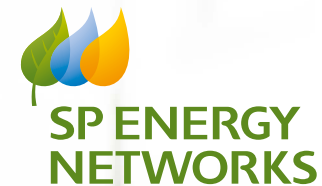


A Guide to Help Customers Understand How to Connect to our Network



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Who are SP Energy Networks?

SP Energy Networks are part of the ScottishPower group of companies. It is our responsibility to take the electricity generated from power stations/renewable generators and transport it through our network, reducing it to low voltage at the end of its journey which is needed for homes and businesses.

Our network has 30,000 substations (1 for every 100 customers), 40,000km of overhead lines (that's once around the globe!) and 65,000km of underground cables.

As well as keeping the lights on, we provide customers with new or upgraded connections to our network. These connections range from, one-off connections to large residential, generation, retail and industrial developments, as well as sports stadia and leisure parks.

Where we operate

We supply 3.5 million homes and businesses, with our network serving three of the UK's largest cities (Liverpool, Glasgow and Edinburgh) in addition to three large rural areas (North Wales, Scottish Borders and Dumfries & Galloway).

To meet the needs of our customers, our business is structured into local districts allow us to be closer to the communities we serve.

Our network has

30,000

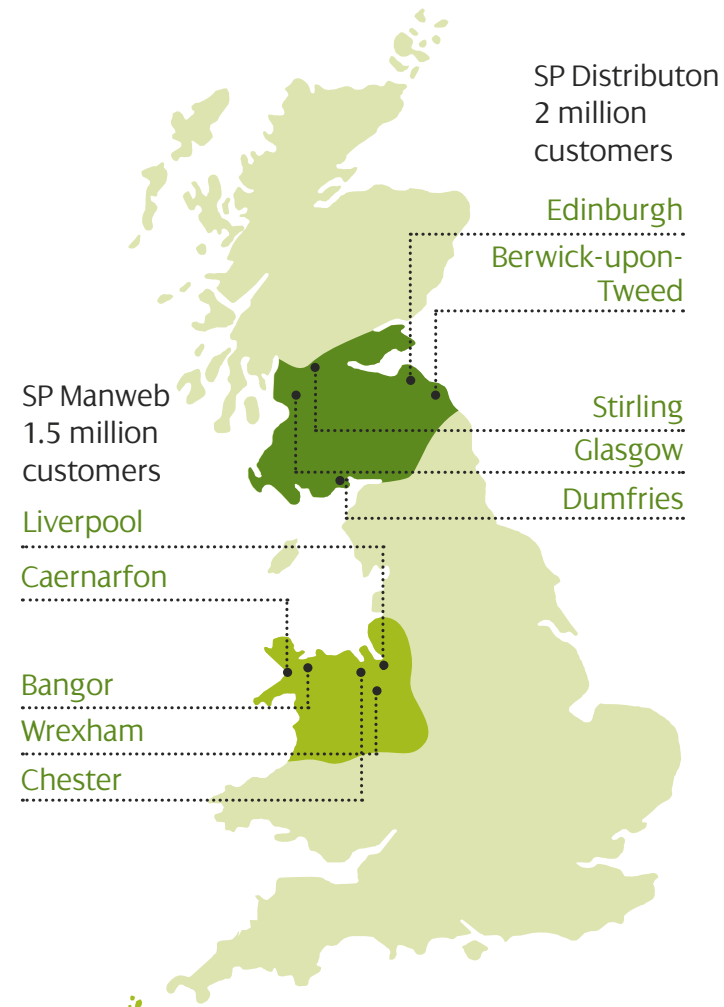
substations (1 for every 100 customers)

40,000km

of overhead lines (that's once around the globe!)

60,000km

of underground cables



SP Distribution

We supply 3.5 million homes and businesses, with our network serving three of the UK's largest cities (Liverpool, Glasgow and Edinburgh) in addition to three large rural areas (North Wales, Scottish Borders and Dumfries & Galloway).

To meet the needs of our customers, our business is structured into local districts allow us to be closer to the communities we serve.



