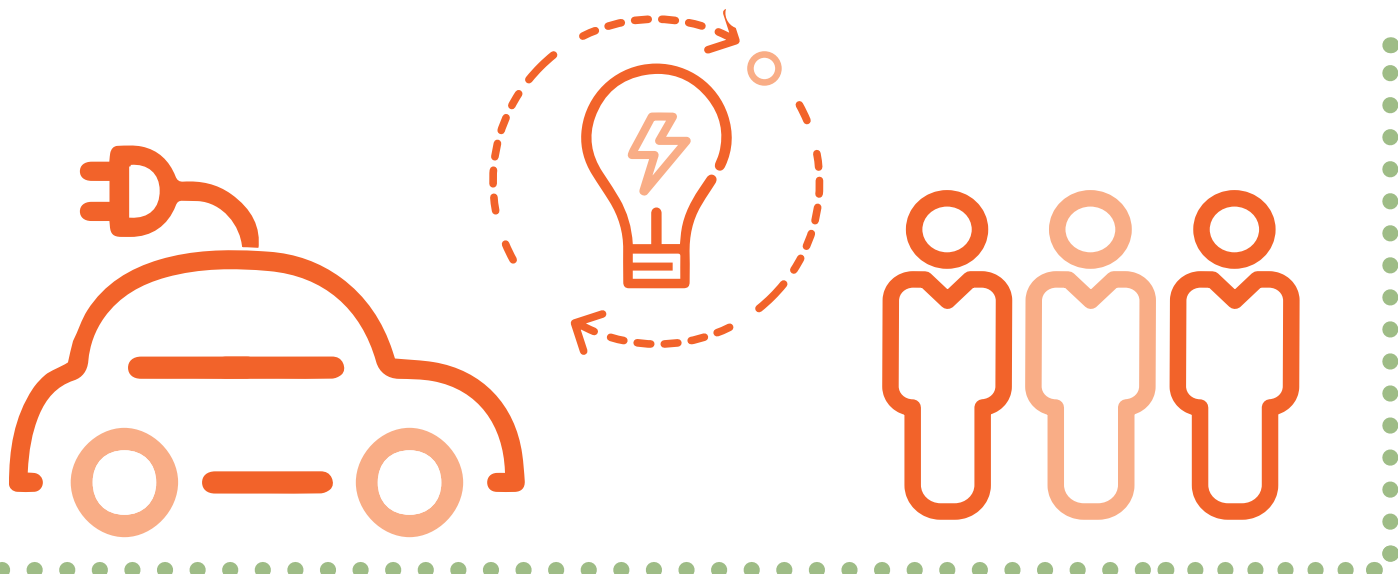
Conventionally, electricity networks provide an Alternating Current (AC) supply. However, many LCTs operate on a Direct Current (DC) voltage which requires conversion from AC.

LV Engine intends to design a Smart Transformer which can provide a LV DC supply to our customers for the first time whilst maximising the use of our existing AC network.

These will bring a number of valuable functionalities to the 11kV and Low Voltage (LV) networks allowing us to maximise the use of our existing assets.

## Benefits for Customers

- We are working to keep costs low and stable for customers. The successful rollout of LV Engine in the UK is expected to represent a saving of £62m by 2030 and £528m by 2050.
- The introduction of innovative Smart Transformers on the distribution network will pave the way for a low carbon future for customers.
- Deliver significant financial savings if deployed across all electricity networks.
- Demonstrate a low voltage Direct Current (DC) connection for low carbon technologies including Electric Vehicles (EV).
- The project will stimulate a competitive marketplace for power electronics and Smart Transformers, contributing to improving productivity within the economy.





# 2019 Year of Innovation

## Dumfries & Galloway

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.

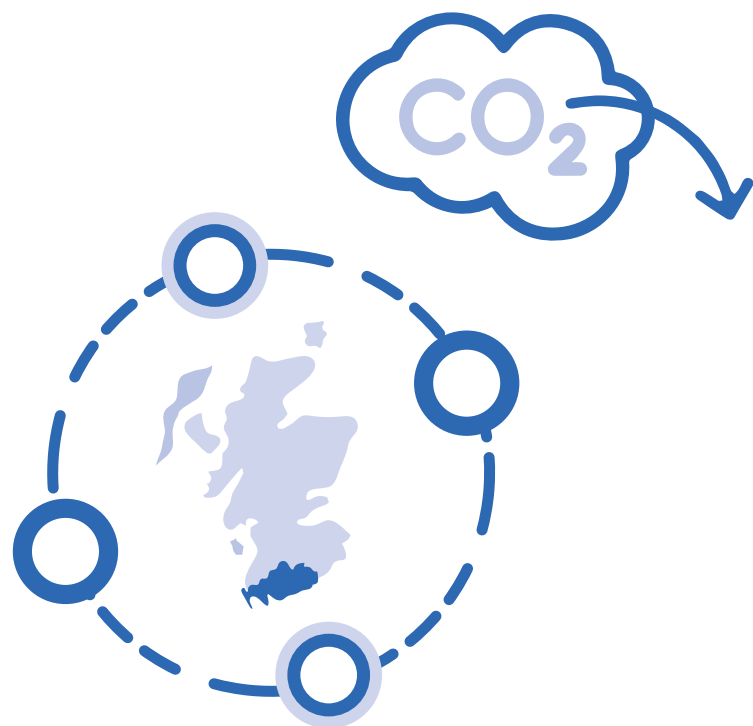
As a result, we are implementing a revolutionary, wide-scale integrated network management zone across the area. This is the first integrated network management scheme of its kind in the UK and will span 11 grid supply points and interface with the System Operator. The project will help manage transmission 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.

## 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.



**Benefits for customer of around £40m**

**Reduction in CO<sub>2</sub> emissions of 522k tonnes by 2031**

## Angle DC

Angle-DC is a ground breaking innovation project that is introducing a smart and flexible method for reinforcing distribution networks. The project is creating a controllable bidirectional Direct Current (DC) link between two sections of our network, the Isle of Anglesey and mainland North Wales. Angle-DC is converting the existing 33kV Alternation Current (AC) assets to DC.

This UK's first project will adapt existing technologies to build a Medium Voltage DC (MVDC) link. This will pave the way for the integration of increasing volumes of renewable generation and accommodate the growth of electricity demand. Angle-DC is building confidence in deploying MVDC technologies by other UK Distribution Network Operators and triggering the MVDC supply chain.

## Benefits for Customers

- Increasing the capacity for load and generation connections.
- Enhanced power flow through existing assets to defer reinforcement costs.
- More precise control of the flow of power in the distribution circuit for improved efficiency to avoid naturally occurring AC overloads. This prevents the possibility of overload of the circuit, helping to reduce the number of faults.
- Pushing more power through existing assets by controlling the losses at each end of the circuit.
- Control the reactive power flow at both ends of the distribution circuit.
- To lower losses and save wasted energy in the wider distribution network due to the improved voltage control.
- Enables faster access to the network for renewable connections. This helps customers who wish to connect low carbon technologies such as wind turbines and photovoltaics to the network.





# Our Stakeholder Engagement Strategy

## Our Principles

### Inclusive

We engage all customers and stakeholders impacted through our work, with a specific focus to ensure those who may be hard to reach are given a voice.

### Authentic

Our engagement works to understand the significant issues affecting our customers and stakeholders, before acting on them in a meaningful way.

### Examples

**INCLUSIVE** ✓ RAdAR Working Group set up to evaluate stakeholder feedback and influence the Company's IT strategy.

**AUTHENTIC** ✓ Supporting report research through roundtable engagement on smart city agenda to understand customer needs/wants for the future.

**TAILORED** ✓ Step 3 of our new approach specifically ensures all engagement is tailored to a specific purpose and set of stakeholders.

**VALUE-FOR-MONEY** ✓ Introduction of a new engagement approach which offers value add but is less time consuming for our customers.

**INNOVATIVE** ✓ New 'quick-entry' screens added to Tractivity, Stakeholder Management System to make it easier for users to record feedback and actions.

### Tailored

The approach we take to engagement ensures that each initiative is planned and delivered in the most appropriate way for the specific purpose and stakeholders in question.

### Value-for-money

An inherent focus, we ensure efficient spending on engagement activities, aiming to maximise the overall customer benefit.

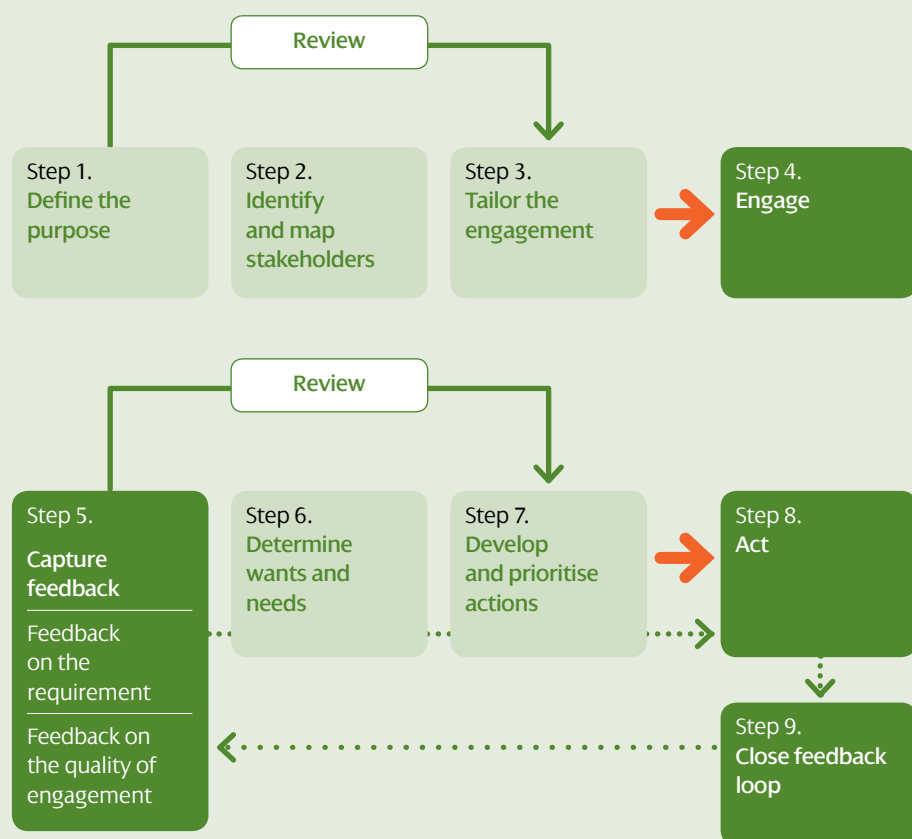
### Innovative

We aim to better our approach each year, continually looking for new methods to improve how we engage and deliver against wants and needs.

## Our Approach

With our mission statement showing our ambition and our principles setting out the underlying characteristics of our activities, we have built on our existing pillars and processes to define a new, 9-step approach to engagement. The approach consists of a series of sequential steps that detail how we plan, review and close all our engagement activities. Our new approach ensures we identify stakeholders and customers wants and needs and that everything we do adds value for money.

It is important to us that we take the time to listen to our stakeholders, capture their feedback and incorporate it into future engagements. We have been closing this engagement loop by commencing each panel session with an overview of progress from the last panel session to ensure our stakeholder's feedback is captured and utilised.



# Our Stakeholder Engagement Model

Through our engagements with our customers and stakeholders, we listen to what they are telling us and develop actions with measures in areas that matter most to them.

We extend an open door policy, regularly meeting with customers and stakeholders to assist with individual projects, on an as and when required basis.

In addition to this, we host a wide range of engagement events which are published on our website and issue invitations to all relevant stakeholders.






# Making Connections: Stakeholder Engagement Reach

In response to stakeholder feedback from last year asking for enhanced opportunities to get involved, we increased the number of ways to engage and reached more stakeholders than ever before.

