

SP Energy Networks Distributed Generation Work Plan



Content is widely recognised by our stakeholders how far we have come in the past 24 months. There is still more to do. This plan sets out what we are doing in response to the feedback we have received from our recent engagement with DG stakeholders and our customers.
Paul Brown (Connections Director)

Providing excellent service to our customers is at the heart of what we do. Our Distributed Generation customers expect exceptional service. We have worked hard over the past 24 months to do what we can to meet and exceed this expectation. We have listened to the needs of our stakeholders and customers and we will continue to do that. This plan responds to the needs of our customers. It presents a plan that is applicable to both our licence areas, SP Manweb PLC (SPM) and SP Distribution PLC (SPD).

It is also important to note that this plan seeks to address issues our customers currently face. It does not set out our approach to managing more strategic issues. These issues are being addressed through the DG-DNO working group, where we play an active role and through other similar bodies such as the Scottish Renewables group and Energy Island Programme (joint venture between Welsh Government and Isle of Anglesey County Council).

Objective

- This work plan seeks to address issues that our customers and stakeholders have recently told us about or enhance activities that we are already doing
- The plan is split into 9 clear sections which supplement a work plan summary
- ••• Each section addresses issues faced by customers who connect at low voltage (<400V) and those who connect at high voltage (at 11,000V; 33,000V or 132,000V). These are recognised in market segments known as DGLV and DGHV respectively.
- The plan sets out those actions that are applicable to either or both market segments
- The plan identifies which quarter (set out in calendar year format) each action will be completed by
- ---- Finally, the plan also proposes a Key Performance Indicator (KPI) against each action

This is our forward looking plan. In six months we will report back to you on our progress against each of the actions contained within our plan.



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Our Approach to Engagement



What we currently do

- We have a dedicated Account Management team, North and South, to actively manage and engage with our DG customers
- We hold monthly 'Customer Surgeries' where we are on hand to answer any questions our customers may have
- We provide tailored workshops for customers and community groups to meet their specific needs
- ... We have an active role in the national DG-DNO Working Group, DG-DNO Technical Sub-group, the Scottish Renewables Working Group, the Energy Island Programme as well as close working relationships with the Scottish Government and Welsh Government
- Actively participate in the annual DG forums facilitated by the ENA. SPEN jointly host the DG Forum in Glasgow and Cardiff These meetings provide an opportunity for DG customers and Distribution Network Operators (DNOs) to discuss issues associated with connecting to the network and the steps required for improving the arrangements

Listening to the views of our Stakeholders and Building our Plan

Building on the work we have been doing in the past 24 months, we developed this plan by;





- Developing interview questions based on our 2013 Stakeholder Engagement and direct feedback from our customers
- We conducted 18 in-depth interviews with our stakeholders.
 (2 representing ICP's, 10 representing the DGHV market segment and 6 representing the DGLV market segment)
- Developing interview questions
 based on our 2013 Stakeholder
 Engagement and direct feedback
 from our customers
- We issued our on-line questionnaire to 794 DGHV customers, (346 in SPM and 448 in SPD), 401 DGLV customers and 26 ICP's, all of whom have made an enquiry or multiple enquiries within the past 24 months



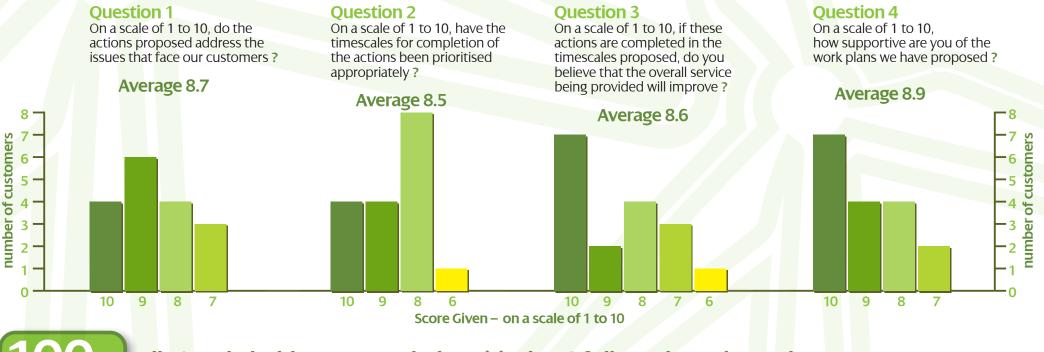
- We analysed the responses we received to formulate and prepare our plan
 We set milestones and key outputs in order to achieve the plan
- We then issued our plan in draft to 19 key stakeholders for feedback and to rate the proposed actions set out in our plan
- •• Where appropriate, the plan was revised in line with any queries, or comments received

Our Work Plan has been endorsed by our Stakeholders



After having drafted our work plan, we then asked a number of stakeholders for feedback. These stakeholders were those who were interviewed, and those who sit on the DG-DNO Working Group, the Scottish Renewables Group, and the Energy Island Group.