SP Manweb

In England and Wales we have five districts operating at 33kV and below: North Wales, Dee Valley & Mid Wales, Merseyside, Mid Cheshire and Wirral. In addition to a 132kV business covering the whole licence area.

Each of our districts have an appointed District Manager who is responsible for overseeing all activities from fault response, asset management/ replacement and connections activities.



How the electricity network works

Our electricity network was designed to allow power to flow from large power stations through the transmission network (275 or 400 kV), then onto our distribution network flowing to the end consumer. Essentially power flows in one direction through the network.

At various stages within the network, transformers correct the supply voltage for households or businesses.

The introduction of small scale generators to the distribution network, known as Distributed Generation (DG) has meant that power must be able to flow two ways on the network.

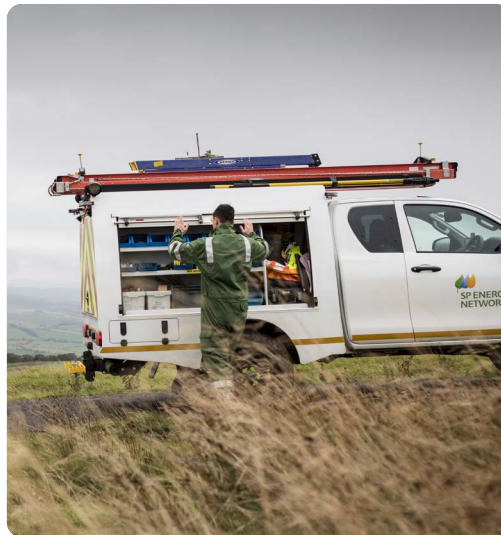
[Click here](#) to visit the Energy Network Association's 'What are the Energy Networks' for more helpful information on how the electricity network works.

Where we operate

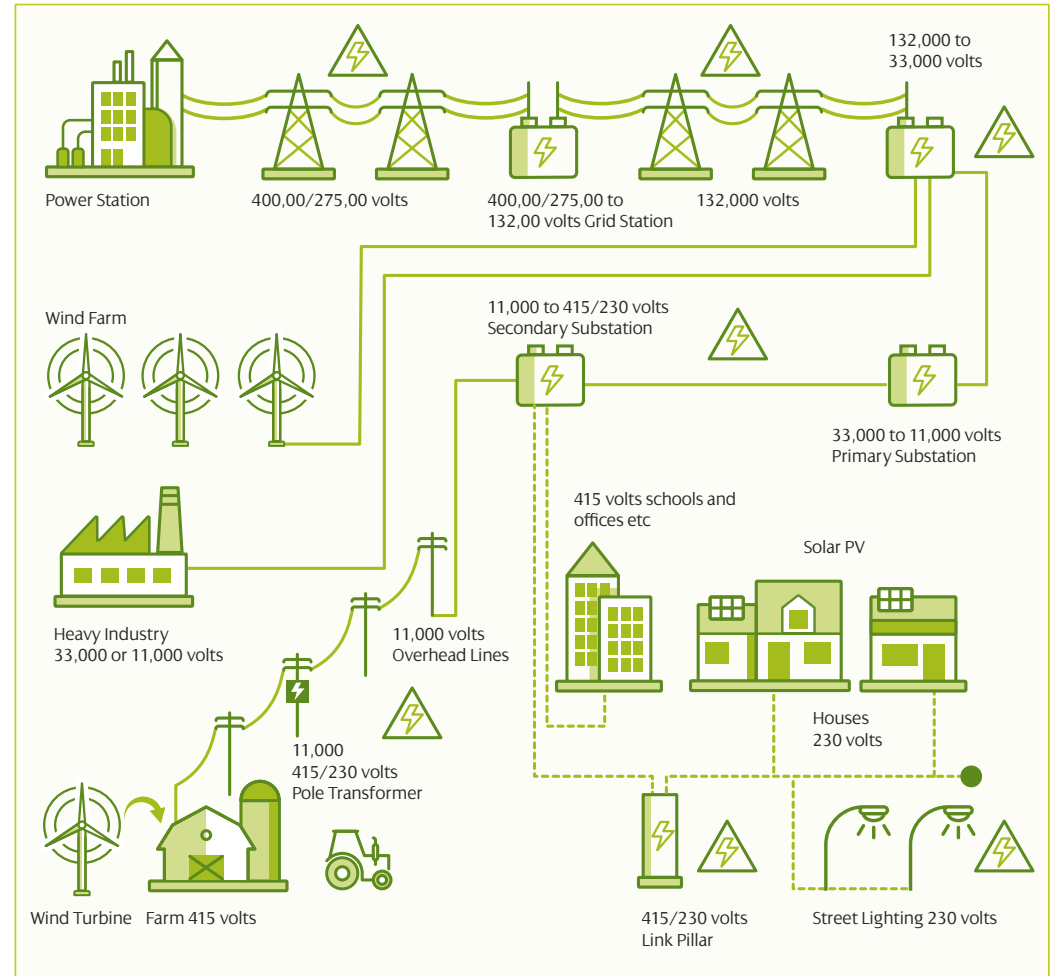
There are various ways by which Distributed Generation can be connected to the network, either by utilising the existing connection, altering the existing connection or by installing a new connection to the network.