Core engagement, such as connections stakeholder panels and in-depth annual surveys, help us to shape our strategic direction, confirming stakeholder priorities and identifying new themes as they emerge.

Over **10,000** 

customers surveyed during 2018/19

**6** 

SPD and SPM Connections Stakeholder Panels

**4** 

SPD and SPM Land & Planning Stakeholder Panels

Over **4,000**

customers invited to our events in 2018/19

**4**  DER Forums (formerly DG Workshops)

**4** Demand Workshops 

**4**  ICP/IDNO Workshops



**4**  RADAR Working Group Sessions

**3** 

Owner Operator Forums and various visits to our Control Centres

**2** 

UMS Workshops and regular meetings with various Local Authorities to discuss UMS

**2** 

Community Energy Workshops


**18** 


Agricultural Shows to discuss Community Energy and Preparing for EV in addition to our important safety messages

**6** 

SPD and SPM Strategic Stakeholder Panels



Monthly and Annual Survey Results have increased 

Annual score for Communication through Delivery of the Project has seen an improvement 

Annual Land Rights score has shown an improvement 



## Our Connections Engagement for 2019/20

We have received excellent feedback on content, level of engagement and events hosted in 2018/19. Acting on this feedback, through our positive engagement and established relationships, our customers and stakeholders have indicated they would like a less time consuming approach. We will pilot an approach that is inclusive, lean and robust to meet their evolving requirements.

In an effort to make our engagement more efficient, we are offering our stakeholders varying engagement events including quarterly collaborative events and online interactive sessions; whilst also committing to monthly newsletter updates on key topics. We feel this will provide the optimal level of access to our staff for customers who prefer face to face communication, whilst also providing a more efficient service for other customers.

In addition, we offer an open door policy, where any customer or stakeholder can make direct contact with our Stakeholder or District teams to discuss any specific requirements.

### Monthly Newsletters throughout 2019/20

Please view the published newsletters on our website at: [www.spenergynetworks.co.uk/stakeholder\\_info](http://www.spenergynetworks.co.uk/stakeholder_info)

April 2019	Flexible Tenders	Published
May 2019	Heat Map improvements	Published
June 2019	Preparing for the Electrification of Heat	
July 2019	G98/G99 Process	
August 2019	DER from Blackstart	
September 2019	RAAdAR Improvements	
October 2019	Queue Management Progress	
November 2019	Project CHARGE	
December 2019	Heat Map Improvements	

The programme for 2020 will be agreed with customers and stakeholders throughout 2019.

### Quarterly Online Sessions throughout 2019/20

Please view the upcoming sessions on the events section of our website at: [www.spenergynetworks.co.uk/stakeholder\\_events](http://www.spenergynetworks.co.uk/stakeholder_events)

June 2019	G98/G99 Process	Register above
September 2019	Preparing for EV on our network	Register above
December 2019	RAAdAR IT System enhancements	Register above
March 2020	DER from Blackstart an Heat Map improvements published.	Register above

Following customer feedback; we have developed a timetable of online sessions to provide further information to customers and providing a Q&A session for customers who would like to discuss each topic in greater detail.

For further information on any of our events or publications please contact: [gettingconnectedupdates@spenergynetworks.co.uk](mailto:gettingconnectedupdates@spenergynetworks.co.uk)

### Would you like to have your say? Register as a stakeholder and get involved!

At SP Energy Networks we are continually improving the information we provide for our customers and stakeholders, and we are committed to providing regular updates on the improvements we have made. We value the feedback we receive on how we can further improve our service for our customers so please register using the link below.

Register as a stakeholder: [www.spenergynetworks.co.uk/pages/register\\_as\\_a\\_stakeholder.aspx](http://www.spenergynetworks.co.uk/pages/register_as_a_stakeholder.aspx)

Based on what you tell us you are interested in when you register as a stakeholder - we will invite you to a range of engagement opportunities such as workshops, conferences, meetings and consultations.

## Our Connections Engagement Events for 2019/20

Our quarterly connections events will focus on the steps we are taking to enable the transition to low carbon technologies and the flexibility of our network as we move towards a DSO.

Each event, open to all customers and stakeholders, will provide a strategic business overview followed by breakout sessions for each stakeholder segment to provide a more detailed update for specific areas of interest.

### SPD

9 May 2019	Future Homes Conference	Inchyra Hotel, Grangemouth	Completed
1 July 2019	ICE Stakeholder Event	ScottishPower HQ, Glasgow	
19 September 2019	Preparing for EV's on our Network	ScottishPower HQ, Glasgow	
19 December 2019	ICE Stakeholder Event	ScottishPower HQ, Glasgow	
19 March 2020	ICE Stakeholder Event	ScottishPower HQ, Glasgow	

### SPM

8 May 2019	Demand Workshop	Doubletree, Chester	Completed
25 June 2019	Preparing for EV's on our Network	Doubletree, Chester	
18 September 2019	Low Carbon Futures Conference	Chester	
5 December 2019	ICE Stakeholder Event	Chester	
11 March 2020	ICE Stakeholder Event	Chester	

We are committed to communicating the information we share at our events for stakeholders who cannot attend in person. Please use the following link to find details of the presentations completed at each event: [www.spenergynetworks.co.uk/pages/stakeholder\\_information.aspx](http://www.spenergynetworks.co.uk/pages/stakeholder_information.aspx)  
Please contact [gettingconnectedupdates@spenergynetworks.co.uk](mailto:gettingconnectedupdates@spenergynetworks.co.uk) if you would like further information or clarification post event.





## Looking Forward: Introduction

### Our 2019/20 work plan contains 14 strategic improvement actions.

Through regular engagement and interactions with our connections customers and stakeholders, we believe our 2019/20 plan delivers real, tangible benefits in the areas that matter most to them.

We are committed to ensuring our stakeholders remain engaged and informed in key strategic areas; Policy Guidance, ICP/IDNO Interfaces, Local Government Engagement, Preparing for Low Carbon Technologies and Flexible Connections. Our work plan introduces some new initiatives but we remain committed to continuous improvement in Land Rights, Project Management and Information Provision.

Our 2019/20 work plan got off to a strong start with our first Future Homes Conference, which took place on Thursday 9th May at the Inchyra Hotel, Grangemouth. The event was attended by 78 stakeholders and customers from public and private sectors for presentations and panel sessions with Scottish Government, Transport Scotland and showcasing the value of collaboration to solve the challenges of implementing low carbon technologies.

We are introducing another new event to help local government representatives, local authorities and community groups to understand the investment requirements to prepare our network for Electric Vehicles, with the first event being held in Liverpool on 25th June 2019.

Project CHARGE continues to push the boundaries of how we support the electrification of transport. A range of pilot projects are already underway which include the electrification of key tourist routes, tackling the issues of providing charging points in urban areas as well as developing smart solutions for connections in constrained networks.

We are adapting our future stakeholder engagement approach to be more streamlined by bringing market segments groups together for collaborative engagement events. This change is in response to feedback that whilst engagement is valued, it can often be time consuming across the industry.

We have worked hard to ensure that our actions address the feedback we have received and we believe the 14 new and continuing actions address the improvements that our stakeholders and customers have requested.



# Policy Guidance Action 1

## Our stakeholders told us...

We have seen an increase in the requests for policy clarifications and documentation updates in relation to the connection of low carbon technologies. Our policy documents are important to our stakeholders and SPEN are committed to helping them understand any policy changes that arise.

Our stakeholders have highlighted they also appreciate the support and guidance we provide to help our stakeholders understand and implement any policy changes we issue.

## Measuring our success

Publication of at least 6 document updates, with any additional updates subsequently added to this measure.

All connections customer facing staff will be trained on any new policy documentation updates.

All policy changes communicated at engagement events and feedback sought for further clarifications required from customers.

## Our action

We will update policy documentation for relevant industry changes and revise SP Energy Networks' specifications as required to ensure these remain up to date. We will produce supporting information and training material where required. This will be issued to customers and published on our website.

Proposed documents to be updated include: policies related to the Design and Planning of LV housing sites and associated HV/LV substations; specification for the interface with Independent Distribution Network Operators Installations; Guidance for Self Determination of Point of Connection and Self Design Approval for Independent Connection Providers; and frameworks for Industrial and Commercial Underground Connected Loads.

We will provide internal training on new documentation to all Connections customer-facing staff to enable them to discuss with customers.

We will continue to offer on-going communication and support to ensure our connections customers fully understand any policy changes.



Quarter 3 deliverable  
Oct - Dec 2019



Time strategy area



DG, Unmetered, Metered

## Endorsement:

"SPEN have addressed stakeholder queries in a forward-thinking manner, enabling a more productive distributor/client interface and co-ordinated working."

**Daniel Borg, Utility Connections**

"I have worked with SPEN on a number of major projects and found their service and commitment to achieving the best solutions for their customers to be excellent. The proposed work plans will provide the basis for an ongoing commitment to achieve even higher standards of customer service."

**David Ibbotson, Fuel Solutions (UK) Ltd**



# Communication Action 2

## Our stakeholders told us...

Our stakeholders have told us the changes to our website have been most welcomed.

They like short, sharp communications that provide bite sized content on relevant topics.

Regular updates via communication channels are great for keeping us up to date to support our decision making, especially when we can't make it along to workshops/ events.

## Our action

We will continue to publish updates via our website, facilitate quarterly online interactive sessions to deliver key messages and issue monthly newsletters to our stakeholders.

## Measuring our success

Monthly newsletter published on website.

Quarterly online session dates and joining instructions posted on website.



Quarter 4 deliverable  
Jan - Mar 2020  
(*impact monitoring*)



Satisfaction



DG, Unmetered, Metered

## Endorsement:

"SP Energy Networks have communicated to me extremely well and on a regular basis, their website is clear and easy to use. They issue process and training guides for Radar and Live Joining process documents which we as an organisation have found very useful.

The customer journey flow chart was issued in a customer engagement event a while back and I came back and briefed all our Project Managers on it and sent them copies which they now refer to."

**Sarah Standish, Bethell**

"I am excited and supportive of your work plan proposals which I believe will only go to improve an already good and supportive service. Improvements in communication and innovation on the web will help achieve excellence when delivering this service."

**Shaun McAtteer, Senior Facilities Manager, McArthurGlen**

"The collaborative working we had from SP Energy Network Design on the A487 Caernarfon and Bontnewydd Bypass has been great, we found that they have excellent knowledge and offered good practical advice and assistance throughout.

"We established a good relationship from early stage of the project and were able to continue and progress all the way to delivery of the scheme. SP Energy Network Design are always accommodating and available to answer queries in a timely fashion with a good practical solution for each problem."

**Llion Morris, Balfour Beatty**





# ICP / IDNO Interface

## Action 3

### Our stakeholders told us...

Several of our Independent Connections Providers (ICPs) and Independent Network Distribution Operators (IDNOs) have told us it's good to have regular contact with our District staff to discuss project specific challenges.

ICPs and IDNOs are keen to work in partnership with SPEN to develop their self-connect capabilities and develop processes which further streamline design and deliver activity. Key areas include HV self-connect and LV design requirements for the connection of low carbon technologies.

Finally, we have received positive feedback about our RADAR Working Group, with ICPs and IDNOs wholeheartedly supporting the proposed improvements to RADAR that have been suggested and agreed as part of this group.

### Our action

We will build on our existing ICP / IDNO partnerships to deliver a streamlined and efficient process for this type of connections activity and will create and publish an updated ICP / IDNO customer journey with key milestones highlighted.

We will establish a partnership with an IDNO to pilot a project, publishing an information pack showing the suite of options available for self-connection. The output from this activity will be communicated via email, newsletter, website and at engagement events.

We will share learnings from the on-going HV self-connect trials and publish interactive user-guide to support existing process documentation.

We will publish recommendations for LV network design associated with new housing developments (shared learnings from Future Homes project).

Having already delivered the short term RADAR system upgrades as part of our 2018/19 ICE plan, we will now deliver the medium / long term system upgrades as part of our 2019/20 plan.