The stakeholders were asked, if they felt it appropriate, to answer the following questions;



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All 19 Stakeholders responded positively, 16 fully endorsed our plan

3 felt they were not in a position to do so without consultation with their members

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Our Work Plan in Summary

Objective ... This work plan seeks to address issues that our customers and stakeholders have recently told us about or enhance activities

- that we are already doing
- The plan is split into 9 clear sections which supplement this work plan summary
- ... It applies to our customers who operate in the market segments known as DGLV (customers who connect at low voltage <400V) and DGHV (customers who connect at 11,000V or above).

The highlights from what we did in 2013...

- ... Over 50 of our DG customers now have an appointed Customer Account Manager
- •• We are trialling our 'Quote +' product, providing customers with a high level feasibility study whilst still maintaining their place in the queue
- We introduced 11kV 'heatmaps' in both of our licensed areas, which have been widely acknowledged as industry leading
- We have worked hard to make 'collaborative connections' work for customers and have 3 good examples of how this type of approach can help get customers connected

Total Q2 Q3 Q4 Q1	
Section Actions Apr-Jun Jul-Sep Oct-Dec Jan-Mar Key Highlig	ghts
Customer Service43100Extend Customer Account Ma	lanagement; Flexibility
Application Process63120Improved Application Form; Promote Quote	
Information 4 1 2 1 0 Enhance our heat map functionality; St	trengthen our Guidance Leaflets
Communication52300Monthly Customer Surgeries;	s; Monthly Newsletters
Technical3110Voltage Control; GRP Enclosures; Letter	
Enablers to Connection31200Payment Terms; Enhanced Cost	t Breakdown; Land Rights
Choice 5 1 1 3 0 Training; Dual Offers for 11kV Connections; Enh	hanced Inspection & Monitoring Process
Distribution to Transmission Interface 3 1 2 0 0 Statement of Works; Secu	
Communities30210Contact & Technical Assistance; DECO	

Customer Service



To deliver outstanding customer service to all our DG customers, whether connecting PV panels to a domestic property or seeking to build a 20MW windfarm

What we did in 2013...

- ... We have published our guidance leaflet "Our Connections Process explained"
- ... Over 50 of our DG customers now have an appointed Customer Account Manager
- ... We appointed a DG Manager responsible for the provision of all connection offers to our customers in both of our license areas

- **G** That you still don't always know who to contact **>>**
- **66** 26% of you agreed that ease of contact was a key area for improvement **9**
- **G** Sometimes we are too 'by the book' and you would like greater flexibility **)**
- 66 100% of you who have an appointed Customer Account Manager said that their overall connection experience had improved 55

We're going to do	DGLV	DGHV	Q2	Q3	Q 4	Q1	KPI
Appoint a Customer Account Manager to any customer who would like this level of service	NO	YES	卜				Number of DG Customers Account Managed
Publish on our website information on key personnel including contact numbers, roles and responsibilities	YES	YES	卜				Website Updated
During our 3 day post enquiry call with you, we will establish the frequency of contact and the information that you require at each milestone of your project	YES	YES	\downarrow				Updated on our CRM System
Publish a consultation paper seeking to understand and address your comments in relation to flexibility	YES	YES		卜		••••••	Consultation Paper Published

Application Process



To ensure that the application process is as simple as possible for you, whilst still providing us with all information necessary to deliver a connection offer that meets your needs

What we did in 2013...

- We are trialling our 'Quote +' product, providing customers with a high level feasibility study whilst still maintaining their place in the queue
- ... Guidance has been posted on our website on offer validity period, options for extension to validity and the interactive process
- ••• We implemented a 'dual offer' process for connection offers over 5MW, allowing customers to accept either the non-contestable or full works from the one connection offer

This year, you have told us...