The connection required may need to be single or three phase. Schemes which require greater than 50 kW tend to require a three-phase connection.

We are committed to getting your project connected, therefore we are investing in our network and also looking at various commercial arrangements to facilitate your connection.



From powerstation to plug



In 2019, the UK made a legally binding commitment to a zero carbon future, mandating a 2050 end date to its contribution to global warming. The challenge is enormous and requires far-reaching change – not only for government, regulators and industry, but for communities too. As the Committee on Climate Change (CCC) has identified, investigating in renewable generation alone is not going to be enough. We need to reduce emissions significantly in many other areas of our daily lives:

Transport

Accounting for 23% of UK greenhouse gas emissions, transport requires urgent action. The CCC recommends that all new cars and vans should be electric by 2035 and advocates the earlier switchover of 2030 if possible. The challenge is immense – currently fewer than five in every 1000 miles driven are by low-carbon vehicle. As we transition to Electric Vehicles (EV), the need for electricity and EV charging infrastructure to support the demand will intensify. For more information about connecting an EV charging point [click here](#).

Heating

The heating sector faces a significant decarbonisation challenge, with 23 million UK properties heated by gas today – that’s roughly 83% of homes. Currently less than 5% of homes use low carbon sources for heating. Getting to Net Zero will mean the end of gas heating as we know it, and the mass conversion of existing homes to electric-powered heat pump technology. For more information about connecting a heat pump [click here](#).

Forecasting the changing network

The energy landscape is changing fast as the way our customers and communities generate, consume, and interact with energy evolves. Our role is to plan our distribution networks to facilitate their decarbonisation objectives and choices, and to enable their journey to Net Zero. As a response to the 2019 government target SP Energy Networks published our Distributed Future Energy Scenarios (DFES) forecasts in Spring/Summer 2020. In January 2021, SP Energy Networks republished these forecasts to reflect the updated UK governments ‘Energy White Paper’.



5%

of homes use low carbon sources for heating

The UK Government's [Energy White Paper](#), has now been released giving us a clear roadmap to achieving Net Zero and securing a green recovery for the UK. Covering clean energy, transport, nature and innovative technologies, the blueprint will allow the UK to forge ahead with eradicating its contribution to climate change by 2050, particularly crucial in the run up to the COP26 climate summit in Glasgow. Published November 2020, the paper outlines a ten point plan for a green revolution:



1. Offshore wind

Producing enough offshore wind to power every home, 40GW by 2030.



2. Hydrogen

Generate 5GW of low carbon hydrogen production capacity by 2030 for industry, transport, power and homes, and aiming to develop the first town heated entirely by hydrogen by the end of the decade.



3. Nuclear

Advancing nuclear as a clean energy source, across large scale nuclear and developing the next generation of small and advanced reactors.