We will produce a training pack to show the RADAR improvements and will publish to all registered customers.

### Measuring our success

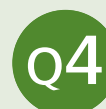
Updated ICP/IDNO Customer Journey issued to all registered customers, communicated at all relevant engagement events and published on website.

Information Pack issued to all registered customers, communicated at all relevant engagement events and published on website.

Learnings of the HV Self Connect trial communicated to all registered customers, communicated at all relevant engagement events and published on website.

Recommendations for LV network design communicated to all registered customers, communicated at all relevant engagement events and published on website.

Training Pack for RADAR upgrades issued to all registered customers, communicated at all relevant engagement events and published on website.



Quarter 4 deliverable  
Jan - Mar 2020  
(*impact monitoring*)



Satisfaction



Time



Cost



DG and Metered

### Endorsement:

"It is vitally important that we should have good lines of contact with district staff whether it be at the design or construction process. These are the people with the local network knowledge and should be available to meet and discuss any possible issues at the earliest possible stage in the process. It would be beneficial to hear how others have fared with the self-connect trials as most IDNO's are still a bit wary of this. The shared learnings from the Future Homes project should be a great help with network designs for all concerned. New technologies continue to provide new challenges and projects like this can only help with providing detailed information going forward."  
**Sonia Sword, Energetics**

"FES feel the communication between the both parties provides dividends on both building relationships, and providing a better service to the end customer."  
**Willie Milligan, FES**

"SPEN have taken on board a lot of the comments that we have made and are starting to improve their processes and procedures. We are committed to work with SPEN in these areas and are pleased to see the commitment extends to the Director level of the business."  
**David Overman, GTC**

# Communication - Local Authority Engagement

## Action 4

### Our stakeholders told us...

Several local authorities have welcomed input from us on their low carbon energy projects.

By working together and in collaboration we can deliver our low carbon 2032 and 2040 targets.

### Our action

SPEN will establish a formal interface with each local authority within our two licence areas, building on the success of our existing relationships, in particular to help facilitate the introduction of low carbon technologies and the decarbonisation of the transport and heat networks.

We will establish a lead contact within each local authority for a low carbon energy transition.

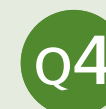
We will provide local authorities with education and support regarding SPEN connections processes to facilitate low carbon technologies, providing them with the tools and information required to ensure low carbon projects are delivered effectively and efficiently.

### Measuring our success

Contact established with all Local Authorities in SPD and SPM.

Monthly updates issued to all Local Authorities.

Local Authority contacts invited to all relevant engagement events and all contacts registered in our Stakeholder Management System (Tractivity).



Quarter 4 deliverable  
Jan - Mar 2020  
(*impact monitoring*)



Satisfaction



Time



Cost



DG, Unmetered, Metered

### Endorsement:

"Warrington Borough Council has been working closely with SP Energy Networks to address network capacity in our key housing growth areas, particularly with respect to a move to electric heating and vehicles. We are delighted to welcome these refreshed actions that will help us to deliver a low carbon future for our town."  
**Rachel Waggett, Special Projects Manager, Warrington Borough Council**

"Wrexham Council have already connected a number of EV charging points in recreational and local tourist hot spots and we are working with SPEN to help plan the most effective rollout of charging points across our area. This relationship has developed over a number of years as we have progressed local authority generation connections and we are looking forward to continuing to work with SPEN to help Wrexham Council prepare for our low carbon future."  
**Emma Williams, Transport and Facilities Manager, Wrexham County Borough Council**

"Flintshire County Council is preparing for the transition to Electric Vehicles (EV) and Charging Infrastructure by working closely with SP Energy Networks and other local authorities to identify the strategic charging infrastructure network required and to assess potential future operating models.

"By adopting this partnership approach and engaging in early consultation on potential networks, real tangible benefits are anticipated, which will ultimately benefit communities across Flintshire. In particular, the project will focus on tourist destinations across the County, as well as local authority owned car parks and premises."  
**Sadie Smith, Energy Conservation Manager, Flintshire County Council**

"Conwy County Borough Council are planning for the introduction of electric vehicle charging across our County Borough, specifically looking at the requirements for EV Charging Points at all of the tourist destinations and council car parks in our area. Being prepared for the move to electrified transport will enable Conwy County Borough Council to take advantage of the economic benefits from the tourism industry whilst also working to achieve our wider 'Lower Emissions' targets and working with SP Energy Networks will help to align strategic investment requirements for EV charging infrastructure."  
**Steven Teale, Facilities Manager, Conwy County Borough Council**



# Pre-Quotation Customer Support

## Action 5

### Our stakeholders told us...

Our customers have provided feedback that our Quote+ facility for DG customers is a very useful tool in supporting them determine their pre-quotation requirements.

Our demand customers have requested we make this facility available to them as well as DG customers.

### Our action

We will extend our Quote+ process and make available to metered demand customers to allow all metered customers to benefit from this pre quotation facility. We will publish a revised Quote+ process and communicate to all metered demand customers.

We will promote the various types of pre-quotation support available to customers to assist their decision making throughout the pre quotation phase of an application.

We will publish an information pack detailing the communication options available for our customers throughout the pre-quotation process and will provide internal training for all connections customer facing staff to ensure they can support and guide customers through the Quote+ process.

We will provide customers with guidance and support on our full range of services to ensure customers receive required design solutions as quickly as possible.

### Measuring our success

Revised Quote + process issued to all registered customers, communicated at 100% of all relevant engagement events and published on website.

Information Pack issued to all registered customers, communicated at all relevant engagement events and published on website.

All Design staff trained on the requirements for pre-quotation support.

**Q2** Quarter 2 deliverable  
July - Sept 2019

Satisfaction

Time

Cost

DG, Unmetered, Metered

### Endorsement:

"I would like to thank you for your help, firstly in helping us understand the application process with SP Energy Networks and secondly for your offer to help with Pre Application assessments of our portfolio of sites in your region. This allows us to make more precise applications and saves us time and expense on the sites that will not work. We also appreciate your offer for us to visit with you guys for a more definitive look at the capacities available for our projects."

**Rob Newberry, Director, Balanced Grid Solutions Ltd**

"I would like to highlight the assistance and thought processes that SPEN provided us with regard to our Fazakerly connection. The site is moderately complex in that it has two solar arrays and one wind turbine. Export was capped at 2 MW, and we made an assumption that effectively breached this cap. Rather than be quite prescribed, and put the onerous on us as a client to resolve the issue, SPEN assisted us by pointing out that we could have a form of flexible - dynamic connection.

A series of meetings were held and the inherent discussions lead us to develop a 3g enabled export limitation device, which was quite unique as normally these are sought to hard wired by DNO's. The collaborative approach adopted by SPEN effectively allowed this project to continue without the need for further costly reinforcement and subsequent project delays.

Our energy consumption is one of our most controllable costs, project successes of this nature allow us to predict our costs to serve which in turn stabilises customer bills, which aligns to our requirements with OFWAT."

**Stephen Slavin, Infrastructure Manager, United Utilities**

"Meaningful conversations with key engineers are the most powerful tool for assessing the feasibility of a connection. SPEN have been happy to offer this service and I encourage them to continue doing so."

**Charles Deacon, Grid Connections Officer, Lightsource**

"This is what we have been asking to do for some time, just to sit down with the key people to discuss our options prior to doing the quote, especially for the more complex projects."

**George Richardson, GTC**

# Land Rights

## Action 6

### Our stakeholders told us...

Previously our larger stakeholders told us they wanted to be much more involved with us in our end to end process for securing land rights. We have now established our Land & Planning Stakeholder Panels which take place across both license areas.

These stakeholders have told us that engagement through this panel is excellent in providing transparency and also an opportunity to feedback improvement suggestions.

### Measuring our success

4 Land & Planning Panels completed.

Land & Planning Guidance document including guidelines on actions and timescales published on website, communicated to all registered customers and discussed at all engagement events.

Customer Awareness Sessions completed by all Land & Planning staff.

### Our action

Based on the success of the Land & Planning Stakeholder Panels in 2018, we will host two panels per licence area in 2019 whilst delivering the following key initiatives throughout the year.

We will embed Land Rights milestones within the Connections process, improving understanding and communication of these and we will improve SPENs approach to Appropriate Land Rights using case study examples.

We will develop and publish a Land & Planning guidance document for Customers and we will continue to work collaboratively with customers and their lawyers so they have a clear understanding of the actions and timescale to conclude each transaction at the outset of the process.

We will continue to host regular Land & Planning Stakeholder Panels and individual customer meetings as required by our customers.

We will deliver customer awareness sessions for the Land & Planning team.

**Q3** Quarter 3 deliverable  
Oct - Dec 2019

Satisfaction

DG, Unmetered, Metered

### Endorsement:

"Massive progress has been made, more communication has since taken place over the years ensuring projects to be completed with ease."

**Daniel Leigh, Bloor Homes**

"Greatly encouraged by the progress made in reaching ICE plan target for land rights. Open and honest debating within the Land Rights Stakeholder Panel"

**Arwel Lloyd, UCML**

"Clear signs of much better engagement and integration than was the case when panel started"

**Hugh Currie, DSSR**





# Project Management Action 7

## Our stakeholders told us...

Our customers have told us that effective project management is key to delivering a project on time and within budget. They have recommended we implement greater rigor in terms of how we manage the milestones associated with project design and delivery.

Customers have also highlighted that regular communication is critical to the successful delivery of a project; and suggested we introduce the framework we use in minor connections for customer updates to our larger connections projects.

Many customers have noted an improvement in our project management since we introduced our basic project management training; but have recommended this training could be extended to make wholesale improvements for all projects instead of just the larger projects.

## Our action

We will roll out project management training to all customer-facing staff completing connections activities across SPD and SPM licences.

We will confirm at the beginning of each project how regularly the customer would like to receive a project update and complete accordingly.

We will create a project management communication timeline for each customer and record satisfaction from the customer at closure of the project.

We will explore system improvements to facilitate automatic prompts at each stage of the project for both staff and customers.

## Measuring our success

All customer facing connections staff to complete project management training.

Customer Satisfaction Survey target of 8/10.



**Q3** Quarter 3 deliverable  
Oct - Dec 2019

Satisfaction

Time

Cost

DG, Unmetered, Metered

### Endorsement:

"I endorse this action because the project I have been involved in had a particularly good PM team who were very customer focussed. However this is not the same for all PM's and often the project execution times within the DNO environment are considerably longer than necessary – they are not as agile as other organisations outside the DNO world."

**Rob Guest, Cobalt Energy**

"Galliford Try have a very positive relationship with the Project Manager through the delivery part of our project at Broughton, both in person and in communications. Whilst there have been issues, these have been worked through and we have been kept fully up to date with progress, so that we were able to manage our own programme of works effectively. Their approach is the kind of engagement needed by construction companies such as us."

**James Wood, Building Services Manager, Galliford Try**

"SPEN are very helpful in resolving any issues that occur to a successful resolution."

**Ian Standring, WSP**

# Partnerships Working - Innovating The Future Action 8

## Our stakeholders told us...

Our customers have told us that they want to be competitive and innovative within their markets. Through working with us they are able to collaborate and explore innovative solutions that can be delivered directly to their customers.

## Measuring our success

Record the number of new partnerships created.

Updates on all new partnerships (number as above) included in the new Monthly Newsletter.

Learnings of each partnership communicated at all relevant engagement events.

## Our action

We will continue to develop strong pragmatic partnerships to create tangible innovative solutions for current and future network challenges, linking real customer challenges with SPEN innovation projects.

We will develop at least 3 innovation partnerships to help local communities and associations to benefit from the emerging low carbon technologies.

We will provide regular updates on the learnings from these partnerships via our Monthly Newsletters to help guide other interested parties to benefit from any innovation projects.