- **G** That the G59 application form is too onerous and you want us to consider whether a simpler application form could be used for your initial enquiry **D**
- 66 Some of you asked why you have to always fill in technical data when it often replicates what you completed on previous applications ??
- **G** Some of you are still find validity periods and interactivity confusing **)**
- **C** That you wanted us to provide voluntary standards for feasibility studies in a timely manner

We're going to do	DGLV	DGHV	Q2	Q3	Q4	Q1	KPI
Publish a consultation paper on what options might be available to simplify the current application form	YES	YES	个				Consultation Paper Published
Provide a link on our website to the ENA technical database that you can access and reference in your application form	YES	YES	卜				Website Updated
Promote our Quote + product, by sending a Guidance Leaflet to all of you who have submitted an application in the past 12 months	YES	YES	个				Guidance Leaflet Published
Publish a consultation on whether our Quote + product meet the needs of you who have requested voluntary standards for feasibility studies	YES	YES		卜			Consultation Paper Published
We will hold specific customer surgeries on validity periods and interactivity	YES	YES			\mathbf{k}		Publish Attendees and Surgery Topic on Website
Extend our 'dual offer' process to all 11kV connection offers	NO	YES			\mathbf{k}		Dual Offer Implemented at 11kV
	A						

Information Provision



To ensure we provide all our customers with clear and concise information and data that allows customers to undertake their own assessment of their connection needs before seeking a formal connection offer

What we did in 2013...

- ... We introduced 11kV 'heatmaps' in both of our licensed areas, which have been widely acknowledged as industry leading
- ... We provided supporting data with our 'heatmaps' to allow our customers to undertake their own network studies
- ... We have posted guidance leaflets on our website, covering activities such as the connections process, wayleaves, metering and on-site responsibilities

This year, you have told us...

- **G** That you would like to be able to calculate the likely cost of connection even before you apply **)**
- **G** Our 'heatmaps' are great but you would like them refreshed more regularly and across more voltage levels
- **G** That you would like to know what contracts we have customers, where they are and what level of generation is being connected **D**

We're going to do	DGLV	DGHV	Q2	Q3	Q4	Q1	KPI
Refresh our 11kV 'heatmaps' and associated data and develop process for updating the heatmaps more frequently than quarterly	NO	YES	\mathbf{k}				Website Updated
Publish equivalent 'heatmaps' and associated data for the 33kV network	NO	YES		丫			Website Updated
We will publish a consultation paper on the provision of contracted data at 11kV and 33kV	NO	YES		个			Consultation Paper Published
We will strengthen our Guidance Leaflets by seeking direct feedback from you and using your feedback to revise their content	YES	YES			卜	•••••	Publish Feedback and Updates on Website

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Communication

To communicate with our customers in the manner in which they seek, within acceptable timeframes and with the quality our customers deserve

What we did in 2013...

- ... We introduced a 3 day call back where we contact you within 3 days upon receipt of your application and after your connection offer has been issued
- ... We appointed dedicated Customer Account Managers North and South for our DG customers
- ... We introduced monthly customer surgeries which are held in various office locations each month

This year, you have told us...

- **G** That 78% of you have used our website to date and 59% of you would like to receive regular updates from us by email **>**
- **G** On occasion, you want us to be quicker at responding to your emails and returning your phonecalls
- **C** That you like our customer surgeries, but would prefer it if they were tailored to review specific areas of 'hot topics' **?**
- **C** That some of you would like on-site pre-construction meetings with both the Design engineer and Delivery engineer present **D**

We're going to do	DGLV	DGHV	Q2 Q3 Q4 Q	1 KPI
At our monthly customer surgeries we will introduce 'hot topics' and seek feedback on what other matters you would like to discuss at future customer surgeries	YES	YES	入	Publish Attendees and Surgery Topic on Website
Implement our new 'Customer Relationship Management' (CRM) system	YES	YES	\mathbf{k}	System Live
We will develop a 'Getting Connected' newsletter that we will issue to all customers by email on a quarterly basis	YES	YES	1	Newsletter Published
We will offer on-site pre-construction meetings for those of you that would benefit from this	NO	YES	1	Customer Specific
Jointly host the DG Forums in Cardiff and Glasgow and attend the DG Forum in London	YES	YES	卜	Attendance Confirmed



Technical



We want to ensure that we are leading the development of any technology advances in the industry that improve the service we provide, as well as ensuring our customers understand what is required to enable a connection

What we did in 2013...