4. Electric vehicles

Accelerate the transition to electric vehicles, and transforming our national infrastructure to better support electric vehicles.



5. Public transport

Making cycling and walking more attractive ways to travel and investing in zero-emission public transport of the future.



6. Jet zero and greener maritime

Supporting difficult-to-decarbonise industries to become greener through research projects for zero-emission planes and ships.



7. Homes and public buildings

Making our homes, schools and hospitals greener, warmer and more energy efficient, whilst targeting to install 600,000 heat pumps every year by 2028.



8. Nature

Protecting and restoring our natural environment, planting 30,000 hectares of trees every year, whilst creating and retaining thousands of jobs.



9. Carbon capture

Becoming a world-leader in technology to capture and store harmful emissions away from the atmosphere, with a target to remove 10MT of carbon dioxide by 2030, equivalent to all emissions of the industrial Humber today.



10. Innovation and finance

Developing the cutting-edge technologies needed to reach these new energy ambitions and make the City of London the global centre of green finance.

Net Zero carbon targets across SP Distribution and SP Manweb



Local Government

Scottish Government

Net Zero Carbon by 2045

By 2032:

- All new cars and vans will be Ultra Low Carbon Vehicles (ULCV).
- 35% of heat for domestic buildings will be supplied using low carbon technologies.
- 70% of heat and cooling for non-domestic buildings will be supplied using low carbon heat technologies.
- 50% of all energy for Scotland's heat, transport and electricity consumption from renewables by 2030.

35%

of heat for domestic buildings will be supplied using low carbon technologies

Welsh Government

Net Zero Carbon by 2050, public sector by 2030

- All public sector fleet ULE:
 - New cars and light goods vehicles by 2025.
 - All heavy goods vehicles by 2030.
- Aiming to reduce the carbon footprint of buses, taxi and private hire vehicles to zero by 2028.
- Public Charging Infrastructure available for 60% of new car and van sales by 2030.
- Public Sector buildings should be supplied with renewable electricity by 2020 and supplied with low carbon heat by 2030.

60%

of new car and van sales by 2030 will have access to Public Charging Infrastructure

Liverpool City Region CA

Net Zero Carbon by 2040

- To meet the city region's hydrogen demand from transport, industry and heat from clean hydrogen produced within the city region from 2023.
- To deliver a network of at least eight zero-carbon refuelling stations (hydrogen and electric) across the city region by 2025.
- To replace all methane with hydrogen from the city region's gas grid by 2035.

2035

is the target to replace all methane with hydrogen from the city region's gas grid by

Cheshire and Warrington LEP

Net Zero Carbon by 2050

- The sale of fossil fuel vehicles will be prohibited from 2040.
- All coal fired power stations are to be decommissioned by 2025.
- More than 50% of heating energy provided by heat pumps and heat networks by 2038.
- Self generated renewable electricity accounting for 20% of domestic and commercial usage by 2038.
- Zero carbon industrial cluster by 2040 through E-port Energy Project.

50%

or more of heating energy provided by heat pumps and heat networks by 2038

Marches LEP

Net Zero Carbon by 2030

- Anticipated Zero Carbon Shropshire Plan (Q12021), which is expected to outline targets for:
 - Retrofitting of domestic/ public/ private buildings for increased energy efficiency.
 - Deployment of renewable and low carbon energy technologies. (40,000 homes and 50,000 cars)
 - Deployment of fuel efficient vehicles in public sector.
 - Acceleration renewable energy deployment or to balance energy provision.

20%

self generated renewable electricity of domestic and commercial usage by 2038

We provide a wealth of information on our website to assist

We want to make connecting to our network as simple as possible and we understand that you may have some questions, prior to making your application. On our website you will find a wealth of information that will hopefully answer your questions.



DG Heat Maps

We now publish [DG Heat Maps](#) which have been created to empower customers with the relevant data to aid a better understanding of the network and assist in determining potential opportunities to connect Distributed Generation to the 11kV network in the SP Distribution plc area.