**Q3** Quarter 3 deliverable  
Oct - Dec 2019

Satisfaction

DG, Unmetered, Metered

### Endorsement:

"Liverpool City Council have been working in partnership with SP Energy Networks for a number of years on strategic investment requirements for the economic growth of Liverpool city centre. We have recently extended this partnership to include the preparation for EV Charging in the Baltic Triangle and Ropewalks area of the city, and we are now investigating options to introduce a heat network along the city waterfront. SP Energy Networks technical advice and guidance on how to complete these projects has been invaluable and we look forward to continuing this partnership as we continue to prepare Liverpool for our low carbon future."

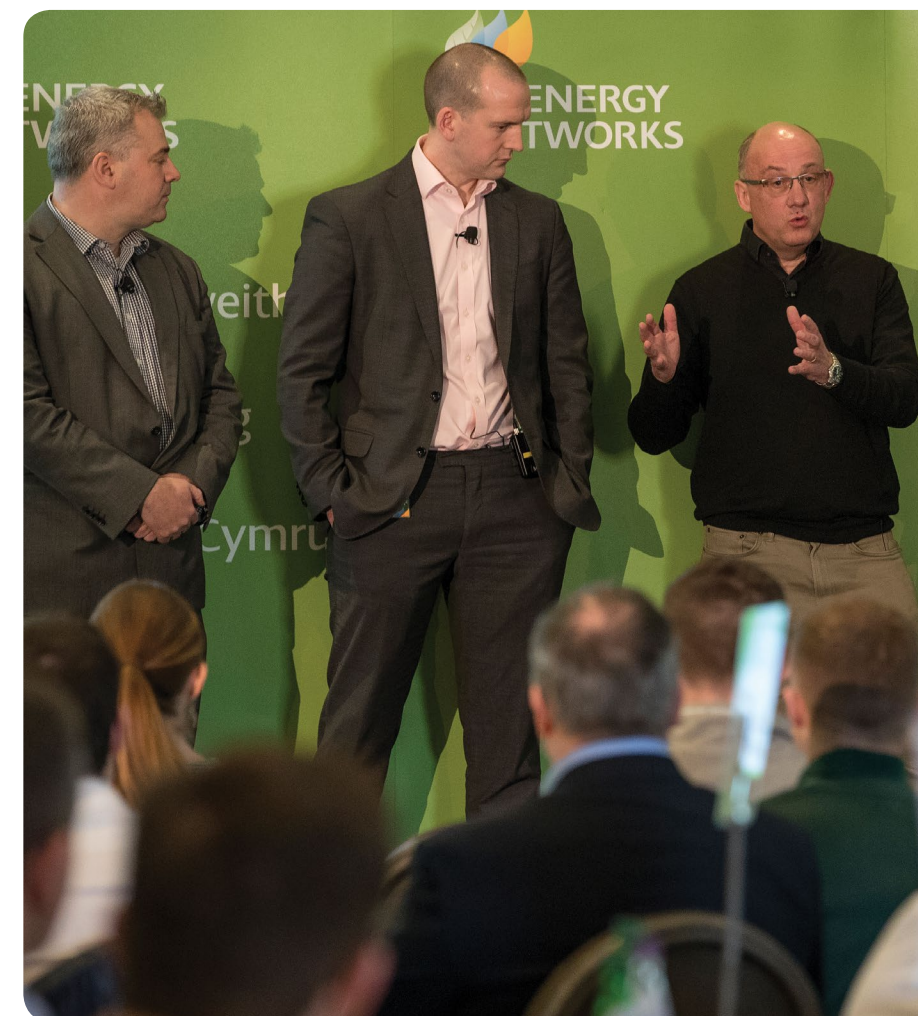
**Christine Darbyshire, Liverpool City Council**

"Local Partnerships have a long standing relationship with SPEN and we have been working together to facilitate generation and growth across North Wales for a number of years. Our partnership with SPEN goes from strength to strength and we are looking forward to exciting new opportunities to help the rural communities in North and Mid Wales benefit from their local resources, as we see EV Charging Points as another method of helping to grow the rural economy for tourism and reducing existing fuel costs."

**Rhys Horan, Local Partnerships and Welsh Government Energy Service**

"Working in partnership with SP Energy Networks to prepare the local electricity network for any required infrastructure improvements is of paramount importance to the City Region and we are committed to facilitate learnings from Project CHARGE to help SP Energy Networks become an enabler for the further electrification of the transport."

**Mark Knowles, Head of Low Carbon Economy, Liverpool City Region LEP**





# Flexible Tenders

## Action 9

### Our stakeholders told us...

Several of our stakeholders have asked how the transition to DSO will offer them opportunities in the future.

Communication on the process and benefits of flexible tenders to date has been welcomed and supported us in our decision making.

### Our action

We will continue to promote the availability of flexible tenders and encourage uptake of this product to help facilitate the flexible networks required to aid the transition to a DSO.

We will promote the benefits of the flexibility tenders at our engagement events and encourage uptake from customers.

### Measuring our success

Flexible Tenders information communicated via our Monthly Newsletter.

Flexible Tenders Information Pack issued to all registered customers, communicated at all relevant engagement events and published on website.

Track and record the amount of MW managed flexibly for our customers and communicate this success via the above.

Q2

Quarter 2 deliverable  
July - Sept 2019



Satisfaction



Time



Cost



DG, Metered

### Endorsement:

"Really pleased that this will be continued for the foreseeable future and that we will see notifications of the prospective tenders in the heat maps"...  
**Stakeholder panel member**



# Project Charge

## Action 10

### Our stakeholders told us...

We have been working closely with local government bodies across both of our licence areas to help facilitate the transition to electric vehicles.

Preparation for EV Charging is important for Local Authorities as they are continually working to improve services for their communities and develop cost effective modes of transport. Economic growth through business and tourism are key factors in Local Government long term plans and the introduction of EV Charging Points will help to move towards plans for a low carbon future.

### Our action

We will establish a high level transport and electrical network map for the SPM and SPD licence areas, highlighting suggested areas where there is available capacity for commercial EV Charging Point locations.

We will continue to develop EV partnerships across both licence areas to assist rural communities in particular to transition to a low carbon future.

We will continue to disseminate information to our customers on how to connect EV charging points with particular emphasis on community groups who may be first time customers and therefore less knowledgeable about our connection processes.

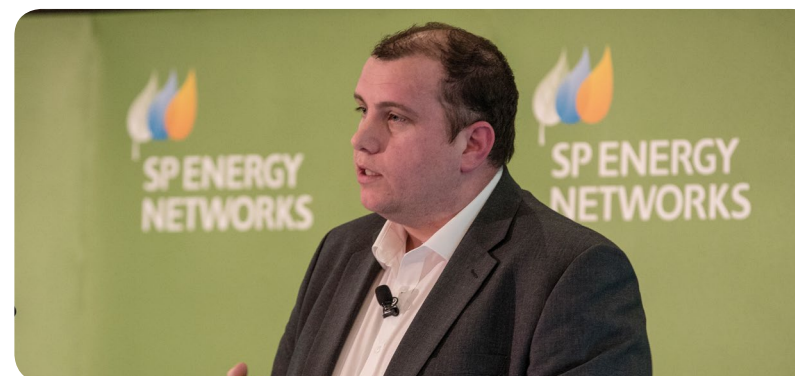
We will update our Connecting Electric Vehicles booklet and include information regarding connecting EV Charging Points at our various stakeholder engagement events and wider communication channels.

### Measuring our success

Transport Capacity Map for each licence issued to all registered customers, communicated at all relevant engagement events and published on website.

Developed at least one more EV Partnerships per licence area (2 in total) specifically targeting rural communities to benefit from the transition to electric vehicles.

Revised Connecting EV Leaflet issued to all registered customers, communicated at all relevant engagement events and published on website.



Q3

Quarter 3 deliverable  
Oct - Dec 2019



Satisfaction



Time



Cost



DG, Metered

### Endorsement:

"Liverpool City Council are working in partnership with SP Energy Networks to prepare for the electrification of the transport network in Liverpool and we support the need to prepare for the increased use of EV Charging points in Merseyside"  
**Collen Martin, Liverpool City Council**

"We look forward to working with SP Energy Networks on project CHARGE because the electricity network infrastructure is an essential and integral part of preparing West Cheshire for the transition to electric vehicles, now and in the near future."  
**Andrew Challinor, Cheshire West & Chester Council**

"The Welsh Government is providing two million pounds of funding for the installation of electric vehicle charging points to help create a publicly accessible national network of rapid charging points across Wales. The focus will be on locations on/ near our strategic road network, with a particular emphasis on enabling North-South and East-West journeys so it's safe to assume that a good proportion of this funding will be invested in Mid and North Wales. The first element of our scheme, to be completed by April 2019, is to perform a gap analysis to scope charging infrastructure needs. Understanding the challenges for the electricity network infrastructure will be an important consideration. The scheme will be delivered in full by the end of March 2020."  
**Dafydd Munro, Head of Transport Decarbonisation, Welsh Government**



# Critical Unmetered Infrastructure Information

## Action 11

### Our stakeholders told us...

Customers who rely on unmetered connections for their operations have requested that we investigate options to provide them with updates in relation to planned/ unplanned outages to their equipment.

### Our action

We will identify critical unmetered infrastructure (primarily broadband network hubs) and map on to our Geographical Information System (GIS).

We will seek to develop a technical solution to provide asset owners with notification of planned & unplanned network interruptions to unmetered supply points.

We will produce an information pack to promote this additional facility on our GIS and communicate to our customers.

### Measuring our success

ESRI system updated to contain unmetered infrastructure information with customer access.

Inclusion of unmetered infrastructure in the notification of planned & unplanned network interruptions.

Information Pack on the new ESRI amendments issued to all registered customers, communicated at all relevant engagement events and published on website.

**Q3** Quarter 3 deliverable  
Oct - Dec 2019

Satisfaction

Time

Cost

Unmetered

### Endorsement:

"It's critical for Openreach to have an open and constructive relationship with Distribution Network Operators (DNOs). We're extremely pleased with the proactive engagement we've had with SPEN over the last year. Working together, we've identified a new process for dealing with knockdowns of Telecoms Fibre Cabinets which should improve electrical reconnection times and therefore reduce telecoms end customer outages. We welcome the steps SPEN has taken to recognise Metered and Un-Metered cabinets require the same level of support for our CPs and end customers."

**Robert Williams, BT plc**



# Low Carbon Futures Conference

## Action 12

### Our stakeholders told us...

Our stakeholders have asked for our support in delivering the low carbon energy future. Working together and showcasing projects that can be replicated is an excellent way to push forward.

### Our action

We will promote collaboration within our stakeholder groups by facilitating a Low Carbon Futures Conference per licence area to promote the implementation of low carbon technologies and help our customers to understand the impacts of decarbonisation to our heat and transport system.

Key focus will be around bringing together local authorities, SPEN and industry partners to showcase project opportunities and initiatives that have the potential for wider adoption in delivering our low carbon future goals.

**SPD - Thursday 9th May 2019**

- What the Future Homes looks like
- Decarbonisation of Transport- challenges and potential solutions
- Delivering a low carbon community

**SPM - Wednesday 18th September 2019**

- Update on learnings from Project CHARGE
- Developing Future Homes with decarbonising heating
- Guidance for local communities to benefit from low carbon transport and heating

Both events will be recorded and an overview video of each event will be published for customers who are unable to attend.

### Measuring our success

2 Low Carbon Future Conferences completed, with all registered customers invited and events details publicised on website.

Videos of each event published on website and communicated to all registered customers.



**Q2** Quarter 2 deliverable  
July - Sept 2019

**Q3** Quarter 3 deliverable  
Oct - Dec 2019

Satisfaction

Time

Cost

DG, Unmetered, Metered

### Endorsement:

"The Homes of the Future conference that SP Energy Networks held was a great opportunity to explore the challenges of coordinating the design of new housing, the technologies which will be part of them, and the electricity networks that serve them. In the Scottish Energy Strategy, Scottish Government have laid out our ambition for the transition to a decarbonised energy system and the principles on which it should be based. To deliver this, we need organisations to work together in new ways, and the Homes of the Future conference was a great opportunity to discuss the way forward. I look forward to engaging further with SP Energy Networks on this issue, and the wide range of stakeholders who attended the conference."