- •••• We commenced activity on our 'Accelerating Renewable Connections' (ARC) project, which is using 'Active Network Management' technology to connect customers quicker than they normally would under traditional reinforcement solutions
- ... We concluded our policy decision on 'Automatic Voltage Regulators' and now offer this technology as business as usual
- ... We have trialled the use of load management schemes to limit export onto the system and avoid network upgrade costs

- **C** That you think there is a wider saving on connection costs for you by making the most of existing generator technology and allowing operation in Voltage control mode **>>**
- **G** That you would like to see us adopting modern GRP enclosures for all generator connections **)**
- **G** You like the work we are doing on the ARC project but would like to see ANM as business as usual quicker **>**
- **C** That you would like us to move quicker on implementing as policy the use of load management schemes to limit export onto the system **D**

We're going to do	DGLV	DGHV	Q2	Q3	Q 4	Q1	KPI
Learn from the only DNO who currently utilise Voltage control technology to better understand how this is realised on the HV network	NO	YES	卜				Learning Shared and Assess Opportunity
Implement modern GRP enclosures as policy for 11kV connections where it is possible to do so	NO	YES		个			Policy Agreed and Published
Working with the DG technical forum to establish a nationwide policy on the use of load management scheme	YES	YES			卜		ENFG Approval

Enablers to Connection



We want to remove, where possible, all perceived barriers to connection and will do so by listening to your feedback and seeking resolution

What we did in 2013...

- ... We are trialling our 'Quote +' product, providing customers with a high level feasibility study whilst still maintaining their place in the queue
- ... We reduced our average time to quote by 10% for all DG customers
- ••• We improved the content of offer letters to provide clarity on our charges, apportionment of costs where appropriate and split of contestable and non-contestable works

This year, you have told us...

- **G** That some of you would like to see a further breakdown of costs, and a clearer, simpler explanation of works within our offer letters **)**
- **G** You want to see further improvements in reducing upfront costs and providing improved payment plans **)**
- **C** That securing land rights continues to be a significant barrier to connection and can cause lengthy delays in the process **>**

We're going to do	DGLV	DGHV	Q2	Q3	Q4	Q1	KPI
We will implement a revised upfront payment and payment plan policy	YES	YES	\mathbf{k}				Revised Policy Published
We are implementing a further improvement to the breakdown of costs we provide within our connection offer	YES	YES		卜			Revised Offer Implemented
Publish our Land Rights policy on our website, communicate the policy to those customers who fed back that they were not clear on the policy, and upon request, hold workshops with customers who require further clarity on the policy	YES	YES		个			Policy Published and Customers Informed

Choice



We want to ensure that you make the right choice when making a new connection to our network

What we did in 2013...

- ... We introduced RAdAR as a replacement for our legacy CRAM system to improve our customers experience when seeking non-contestable connection offers
- ... We introduced monthly customer surgeries that are open to all customers including those seeking non-contestable connection offers
- ... We introduced 11kV 'heatmaps' in both of our licensed areas, which have been widely acknowledged as industry leading
- ••• We implemented a 'dual offer' process for connection offers over 5MW, allowing customers to accept either the non-contestable or full works from the one connection offer

This year, you have told us...

- **G** That some of you still don't understand the 'Competition In Connections' (CIC) process
- **G** Our new RAdAR system is an improvement on our legacy CRAM system but you would like some further training **)**
- 66 You want to be able to choose whether you proceed with the non-contestable works or full works from the one connection offer ??
- **G** You would like to be able to opt-in for the final jointing costs so it should be included in the quote **D**

We're going to do DGL	/ DGH	IV Q2	Q3	Q4	Q1	KPI
We will offer further training sessions on RAdAR for you if you feel this would be useful YES	YES	个				Training Session held where applicable
We are implementing a further improvement to the breakdown of costs we provide within our connection offer	YES		个			Revised Offer Implemented
Enhancing our processes for inspection and monitoring of contestable works	YES			\mathbf{k}		Revised Processes Published
Publish a consultation on our current CIC service to understand whether it meets your needs and to establish what if any, improvements can be made	YES			卜		Consultation Paper Published
Extend our 'dual offer' process to all 11kV connection offers	YES	;		卜		Dual Offer Implemented at 11kV

Distribution / Transmission Interface



To have a transparent and efficient interface with the Transmission System Operator, National Grid Electricity Transmission Plc (NGET)

What we did in 2013...