Document library

Our library provides a hub of information including SP Energy Networks specifications and guidance. For further details [click here](#).

Distribution Future Energy Scenarios

Given the ever-changing policy landscape in which we operate, we have created forecasts for four scenarios, which reflect differing levels of consumer ambition, government/policy support, economic growth and technology development. These scenarios model the future growth of low carbon technologies and renewable generation in each of the SP Energy Networks licence areas. To view each of these four scenarios [click here](#).

Access to our cable records

You can access our network records free of charge on our Geographical Information System (GIS). This is done through our Utility Map Viewer (UMV) system. Access is available to companies, local authorities, councils and similar organisations through a web portal on a requested basis. For further details [click here](#).

Guidance leaflets

We have a wide range of leaflets to assist with all aspects of the connection process. For further details [click here](#).

Long-term development statement

Our long-term development statement helps, existing and future users of our network to identify and assess opportunities for making new or additional use of our distribution systems, we have provided an overview of the design and operation of the network. You can also register for access to our full long-term development plans. For further details [click here](#).

Transport Capacity Maps

As part of our Charge project, energy demand and transformer capacity has been modelled to produce the [Transport Capacity Maps](#). The data shown on the capacity maps is intended to give customers an indicative guide of potential EV charging locations.

Transformer Loading Database

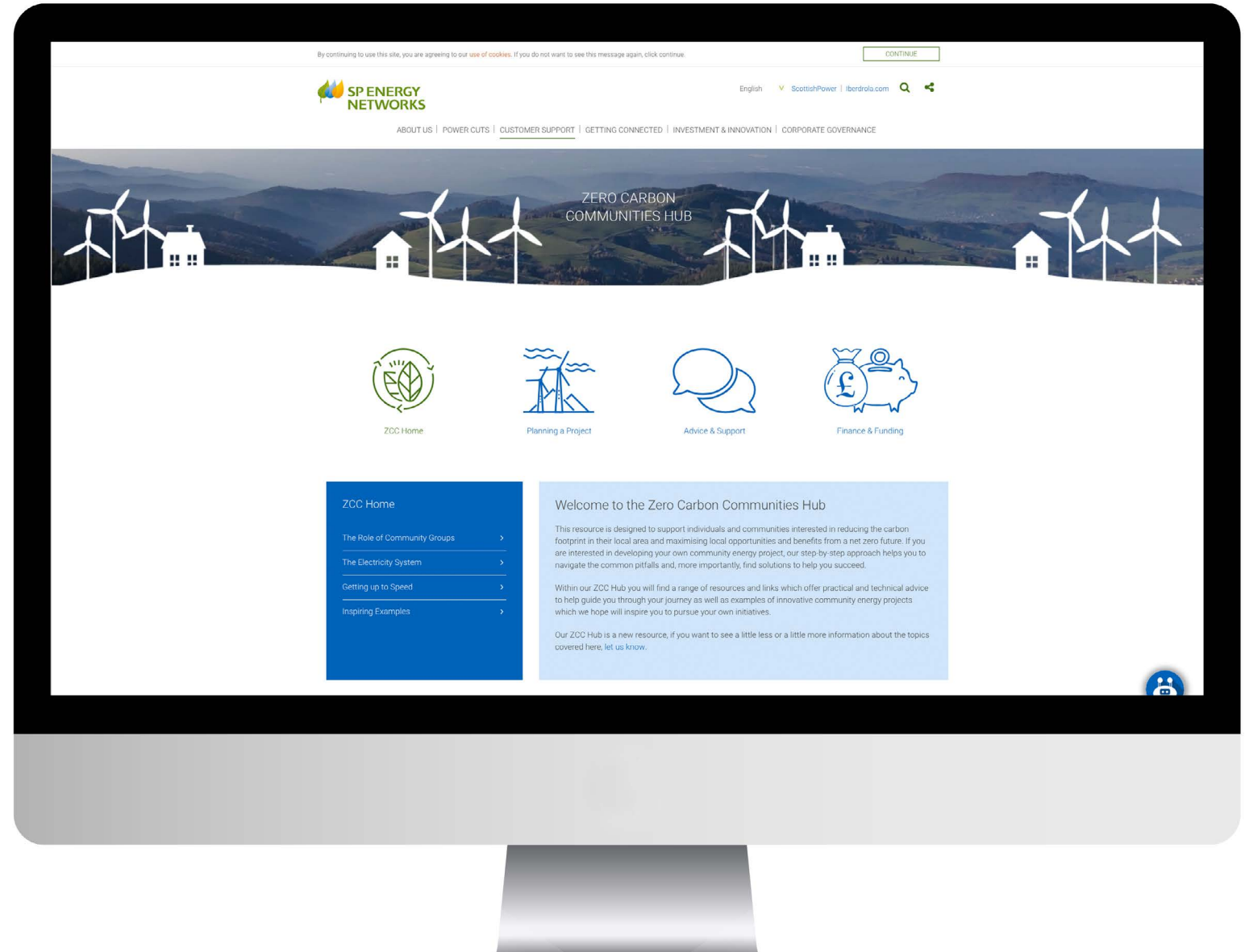
You can access records of our transformer loadings free of charge on the Transformer Loading section our website. To view a guide on how to access our Transformer Database [click here](#).