**Simon Gill, Scottish Government**

"The 1st Homes of The Future Conference held by SPEN was a great start and has answered a lot of questions, however it has also created so many more questions that we will need to answer going forward, with further spin off sessions and other conferences. We look forward to our ongoing partnership and workshops moving forward and this event has increased awareness of the challenges and options across the industry"

**Stephen Kelso, Group Product Design Manager, Cala Group Ltd**

"This is an excellent step forward and we would like to get involved in future events."

**David Overman, GTC**



# DG Heat Map Enhancements

## Action 13

### Our stakeholders told us...

SP Energy Network have led the industry in the provision and innovation of heat map technology. We want to continue in this leading role and are working hard to deliver dynamic heat maps, as that is what our customers are looking for to support them in their decision making.

At events, our stakeholder are providing feedback and suggesting ways to improve our heat maps through inclusion of forthcoming investment, low carbon technologies and DSO information.

### Our action

Having already delivered the short term DG Heat Map system upgrades as part of our 2018/19 ICE plan, we will now deliver the medium / long term system upgrades as part of our 2019/20 plan. These updates will include:

Consortium Information; Monthly Updates; Flexible Tender Information.

We will publish a Training Guide to show the improvements implemented and how to operate the revised DG Heat Maps.

We will provide internal training for all connections customer facing staff to ensure they can explain and guide customers through the heat map improvements.

### Measuring our success

DG Heat Maps Training Guide issued to all registered DG customers, communicated at all relevant engagement events and published on website.

Customer Satisfaction of the improved DG Heat Maps measured via the monthly and annual customer surveys.



Quarter 3 deliverable  
Oct - Dec 2019



Satisfaction



DG

### Endorsement:

"I welcome this – when seeking a DG connection at concept stage it is often difficult to see if a connection is feasible without submitting an application and then waiting 60 days – this delay often kills the opportunity to establish a project".

**Rob Guest, Cobalt Energy**

"To further enhance the service, SPEN should provide more granularity and constraint detail on their heat maps to allow us to do our "homework" and be allowed to pre-emptively invest in their Manweb region to mitigate the fault level issues that are preventing new distributed generation connections."

**Charles Deacon, Grid Connections Officer, Lightsource**

"Regular update of the heat maps should help with the increase in requests for sites requiring ASHP's and EVCP's."

**Sonia Sword, Energetics**



# Electronic Signature Process

## Action 14

### Our stakeholders told us...

We have received numerous requests via our regular engagement events and customer interactions for us to investigate the use of electronic signatures to enable our customers to sign the Quotation Acceptance.

Our customers have told us that they would like SPEN to introduce an electronic method of communication to help save time and improve efficiency in our quotation.

### Our action

Following the successful pilot of the Docusign Electronic Signature Trial for smaller connections projects, we have decided to extend the use of electronic signatures into our major connections projects.

We will publish an Information Pack on our website to show to operate the Docusign System and will communicate to all registered customers and will discuss at all of our upcoming engagement events.

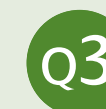
We will provide internal training on Docusign to all customer-facing staff to enable them to help customers use the new system.

### Measuring our success

Published an Information Pack on how to use Docusign.

All connections customer facing staff trained on Docusign.

Communicate the new process on our website and at engagement events.



Quarter 3 deliverable  
Oct - Dec 2019



Satisfaction



DG, Metered

### Endorsement:

"The implementation of these proposals will result in tangible improvements in communication, service levels and delivery."

**John Walker, Hannan Associates**

"Our experience with SP Energy Networks has been a positive one already but reading this document we can see that you are continually striving to improve your efficiency acting upon customer comments to better your future work plans."

**Graham Shaw, shaw-energi Ltd**

"PN Daly Ltd. consider the introduction of the procedure for acceptance of POC.s using DocuSign electronic signature is a positive step towards making the Point of connection process more efficient and transparent. Hopefully this should go some way towards resolving the repeated historic problem of cheques and acceptances parting company and points of connection consequently being lost."

**Patrick J Daly, PN Daly Ltd**

"This is a positive step towards reducing paperwork and will bring SPEN in line with other DNOs."

**George Richardson, GTC**







## Looking Back Report: Introduction

### Our 2018/19 work plan contained 13 strategic improvement actions.

Through robust and regular engagements we have been able to ensure we support the needs, aims and aspiration of our stakeholders. We are delighted to confirm we have made significant progress on the delivery of our commitments which have been well received.

Our key strategic focus remains on communication, engagement with Independent Connections Providers (ICPs)/ Independent Distribution Network Operators (IDNO's), Project Management and Land & Planning.

For our demand and DG customers we recognise the important role that heat maps play in their decision making. We have implemented five new improvements to our heat maps based on stakeholder feedback and continue to work on a solution to deliver more dynamic heat maps to our customers.

We understand that Land and Planning remains a priority area for our stakeholders. We are delighted that through our Land and Planning Stakeholder Panels our stakeholders now have an opportunity to engage directly with our land rights and legal team which has proven extremely positive. These panels have helped us to develop a strong Land Rights action for our 2019/20 plan.

We have taken on board feedback from the RAdAR Working Group and have already implemented short term improvements as part of our 2018/19 plan. Further enhancements to RAdAR to implement the medium and long term improvements are currently being evaluated, to determine whether we make significant changes to the existing system or undergo a wholesale change. We are reviewing the benefits of both options to determine the final solution with our RAdAR Working Group as part of our 2019/20 action.

An area of continuous improvement is our approach to project management. We have commenced a three year project management development program that will up-skill our project managers and ensure a consistent approach to delivery across all geographic areas. Further improvements have been made in the delivery of portfolio meetings, which allow multi-project stakeholders to have a single combined meeting for all their projects.

We are delighted with our results this year and will continue to develop these and the new work plan actions in the coming year to ensure our customers' needs are met in the rapidly changing energy marketplace.



## Land and Planning Stakeholder Panel Action 1

### Status



Complete

### Description

We will seek to establish a Land Rights Stakeholder Panel to examine our Land Rights processes from a customer perspective, with the aim of identifying any opportunities for improvement.

### Update

We held four Land & Planning stakeholder panels in our two license areas, with excellent feedback from our stakeholders.

These panels allow our stakeholders to directly discuss specific challenges they face with our Land & Planning and Legal teams, and we have committed to hosting these panels throughout 2019/20 to continue the focus on improving the land rights process for our customers.

Several suggestions for continued improvement have been collated from the panels and we have incorporated these suggestions into our land rights action for 2019/20.

We were asked to provide a guidance document to help our customers and their lawyers understand the process and timescales in respect to securing the necessary land rights for their projects. This has been incorporated in our land rights action for 2019/20.

Our customers say this will improve their understanding of the overall journey to project completion and allow them to better engage with their own legal teams.

Finally, customers suggested it would be useful for all Land & Planning staff to undertake customer awareness sessions to improve the overall customer experience when working through the issues associated with securing land rights.

### Endorsement

"Massive progress has been made, more communication has since taken place over the years ensuring projects to be completed with ease."

**Daniel Leigh, Bloor Homes**

"Greatly encouraged by the progress made in reaching ICE plan target for land rights. Open and honest debating within the Land Rights Stakeholder Panel"

**Arwel Lloyd, UCML**

"Clear signs of much better engagement and integration than was the case when panel started"

**Hugh Currie, DSSR**

"As an Independent Connections Provider, Matrix Networks Limited, manage the legal process of land rights acquisition with a proactive approach, being involved in SPEN's stakeholder events have been invaluable to us. Our business prides itself on putting the customer first so the events have aided not only our understanding of the procurement process, but helped us to continue to deliver on our customers' expectations."

**Annamarie Maffitt, Commercial Bid Manager, Matrixnetworks**

## Land and Planning Incorporated Process Action 2

### Status



Complete

### Description

We will communicate our Incorporated Rights Process available for use by Independent Distribution Network Operators, active in our SP Manweb licence area, and will publish guidance documentation in relation to this process.

### Update

The land & planning incorporated process has been published on our website and communicated to all SPM staff dealing with Land Rights for customers. This will enable all staff to have the knowledge to provide guidance to customers interested in using the incorporated process in SPM.

The process has been published on the new land & planning area of our website and also communicated at all relevant customer workshops in SPM throughout 2019.

Further detail on the incorporated process can be found at: [www.spenergynetworks.co.uk/pages/land\\_rights\\_for\\_connections\\_customers.aspx](http://www.spenergynetworks.co.uk/pages/land_rights_for_connections_customers.aspx)

### Endorsement

"SP Energy Networks are taking a proactive stance regarding improving transparency of their Land Rights products for IDNO's, and in particular Incorporated Rights, where a trial is to be carried out with UK Power Distribution to help embed this as business as usual."

**Frank Welsh, Director, UK Power Distribution**

"SPEN has fully engaged with us to provide a clear understanding of its incorporated rights process. With this increased level of knowledge, we can potentially identify where improvements could be made to ensure that when we trial the process, connections will be delivered on time."

**Annamarie Maffitt, Commercial Bid Manager, Matrixnetworks**

## Communication Action 3

### Status



Complete

### Description

We will focus on the stakeholder area of our website and enhance the information provided to ensure our stakeholders are aware of the depth and breadth of engagement across SP Energy Networks and provide more opportunity for stakeholder participation. We will introduce a SP Energy Networks stakeholder event calendar providing details of all events. We will also improve the information on the completion, of our ICE improvements by introducing a timeline of key activities linked to the relevant information.

### Update

Based on feedback from our customer survey; we have improved the navigation of our webpage so information can be accessed efficiently.

Our landing webpage now includes "Getting Connected" as one of the 6 leading navigation icons allowing Connections Customers to access relevant information quickly and effectively.

In addition, our new Getting Connected page, also has a set of 6 navigation icons which allows customers to access information relating to the service they require.

Quick links now available to supporting information for Connecting Generation, Other Connection Providers and Land & Planning.

Our customers asked for transparency of Land & Planning processes; a new webpage has been developed to provide key information with a "Contact Us" facility.

### Endorsement

"Webpages are fairly easy to follow and provide a lot of useful information."

**Sonia Sword, Energetics**

"We at Shingler Construction have been pleased with the communication received from yourself regards our latest project. Working together we have overcome obstacles in the way and resolved them in a timely manner. Meeting up on site and walking over the job was very important so we both understood the requirements and meeting again to discuss the proposed alterations saved time and resulted in the quote being forwarded. We have no hesitation dealing with you in the future on other projects. Many thanks for your assistance during this project."

**Keith Sudlow, Shingler Construction**

"SPEN have made significant improvements in moving forward working with customers and communicating changes."

**Daniel Leigh, Bloor Homes**

"I have found my experience in obtaining SP Energy Networks Code of Practice and Policy Standards to be very easy as these documents are accessible via their website. On the rare occasions where I am unable to locate a particular document, the Senior Design Engineers I contacted have been more than helpful and often come up with what I need – failing that there is also an Online Request Form option which I've yet to utilise."

**Alvin J. Carabeo, Delivery Manager, Key Utility Solutions Ltd**

"The SPEN website is a valuable information hub. At Matrix Networks we regularly consult the 'Getting Connected' page - and find it informative and easy to navigate. The site also reflects the SPEN brand image – modern, accessible and responsible."

**Annamarie Maffitt, Commercial Bid Manager, Matrixnetworks**

"Customer engagement ahead of application has been very good. Using the easy-to-find contacts guide it has been easy to get in touch with the right person quickly to discuss a certain part of the network in detail before making a connection application. This is paramount in the era of Connection Offer Expenses. SPEN engineers have been happy to provide detailed network information enabling us to make the most cost effective application on what is a heavily constrained network. Useful highlights have included face to face meetings with the lead system design engineers to discuss the complexities of the Manweb network as well as proactive approaches in Scotland to putting us in touch with other developers to socialise high reinforcement costs."