- ... We have continued to work with NGET to identify efficiencies in the SoW process and processes which deal with large embedded sites
- ... We have introduced changes to our internal process to ensure that payments to NGET are made faster
- ... We have introduced alternative forms for placement of security payments

- G The Statement of Works (SoW) process takes too long and for some of you, you feel your project 'disappears' into a black hole for an unknown period of time ??
- **G** In relation to liabilities and securities for Transmission works, some of you want us to pass on the liability from NGET
 - in the manner prescribed under CMP192 rather than 100% as we currently do 🔊
- **C** That you would like us to explore whether anything can be done with the capital cost of local Transmission connection works,
 - which are triggered by the connecting generation and how they are paid for **)**

We're going to do	DGLV	DGHV	Q2 Q3	Q4 Q1	KPI
We continue to work with NGET in relation to the SoW process and are continually looking at ways to improve our own internal process in relation to SoW	NO	YES	个		Improved SoW Timescales throughout process
We will continue to work with NGET and OFGEM to develop arrangements which will enable us to pass on the intended principle of CMP192 for distribution customers impacted by transmission works	NO	YES	ት		Outcome of CMP223
We are seeking to publish guidance on areas of our network which are impacted by transmission works	NO	YES	卜		Guidance Published

Communities



To ensure that community projects are able to seek connection to our network on the same basis as our other customers

What we did in 2013...

- ... We held specific process and design workshops with community representatives and groups to increase the level of knowledge and understand of the process
- ... We have worked hard to make 'collaborative connections' work for customers and have 3 good examples of how this type of approach can help get customers connected
- •••• We sit on the panel that assesses community projects in Scotland, providing feedback on their potential and where possible network capacity in and around the area
- ... We sit on the Energy Island Programme (joint venture between Welsh Government and Isle of Anglesey County Council)

- **G** That you need us to do more and have asked whether we can provide enhanced engagement or more dedicated resource to meet communities needs **>**
- Ge You recognise the good work we have already done with 'collaborative connections' and that you wanted to explore the idea of 'collaborative connections' or as part of a consortia
- **C** That our 'heat maps' are a very useful tool for communities but can we make them more 'real' for communities **?**

We're going to do	DGLV	DGHV	Q2	Q 3	Q 4	Q1	KPI
We are going to provide a dedicated email address for communities	YES	YES		卜			Email Address Published
We are working with DECC and OFGEM to explore what can be specifically done for communities in relation to 'Customer Service', 'Cost of Connection' and 'Capacity and Investment Policy'	YES	YES		个			Outcome of Paper Presented to Energy Minister
We will hold quarterly 1 day workshops in both our licence areas to take communities through the process and offer assistance in developing potential projects	YES	YES	大	卜	卜	卜	Ongoing

Glossary of Terms



Term	Definition
ANM	Active Network Management; using technology to enable generators to connect in constrained areas on a commercially un-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 voltage remains within statutory limits
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
CIC	Competition in Connections; ability for a customer to seek connection to the network using a Lloyds accredited ICP of your choice
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
Contestable	Contestable work is defined as work 'off the system' which can be completed by ourselves or an ICP of your choice
CRAM	Connection Registration and Management, this was a legacy IT system utilised to manage CIC enquires where a Lloyds accredited ICP of your choice was being employed to complete the contestable works
CRM	Under our SPEN brand name of Athos, CRM is our new 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 wished to discuss a project with us at any time in the process
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 & Wales
DGHV	A relevant market segment defined as; Any Connection Activities (DG) involving work at high voltage or above
DGLV	A relevant market segment defined as; low voltage Connection Activities (DG) involving only low voltage work
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 your choice
ENFG	Energy Networks Futures Group
Feasibility Study	A feasibility study is a chargeable service to run a number of network models and advise what capacity is available 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
Formal Connection Offer	A formal Connection offer facilitates a contract between us and the applicant to accept our offer and progress the construction works associated with the connection
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
Heat-maps	These are maps of our HV network, colour coded based on the available capacity on any given circuit
ICP	Independent Connection Provider; a third party accredited by Lloydes register to undertake contestable works
Jointing	Jointing a is a method of connecting two sections of cable together
Load management device	These are devices which seek to manage the local demand alongside any generator, essentially restricting export to our network
Market Segment	This is the regulatory terminology which defines DGLV and DGHV
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), and is administered by ELEXON
NGET	National Grid Electricity Transmission Plc
Non-Contestable	Non-contestable work is defined as work 'on the system', which can only be completed by ourselves
On-site	On-site works are typically within either the customers land boundaries or the CDM boundary within which a Principle Contractor operates
Quote +	Quote+ is a new product which we are currently trialling, which 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 enquires where a Lloyds accredited ICP of your choice is being employed to complete the contestable works
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
Wayleaves	This is the process which secures the legal right for apparatus to be installed an any given location and secures the connection to your site for a defined period of time

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