Zero carbon communities hub

This resource is designed to support individuals and communities interested in reducing the carbon footprint in their local area, and maximising local opportunities and benefits from a Net Zero future. If you are interested in developing your own community energy project, our step-by-step approach helps you to navigate the common pitfalls and, more importantly, find solutions to help you succeed.

Within our Zero Carbon Communities Hub you will find a range of resources and links which offer practical and technical advice to help guide you through your journey as well as examples of innovative community energy projects which we hope will inspire you to pursue your own initiatives.

To visit our Zero Carbon Communities Hub and see inspiring examples of community projects [click here](#).



Energy generation

Generators are rated in kW (1,000 Watts or Kilowatt) or MW ((1,000,000 Watts or Megawatt), indicating the maximum that can be generated at any moment. If a 1kW generator is operating at full capacity for 1 hour it will generate 1kWh. However, the amount of energy generated will depend on how much useful energy is available to power the generator. **It will only generate to its maximum rated level if it supplied with sufficient useful energy.**

In the past, a distributed generation connection would require sufficient spare capacity on the network, otherwise it would become constrained. In the case that there is not sufficient capacity, reinforcement to the network would be required before progressing with the connection. The concept of 'flexibility' would allow the connect to move progress without network reinforcement by curtailing generation at certain points of time.

As we progress towards Net Zero, we will see an increasing focus on electrification high load elements such as transport and heating. With this community energy projects have an increase opportunity for flexibility, take advantage of current network infrastructure through 'Energy Balancing' using these low carbon technologies.

Energy balancing

Electrical appliances are rated in kilowatts. For example, an oil filled radiant heater is rated at 1.5kW. This means that when the heater is switched on it will immediately consume up to a maximum 1.5kW. Commonly, a domestic property is fitted with a 100A fuse, this means a maximum demand of 23kW can be switched on at the same time before the system is overloaded.

However, when assessing the network at a street scale, it is very unlikely that every home is operating at full capacity at once. Diversity can be applied, with a maximum demand 2kW for each home at any given time has been shown to be a reasonable approximation. However, with the introduction of low carbon technologies, this could rise to around 12kW.

By taking a holistic approach to community energy projects, and combining renewable generation with low carbon technologies would allow connection of distributed generation onto the network in areas which would previously be highly curtailed or require reinforcement. With the high increase of electricity demand expected as we progress towards Net Zero, balancing generation and demand will become an increasingly valuable tool.

What is Community Energy?

Community energy covers aspects of collective action to reduce, purchase, manage and generate energy. Community energy projects have an emphasis on local engagement, local leadership and control, and the local community benefiting collectively from the outcomes. Community-led action can often tackle challenging issues around energy, with community groups well placed to understand their local areas and to bring people together with common purpose.