**Charles Deacon, Grid Connections Officer, Lightsource**





## Metering Process Action 4

### Description

We will develop an interactive tool on our website that will provide clear guidance for metering. This guidance will seek to clearly explain the roles and responsibilities at each stage of the process.

### Update

We have revamped our metering information leaflets and created an interactive metering customer journey on our web page to improve customers' understanding of the complex metering process. Our "Metering Customer Journey" can be found at: [www.spenergynetworks.co.uk/userfiles/file/connections\\_meter.pdf](http://www.spenergynetworks.co.uk/userfiles/file/connections_meter.pdf)

We communicated the publication of the updated metering leaflets and new customer journey at our various engagement events throughout the year. Customer feedback has been positive, and this improvement has also been reflected in our monthly customer satisfaction surveys. The satisfaction score pre introduction of the new process was at 7.8, and this has risen to 8.5 following the introduction of the new process and guidance leaflets.

### Status



Complete

Customer feedback has been positive, with this improvement has also reflected in our monthly customer satisfaction surveys, details shown below.

Monthly Scores before process updates - 7.8  
Monthly Score post process updates – 8.5

### Endorsement

"I couldn't see how it could've been improved, it has been done spot on"

Roy Evison, R&C Homes

"It all worked really well to be honest. It was all good"

Simon Lyall, Lyall Building Solutions

"I am not really aware of any downsides"

Martin Wildman "

"This is particularly important area as there is often confusion in metering requirements and lead times – especially for CG schemes"

Rob Guest, Cobalt Energy

"Metering is viewed across the industry as confusing and time consuming. SPEN has addressed this by updating the 'Customer Support' section of its website, and providing a guidance leaflet – setting benchmark for the wider industry."

Annamarie Maffitt, Commercial Bid Manager, Matrixnetworks

## Communication- Channels Action 5

### Description

To offer our stakeholders a range of communication channels; we considered the use of webinars and online tutorials whilst preparing our 2018/19 ICE Plan. However, our stakeholders have not shown a keen appetite for live webinars preferring instead face to face contact, workshops, newsletters and online webpage content.

### Update

Due to the dynamic nature and evolution of DSO, batteries and Electric Vehicles - to ensure our stakeholders get the most up to date information, we have chosen not to publish information in these areas by webinar but update stakeholders via our regular engagement events, newsletters and partnerships forums.

With this feedback in mind, we have published five video clips and the full presentation from the DER workshops that took place in both license areas.

The RADAR tutorial videos have also been published to allow stakeholders to access at their convenience.

Due to the success of the Land & Planning Stakeholder panels and new webpage; our stakeholder have not expressed an interest in webinars as a further form of communication, preferring to discuss specific challenges they face at the Stakeholder panels. Several actions have been collated as a direct result of these panels and will continue to be a focus for the foreseeable future.

### Status



Complete

### Endorsement

"As with the previous connection we undertook at our Ince site I have been delighted with the assistance and support you have afforded both me and my team with the complex connection arrangements on our Hooton Park site. Given the complex nature of the connection I feel that without your assistance and the understanding of what we were trying to achieve it would have been a very much more difficult process. Looking forward to continuing our relationship on this and future projects "

Mark Degg, Engineering Director, CoGen Ltd

"In previous projects we had some difficulties in terms of getting projects / diversions etc. over the line and this seemed to take a long time to conclude / complete.

Since our introductory meeting last year I can honestly say the service we have received from SPEN since has been fantastic, we now have a point of contact for helping us with projects to help keep projects progressing and moving without delay. In addition the various departments within SPEN have also been an excellent help, specifically getting legals concluded within the Kirk Lane, DR4, Dunbar and Lauder areas – the SPD team have provided us with an excellent customer service.

Now that we have regular contact with yourself and a clear route to go down when we require assistance or help, this has made a huge improvement and difference to the service SPEN is providing Persimmon with and I cannot thank you enough for this. It feels like we are all now working together helping each other where possible and we look forward to continuing to build this positive relationship."

Gary Heaney, Senior Engineering Manager, Persimmon Homes

## Project Management Action 6

### Description

We will continue to monitor and assess our customer communication throughout the lifecycle of a project.

Following the development of project templates and governance for our large major projects, we will look to establish similar templates and processes for smaller HV/LV projects. At the outset of each project we will agree key milestones and a delivery programme which reflects the project commitments of our customers and SPEN.

Furthermore, we have also recognised the need to enhance the project management skills within our delivery teams and therefore will look to establish further training for those staff delivering our connections projects.

Additionally for our larger, multi-district, license, project stakeholders, we will review enhancing the account management and project management offering to provide a more effective way of working with them.

### Update

We cascaded the best practise approach to project management from our pilot in Central & Fife last year across all Districts in both license areas.

We published an 11kV project template on the webpage to complement the existing three templates already published.

We worked with larger stakeholders that have multi district projects and developed a portfolio management approach. This approach was offered to key stakeholders and is now underway with 2 stakeholders. We are keen to continue this method with other major customers.

We have developed a Project Management training programme which includes 7 modules that will be delivered to all customer-facing staff in 2019.

### Status



Complete

### Endorsement

"I would like to state that the past 8 months have been a pleasure working with you and your team at SPEN. When we had to rework our contracts, your team in Scotland and in Liverpool facilitated all of our needs and requirements. From a customer's point of view, we are very happy with the communication and service to date."

Daire Godkin, Project Manager, Network Rail

"Stag Energy had a positive relationship with the Project Manager through the delivery part of the project, both in person and in communications. The SPEN PM reacted to problems swiftly and also assisted our overall project management by providing regular updates on SPEN's programme of works. I also appreciated the SPEN PM's willingness to engage directly with our principal contractor for the project – it certainly contributed to the timely delivery of the project.

"This has not always been the case with SPEN and I appreciate the work you have undertaken to improve the delivery of your projects, as historically we have been passed around numerous SPEN people with no one taking ownership/responsibility. I fully support the implementation of the Project Management training to all staff to ensure the service you provide to all customers improves to the standard I received on the Ruabon project."

Adam Heffill, Stag Energy

"We have worked with SP Energy Networks for a considerable number of years and have seen significant improvements over the last few years in your project delivery. Having a single point of contact has benefitted us tremendously and the proactive and positive support we now receive in developing our connection solutions is greatly appreciated."

Andy Dinnage, Morgan Sindall

"To put this simply, without the effort, guidance and support of the Senior Project Manager I dealt with in one of the schemes I was involved in, the project would have been in serious jeopardy. The patience and understanding shown by the SPM during some testing times was invaluable and helped get the project to the finishing line."

Alvin J. Carabeo, Delivery Manager, Key Utility Solutions Ltd





## EV Partnership Working Action 7

### Status



Complete

### Description

We will seek to establish key partnerships with stakeholders to inform them of our Electric Vehicle strategy and policy going forward. This will include local and national government as well as private sector organisations.

### Update

We are proud of the range and extent of existing community energy partnerships we have with various stakeholders across our two licence areas. We have worked hard this year to help all local authorities, community groups and connections customers to benefit from the transition to electric vehicles.

In particular we have been actively involved in helping our customers understand the network infrastructure requirements for EV Charging Points and communicating how integrated investment planning can facilitate a smooth transition to EV charging.

Existing partnerships have been extended to include EV charging, which is being seen by local government as a way of improving the economy for already isolated, fuel poor communities.

New partnerships with Glasgow and Edinburgh Councils, Cala Homes, Cheshire Energy Hub, Community Energy Wales and Ynni Llyn show the wide variety of stakeholders who are keen to work with us to jointly prepare for electric vehicles.

### Endorsement

"Community Energy Wales are developing a network of Community Car Clubs across Wales and we look forward to working with SPEN to understand the EV Charging Point requirements across North and Mid Wales. We are particularly interested in working with SPEN to determine how we can use local community generation to charge EV, therefore ensuring our rural communities in Wales benefit economically from the transition to EV."

Rob Proctor, Community Energy Wales

"We are a community organisation based on the Llyn Peninsula where there is limited spare capacity on the electricity network to connect more generation. We have been working with SP Energy Networks to determine how we can balance our existing demand and generation locally to help facilitate cheaper generation connections. We are particularly keen to continue this relationship to develop EV Charging Points on the Llyn Peninsula to help boost our local economy as our local communities and tourists transition to electric vehicles. We look forward to working with SPEN and the new innovative EV project CHARGE."

Will Parry, Ynni Llyn

"SP Energy Networks have been providing support for local community groups across North West Wales to help them understand the generation capacity available on an already saturated network for a number of years. We appreciate this support SPEN has provided to help community groups benefit from their local resources and we look forward to extending these partnerships to develop EV projects with SPEN as part of the exciting new innovation project CHARGE."

Grant Peisley, DEG Cymru



## Telecommunications Action 8

### Status



Complete

### Description

Following our feasibility study carried out in 2017, we will investigate the potential of making the provision of telecommunication solutions a contestable activity. Over the next year we will start to conduct trials with identified partners which will determine the feasibility and scope of future contestable telecommunications works.

### Update

The process for contestable telecommunications has been published on our website.

To date, although several customers have been interested there have been no project in a delivery state to uptake this offer. We will continue to promote and work with our customers to offer this facility.

### Endorsement

"It was welcomed that SP Energy Networks identified from my feedback that the telecommunications was a bottleneck for the connections process. The responsiveness and support they demonstrated throughout the pilot was very welcome, especially as it clarified and simplified the overall process and allowed us to look for alternative suppliers. In particular the detailed meetings with associated process and technical presentations allowed us to pass these on to suppliers of our choice.

Being given the chance to explore this and the efficiencies and cost savings has been a very positive experience and I look forward to SP Energy Networks extending this to others areas."

Steve Ruggi, GridCodePower

## ICP/IDNO Partnership Action 9

### Status



Complete

### Description

To assist with the uptake of our Code of Practice we will review our processes and systems to support the delivery of the code. Specifically, we will seek to enable greater level of self-service by our customers with the purpose of reducing the time taken to design and deliver projects.

We will establish a working group of internal/external stakeholders to undertake this review.

We will review with our stakeholders other DNOs' best practices with a view to adopting them where practicable.

### Update

We have concentrated our efforts in building our ICP and IDNO stakeholder group, increasing our workshops to 4 per year and creating a separate RADAR Working Group to specifically address issues that ICPs/IDNOs experience when using our existing system.

Immediate and medium term actions from the RADAR Working Group have already been implemented, with plans to complete the longer term IT system improvements to RADAR included in our 2019/20 ICE Actions.

We have also extended the level of self-service our ICP/IDNO customers can participate in, and supporting IDNO's with HV Self Connect delivery, and introduced a process for self-design for our interconnected network in SPM.

Further enhancements for self-design and assessment are also included in our 2019/20 plan.

### Endorsement

"We worked with SP Energy Networks to agree a mirrored approach Design Approval process to what we had already achieved in the Scotland footprint. This is a good demonstration for us as to how SP Energy Networks are now working with their customers and that they are open to consider changes that can benefit the overall POC process."

Simon Dawson, Offsite Design Manager, GTC

"Regular workshops/forums have been particularly informative/helpful with the introduction of new technologies."

Sonia Sword, Energetics

"The introduction of additional communication with FES has proven to support the services FES provides to the customer. We have met with Johan Gillespie and Craig Graham on several occasions, to discuss pre POC applications and Designs (Falkirk Stadium PV, Various Battery Storage, Kildean Retail Park, and Western general) are a couple of recent projects. The meetings provide FES with the opportunity to discuss the projects in detail prior to formal submission, any changes from the discussion can be made which saves time when the formal application is made."

Willie Milligan, FES



## Heat Maps Action 10

### Status



Complete

### Description

We are developing the next generation of heat maps to address the uptake of Low Carbon Technologies (e.g. Heat pumps and Electric Vehicles) and will engage with our stakeholders to understand exactly what their future requirements are. This engagement will help us identify the enhanced functionality required and allow us to implement the changes efficiently and in a timely manner.

### Update

After an extensive 9 month review with customers, which included face to face meetings, workshops and a customer survey issued to all registered DG customers, we have implemented 5 changes directly as a result of stakeholder feedback.

We have published a Heat Map Application User Guide on our website to give more information on how to use the heat maps, along with training material to help customers understand the improvements that have been made.

An overview of the training was included at our latest DER Forum to again help customers understand the improvements that have been implemented.

Further, longer term improvements will be included into our 2019/20 ICE Actions.

During the review of the existing heat maps, a number of customers requested more dynamic updates, so we now update our heat maps monthly rather than 3 monthly and are working towards making these dynamic in real time

### Endorsement

"The focus in the ICE October 2018 update on constraints will also support the timely development of our future projects. For example, the development of advanced network heat maps will be a significant improvement on the previous system of less detailed, less interactive information.

I look forward to seeing the continued improvements to the heat maps during 2019 and support the work you are doing to provide better information to your customers."

Adam Heffill, Stag Energy

"SPEN have introduced layer control which provides an easier more user friendly function. Different characteristic i.e. voltages, are easily separated and identified. Over all it provides a better user friendly system."

Willie Milligan, FES

## Queue Management Action 11

### Status



Complete

### Description

Measure the impact of our queue management policy being applied to new and previously accepted projects. We demonstrated that capacity is being released when projects are identified as not progressing according to policy.

### Update

We have worked with our existing customers to review each project individually against our queue management policy, initially piloting this in Central & Fife to assess the customer impact and potential benefits.

Following completion of the pilot, the findings were shared with our stakeholder panel who endorsed it. As a result, Queue Management training and awareness sessions were delivered to all 11 districts, with approximately 620MW of capacity released and queue positions altered.

### Endorsement

"Very happy to see this moving and that c620MW have been released back into the distribution network, also good to see that this released capacity is being reflected in the heat maps"

Chris Clark, STA



## Flexible Tenders Action 12

### Status



Complete

### Description

It is our responsibility to develop smarter, more flexible solutions to meet future demand, seeking out alternative solutions which could mitigate the need for traditional reinforcement and reduce costs for our customers. We recognise that connected distributed resources could provide services to assist our distribution networks in key areas that have specific challenges during periods of network constraint. This action will therefore seek to explore additional markets for flexibility with customers who are able and willing to control how much they generate or who can reduce their demand.

### Update

We participated in Phase 2 of the Piclo Live Trial funded from the BEIS Energy Entrepreneurs Fund (EEF) to develop a new online marketplace for local electricity flexibility trading.

We published information on the trial on our website and publicised at our various engagement events throughout 2018/19 to encourage flexibility providers to register with Piclo Flex and view the opportunities available to them.

The trial consisted of offering flexibility schemes in 3 locations, Warout Road in SPD, and Newtown – Welshpool and Flintshire in SPM, seeking a total of 116MW of Flexible Services across both licence areas.

Our tender evaluation process is ongoing.

### Endorsement

"Really pleased that this will be continued for the foreseeable future and that we will see notifications of the prospective tenders in the heat maps"...

Stakeholder panel member

## Connection Offer Expenses Action 13

### Status



Complete

### Description

We will implement Connection Offer Expenses and communicate this to all internal/external stakeholders. We will produce an information leaflet to inform our customers of the commencement date, fee structure and any exemptions.

### Update

Following the introduction of Connection Offer Expenses across the industry, we made a specific decision to only implement once we had given our customers sufficient time to prepare the additional costs they would incur when making an application.

With this in mind we notified all customers in April that we would introduce Connection Offer Expenses in September 2018

We followed this communication with the publication of a specific Connection Offer Expenses Booklet in June 2018, giving all affected customers a 3 month notification that charges would be applied from September 2018 onwards.

We feel the additional time we gave customers time to prepare for the additional associated costs with an application was appreciated, and to date we have received positive feedback about the implementation.

We have experienced a significant reduction in speculative quote requests since the introduction of Connection Offer Expenses, though we have also seen a noticeable increase in requests for budget quotations and our Quote + facility. Due to this we have included an action in our 2019/20 plan to improve these facilities and pre quotation support in general.

### Endorsement

"During the introduction of up-front connection expenses, I was involved in the engagement process with SPEN, through my position on their steering group in the Manweb footprint. During this time, SPEN were keen to explain their approach and thought during various stakeholder events. We were able to share our feedback on their approach and it was good to see that they were trying to learn from the other DNO's introduction of these expenses. By waiting to introduce these and not rushing them through there was a more informed approach to the introduction of these, along with communication to their stakeholders about introduction timescale and costs.

SPEN's approach, whilst requiring significant up-front cost for a developer, ensures that a better value service is able to be provided."

Keir Spiller, MJS Grid Services



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# SP Distribution Licence Area

## Areas of Responsibility & Key Contacts

Each of our six geographical districts across the SP Distribution licence area cover all connections activities at 33kV voltage level and below

This Area of Responsibility List was created as a direct result of our stakeholders requesting information and access to our key contacts in our Districts and has been warmly welcomed.

### Edinburgh & Borders

- District General Manager - Ian Johnston**  
Ian.Johnston@spenergynetworks.co.uk | 07753 624803
- Head of Planning & Design - Sean Gavaghan**  
Sean.Gavaghan@spenergynetworks.co.uk | 07789 925327
- Head of Delivery - Mark Everett**  
Mark.Everett@spenergynetworks.co.uk | 07753 624104
- Head of Delivery - Gordon Burrows**  
Gordon.Burrows@spenergynetworks.co.uk | 07725 410347

### Central & Fife

- District General Manager - Ross Galbraith**  
Ross.Galbraith@spenergynetworks.co.uk | 07753 622658
- Head of Planning & Design - Craig Graham**  
Craig.Graham@spenergynetworks.co.uk | 07753 623669
- Head of Delivery - Peter Joyce**  
Peter.Joyce@spenergynetworks.co.uk | 07753 623966
- Head of Delivery - Ross Tierney**  
Ross.Tierney@spenergynetworks.co.uk | 07710 917989

### Glasgow & Clyde North

- District General Manager - Alistair Menzies**  
Alistair.Menzies@spenergynetworks.co.uk | 07753 623670
- Head of Planning & Design - Stephen Peacock**  
Stephen.Peacock@spenergynetworks.co.uk | 07753 624866
- Head of Delivery - Aileen Rourke**  
Aileen.Rourke@spenergynetworks.co.uk | 07918 197415
- Head of Delivery - Tom Melrose**  
Tom.Melrose@spenergynetworks.co.uk | 07753 624699

### Ayrshire & Clyde South

- District General Manager - Angus Campbell**  
Angus.Campbell@spenergynetworks.co.uk | 07753 623778
- Head of Planning & Design - Jonathan Giff**  
Jonathan.Giff@spenergynetworks.co.uk | 07725 410356
- Head of Delivery - Albert Santanbreu**  
ASantanbreu@spenergynetworks.co.uk | 07702 511613

### Dumfries & Galloway

- District General Manager - Iain Steele**  
Iain.Steele@spenergynetworks.co.uk | 077536 24154
- Head of Planning & Design - Kenny Bowie**  
Kenny.Bowie@spenergynetworks.co.uk | 07753 624570
- Head of Delivery - Neil Carruthers**  
Neil.Carruthers@spenergynetworks.co.uk | 07753 624579
- Head of Delivery - Craig Cottrill**  
Craig.Cottrill@spenergynetworks.co.uk | 07921 113104



### Lanarkshire

- District General Manager - Eddie Mulholland**  
Edward.Mulholland@spenergynetworks.co.uk | 07702 665526
- Head of Planning & Design - David Climie**  
David.Climie@spenergynetworks.co.uk | 07753 623951
- Head of Delivery - Derek Drummond**  
Derek.Drummond@spenergynetworks.co.uk | 07753 623790
- Head of Delivery - Nicola Stewart**  
Nicola.Stewart@spenergynetworks.co.uk | 07753 624139

### Other Contacts

#### Land & Planning

- Head of Land & Planning - Ross Baxter**  
Ross.Baxter@spenergynetworks.co.uk | 07753 623724
- Distribution Land Team Leader - Rachel Pitt**  
Rpitt@spenergynetworks.co.uk | 0141 614 3916 | 07922 580788

#### Stakeholder Engagement Team

- Stakeholder & Community Engagement Manager - Caryn Jack**  
Caryn.Jack@spenergynetworks.co.uk | 07702 663605
- Customer Engagement Manager - Elaine Forsyth**  
Elaine.Forsyth@spenergynetworks.co.uk | 07753 624157
- Customer Engagement Manager - Johan Gillespie**  
Johan.Gillespie@spenergynetworks.co.uk | 07921 113137
- Customer Engagement Manager - Stuart Walker**  
Stuart.Walker@spenergynetworks.co.uk | 07725 410382

# SP Manweb Licence Area

## Areas of Responsibility & Key Contacts

Each of our five geographical districts across the SP Manweb licence area cover all connections activities at 33kV voltage level and below

### North Wales

- District Manager - Andrew Churchman**  
Andy.Churchman@spenergynetworks.co.uk | 07753 624757
- Head of Planning & Design - Terry Jones**  
Terry.Jones@spenergynetworks.co.uk | 07753 624359
- Head of Delivery Wales - John Heathman**  
John.Heathman@spenergynetworks.co.uk | 07753 623886

### Wirral

- District Manager - Tom Walsh**  
twalsh@spenergynetworks.co.uk | 07753 624439
- Head of Planning & Design - Ken Brassington**  
Ken.Brassington@spenergynetworks.co.uk | 07753 624053
- Head of Delivery - Steve Matthias**  
Steven.Matthias@spenergynetworks.co.uk | 07725 410097

### Dee Valley/ Mid Wales

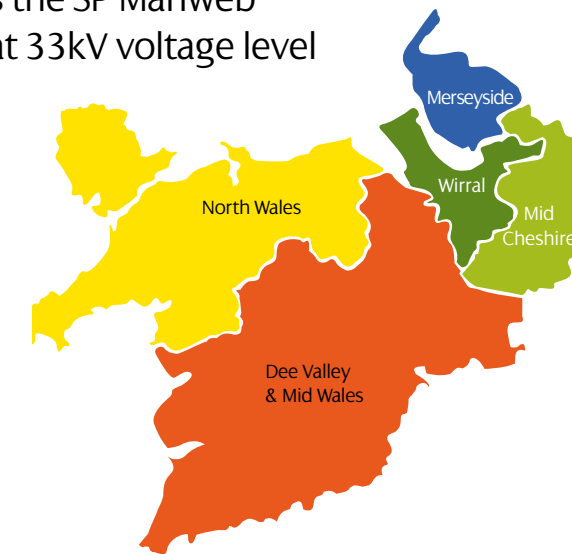
- District Manager - Liam O'Sullivan**  
Liam.O'Sullivan@spenergynetworks.co.uk | 07917 085526
- Head of Planning & Design - Gary Barnes**  
Gary.Barnes@spenergynetworks.co.uk | 07753 624393
- Head of Delivery Wales - John Heathman**  
John.Heathman@spenergynetworks.co.uk | 07753 623886

### Merseyside

- District Manager - Andrew Lloyd**  
Andrew.Lloyd@spenergynetworks.co.uk | 07753 623728
- Head of Planning & Design - Neil Woodcock**  
Neil.Woodcock@spenergynetworks.co.uk | 07753 624072
- Head of Delivery - Paul Thomas**  
Paul.Thomas@spenergynetworks.co.uk | 07501 223071

### Mid Cheshire

- District Manager - Tom Walsh**  
twalsh@spenergynetworks.co.uk | 07753 624439
- Head of Planning & Design - Ken Brassington**  
Ken.Brassington@spenergynetworks.co.uk | 07753 624053
- Head of Delivery - Steve Matthias**  
Steven.Matthias@spenergynetworks.co.uk | 07725 410097



### Other Engagement Contacts

#### 132kV System Design SP Manweb

- Distribution Network Manager (SPM) - Malcolm Bebbington**  
malcolm.bebbington2@spenergynetworks.co.uk - 0141 614 5838
- Lead Engineers - Merseyside - Sue Pilcher**  
Sue.Pilcher@spenergynetworks.co.uk | 0141 614 5692
- Lead Engineers - North Wales - Andy Beddoes & Jon Mitchell**  
Andy.Beddoes@spenergynetworks.co.uk | 0141 614 5689  
Jonathan.Mitchell@spenergynetworks.co.uk | 0141 614 5686
- Lead Engineers - Cheshire - Mark Lyon & Miles Buckley**  
Mark.Lyon@spenergynetworks.co.uk | 0141 614 5690  
Miles.Buckley@spenergynetworks.co.uk | 0141 614 5691

#### 132kV Business SP Manweb

- Business General Manager - Alyn Jones**  
alyn.jones@spenergynetworks.co.uk | 07753 624268
- 132kV Programme Head of Delivery - Mark Sobczak**  
Mark.Sobczak@spenergynetworks.co.uk | 07753 623735

#### Land & Planning

- Head of Land & Planning - Ross Baxter**  
Ross.Baxter@spenergynetworks.co.uk | 07753 623724
- Distribution Land Manager - Rachel Pitt**  
Rpitt@spenergynetworks.co.uk | 07922 580788
- Distribution Land Team Leader - Jo Baugh**  
Jo.Baugh@spenergynetworks.co.uk | 0141 614 5835 | 07753 461241

#### Stakeholder Engagement Team

- Stakeholder & Community Engagement Manager - Rachel Shorney**  
Rachel.Shorney@spenergynetworks.co.uk | 07753 623898
- Customer Engagement Manager - Louise Taylor**  
Louise.Taylor@spenergynetworks.co.uk | 07753 624442
- Customer Engagement Manager - Fay Morris**  
Fay.morris@spenergynetworks.co.uk | 07753 624921



# Glossary

Term	Definition
Accreditation	The appropriate qualifications to allow alternative connection providers to operate on our electrical network.
Alternative Provider Register	Scottish and Southern Electricity Networks & Northern Power Grid list of alternative providers that are active in our license areas for new connections work.
ANM	Active Network Management; using technology to enable generators to connect in constrained areas on a commercially non-firm basis.
ARC Accelerating Renewables Connections;	SPEN 'Low Carbon Networks' funded project to consider innovative methods for connecting DG quicker and cheaper.
AVR	Automatic Voltage Regulator; this is a device which can be deployed on our overhead line network and controls the voltage to ensure the network remains within statutory limits.
Baringa Report	Baringa Partners, an independent consultancy, was employed via a competitive tender to produce the ENA Future Worlds impact assessment and this consultation seeks stakeholder views on that work.
BEIS	Department of Business, Energy and Industry Strategy - The Government department brings together responsibilities for business, industrial strategy, science, innovation, energy, and climate change.
Budget Quote	A budget quote is provided to aid customers with up front planning of projects and is a simple review of the network within the vicinity of the proposed development and does not include detailed modelling of the system. A budget quote cannot be contracted.
BMCS	Broader Measures of Customer Service.
CCCM	Common Connection Charging Methodology.
CARES	Community and Renewable Energy Scheme.
CIC	Competition in Connection; ability for a customer to seek connection to the network using a Lloyds accredited ICP of your choice.
CIC Code of Practice (CoP)	This is a proposed industry standard which is being developed jointly by DNOs and OFGEM. The code is aimed at making it easier for alternative connection providers to get their customers connected and better inform customer of their choices.
Collaborative Connections	These are connections where multiple customers are brought together to benefit from shared connection costs and shared assets to maximise the amount of generation connected in any part of our network.
Connections Customer Steering Panel(CCSP)	A dedicated forum to give stakeholders more influence over our connection service.
Constraint Managed Zones (CMZ)	Effectively manage peaks in demand or distributed generation without needing to reinforce the network.
Contestable	When we talk about contestable work, these are the 'off the system' works, which can be completed by either ourselves or a Lloyds accredited ICP of a customers choice.
Contracted Capacity Register	This lists generators that are contracted but not physically connected to our network.
CRAM	Connection Registration and Management. This was a legacy IT system utilised to manage CIC enquiries where a Lloyds accredited ICP was being employed to complete the contestable works.
CRM	Under the SP brand name of Athos, CRM is SP Energy Networks Customer Relationship Management system which will help us better serve our customers.
Customer	A customer is defined as someone who is or has applied for a connection to our network.
Customer Surgeries	These are held monthly for any customers who wish to discuss a project with us at any time in the process.
DER	Distributed Energy Resources which include all distributed generation, storage, demand side response and micro grids.
DG	Distributed Generation; this is the connection of generation to any point of the distribution system, from 230V up to 33,000V in Scotland or 132,000V in England and Wales.
DNO	Distribution Network Operators, responsible for owning, operating and maintaining the electrical network in their licensed geographical area.
DSO	Distributed Systems Operator responsible for facilitating effective and well-functioning distribution markets, which give options to customers to choose the best connection provider and allow connection providers to offer options and services best tailored to connection customer needs.

Dual Offers	These are formal offers which facilitate the acceptance of either the full works or just the non-contestable works, with the contestable works completed by a Lloyds accredited ICP of a customer's choice.
ENA	Energy Networks Association is the voice of the networks, representing the 'wires and pipes' transmission and distribution network operators for gas and electricity in the UK and Ireland.
Export Management/ Limited Device	These are devices which seek to manage the local demand alongside any generator, essentially restricting export to our network.
Feasibility Study	A feasibility study is a chargeable service to run a number of network models and advise what capacity is available and where on parts of our network. This does not facilitate a connection offer, and does not carry any contractual link to a formal connection offer.
Flexible connection	A transitional solution may be available for a connection. We will engage with you to discuss flexible contractual terms, which depending on the circumstance, may allow connection ahead of the required reinforcement works.
Formal Connection Offer	A Formal Connection offer facilitates a contract between us and the applicant to accept our offer and progress the construction works with the connection.
Full Metering Settlement Option	Enables clients to share a point of connection without a boundary meter. The point of supply is separated on the customer side of the connection providing two or more customer meters with full settlement (e.g. shared connection for community and commercial pv site / shopping centre with multiple outlets).
GIS	Geographical Information System
G59	G59 is the industry standard for generators greater than 16 amp per phase.
G83	G83 is the industry standard for small scale embedded generators for connections up to 16 amp per phase, 3.68kw single phase connection or when multiple generators are to be connected.
GRP Enclosures	'Glass Reinforced Plastic' enclosures. Our traditional solution for a substation which requires a battery set is a brick building, GRP solutions utilise glass reinforced plastic technologies (GRP) to provide substation enclosures that can provide similar environments to brick-built substations.
GSPs	A Grid Supply Point is the point at which electricity enters the distribution network, leaving the transmission network.
Heat-maps	These are maps of our High Voltage network, colour coded based on the available capacity on any given circuit.
ICP	Independent Connection provider.
IDNO	Independent Distribution Network Operators develop, own, operate and maintain local electricity distribution networks.
Intertrip	An intertrip will automatically disconnect a generator or demand from the network when a specific event occurs.
JOA/SRS	Joint Operational Agreement/ Site Responsibility Schedule these are required for users connected at High Voltage / Extra High Voltage.
Jointing	Jointing is a method of connecting two sections of cable together.
KPI	Key Performance Indicator.
LCNF	Low Carbon Networks (LCN) Fund was established by OFGEM as part of the electricity distribution price control. The fund offers capital to support projects sponsored by the Distribution Network Operators (DNOs) to try out new technology, operating and commercial arrangements.
LiDAR	Light Detection And Ranging, a surveying technology that measures distance by illuminating a target with a laser light
Link boxes	A link box provides a point of isolation at the interface of an IDNO (Independent Network Operators) and DNO network
Meter Point Administration Number (MPAN)	A 21-digit reference used in Great Britain to uniquely identify electricity supply points.
Market Segment	This is the regulatory terminology which defines Distributed Generation (DG), Demand and Unmetered Supplies (UMS).
Metering	This is the mechanism for settlement to ensure your generation receives the correct rates for your tariff and is a key part of the balancing and settling arrangements, which are laid down in the Balancing and Settlement Code (BSC).
NERS	National Electricity Registration Scheme, performs technical assessment of the service providers who elect to be assessed for accreditation for contestable works associated with the installation of electrical connections.
NGET	National Grid Electric Transmission - Deals with all aspects of the contracts for the connection to and use of the electricity transmission system throughout the UK.



Non-Contestable	Where we talk about on-site works, these are typically within either the customers land boundaries or the CDM boundary within which a Principle Contractor operates.
On-Site	On-site works are typically within either the customers land boundaries or the CDM boundary within which a Principle Contractor operates
PPA	Power purchase agreement, is a contract between two parties, one which generates electricity (the seller) and one which is looking to purchase electricity (the buyer).
Pseudo MPANs	enables clients to sub-meter behind a single point of supply making individual bills available (e.g. shared connection for community and commercial pv site / shopping centre with multiple outlets). This option requires a common meter operator and a boundary meter.
POCs	Point of Connection for the electrical network.
Quote+	Quote+ provides options for our customers quickly whilst maintaining queue position.
RADAR	Register of Adopted Asset Requests; this is our current IT system utilised to manage CIC enquiries where a Lloyds accredited ICP is being employed to complete the contestable works.
RIIO ED1	(Revenue = Incentives + Innovation + Outputs) price control set the outputs that the 14 electricity Distribution Network Operators (DNOs) need to deliver for their consumers and the associated revenues they are allowed to collect for the eight-year period from 1 April 2015 to 31 March 2023.
SoW	The Statement of Works process should be followed when it is identified that a generator seeking a connection to a DNO's network may have an impact on the transmission network
Substation	A part of our network where DG is connected and we transfer power across boundaries, either by voltage level or a customer's point of common coupling
TSO	Transmission Systems Operator – responsible for facilitating effective and well-functioning transmission markets, which give options to customers to choose the best connection provider and allow connection providers to offer options and services best tailored to connection customer needs.
Land Rights	SPEN seek to obtain land rights for all of its operational assets which are situated on private land. Those rights can take the form of wayleaves, easements and servitudes, leases and outright ownership.
Webinar	Web conferencing.
Witness test	'Witness testing' is where we, the distribution network operator, attend the site of a generator to witness your commissioning engineer test the protection systems associated with your generator and ensure they operate correctly.



# Summary of Relevant Market Segments

Term	Definition
Metered Demand Connections	Low Voltage (LV) work: LV connection activities involving only LV work, other than in respect of the Excluded Market Segment.  High Voltage (HV) work: LV or HV connection activities involving HV work (including where that work is required in respect of connection activities within an Excluded Market Segment).  HV and Extra High Voltage (EHV) work: LV or HV connection activities involving EHV work.  EHV work and above: extra high voltage and 132kV connection activities.
Metered Distributed Generation (DG)	LV work: low voltage connection activities involving only low voltage work.  HV and EHV work: any connection activities involving work at HV or above.
Unmetered Connections	Local Authority (LA) work: new connection activities in respect of LA premises.  Private finance initiatives (PFI) work: new connection activities under PFIs.  Other work: all other non-LA and non-PFI unmetered connections work.







**SP ENERGY  
NETWORKS**

**SP Energy Networks**  
SP House  
320 St Vincent Street  
Glasgow  
G2 5AD

[spenergynetworks.co.uk](http://spenergynetworks.co.uk)