There are many examples of community energy projects across the UK, with over 5000 community groups undertaking energy initiatives in the last five years. Examples of community energy projects include:

- Community-owned renewable electricity installations such as solar photovoltaic (PV) panels, wind turbines or hydroelectric generation.
- Members of the community jointly switching to a renewable heat source such as a heat pump or biomass boiler.
- Working in partnership with the local Distribution Network Operator (DNO) to pilot smart technologies.
- Collective purchasing of heating oil for off gas-grid communities.
- Collective switching of electricity or gas suppliers.
- Rural businesses developing energy projects with a strong local and community benefit.

At SP Energy Networks (SPEN) we are dedicated to supporting your community project and helping your project get connected.

We have experts on hand to assist

We understand that sometimes being able to speak to someone in person is often better. We also realise that often communities require some technical assistance to understand some of the information that we provide, such as our heat maps. We provide this service in a number of ways.



Dates for the diary 2021/22

Every year we create several opportunities to engage with our stakeholders. Engagement events for 2021/22:

10th March 2021	Low Carbon Connections Conference
9th June 2021	Preparing for Net Zero Conference
8th Sep 2021	Preparing for Net Zero Conference
1st Dec 2021	Preparing for Net Zero Conference
9th March 2022	Preparing for Net Zero Conference

Our Stakeholder Events section details all recent engagements and those we have planned for the future. For further details on stakeholder events [click here](#).

Local distributed generation experts

We have Distributed Generation experts located within each of our local offices. Their contact details can also be found on our [website](#) or [page 20](#) of this booklet.

Customer engagement managers

Our experience has shown us that your first step is to contact one of our dedicated Customer Engagement Managers who will be able to guide you through the connection process and provide account management. Details of our team can be found on our website by [clicking here](#) or [page 20](#).

Open door policy

Due to the ongoing COVID-19 pandemic, we will be continuing our Open Door Policy via telephone or using MS Teams or Zoom. We are keen to engage with any stakeholder and customer in any way they choose despite the lack of face to face meetings at present. Please continue to contact our teams in both licence areas using the Areas of Responsibility information at the back of this document, or the Contact Us page of our website, which can be found at: www.spenergynetworks.co.uk/pages/connections_contact_us.aspx

Customer engagement managers

Following feedback from stakeholders we have decided to provide regular updates on the key topics that are important to our stakeholders. We have revised the format of our monthly newsletter, which now gives a regular update on the SP Energy Networks Drive to Decarbonisation, providing a monthly update on the work we are doing on the following topics:

EV, Heat, DSO/Flexibility, Innovation Projects, Policy Updates, Community

Register as a stakeholder

Registering as a stakeholder is the best way to keep informed, as we send you details of upcoming engagements we know you'll want to hear about based on what you told us you were interested in. To register as a stakeholder [click here](#).

At SPEN we offer a range of quote options to suit your requirements. Provision of these options vary in cost and timescales. The summary below will help you to decide which option to apply for:



Budget estimate

If you are unable to make a formal application because the information required for us to prepare a formal quotation is not available, or you are not in a position to progress to the construction phase, we can provide an indication of the costs by means of a budget estimate. There is no charge for us to prepare and issue a budget estimate and we will provide this within the relevant guaranteed standard timescales.

Feasibility study

Prior to making a formal application you may request that a feasibility study is undertaken to establish the viability of making a connection. We will carry out network studies and provide an indicative connection assessment. There is a charge for this service. We will advise you of the cost, and require payment, prior to undertaking network studies. Timescales to provide the feasibility study will be agreed with you in advance.

Quote+

An enhanced hybrid of the feasibility study and the budget estimate is also available. This free service allows you to know quickly whether or not a connection is possible within project budget and whether there are a range of connection options available. On submission of limited information, we will provide estimates based on your three different capacity options. For generation connections, should one of these options be taken forward within five days, your generation queue position is considered to be the date you requested Quote+. Further details just [click here](#).

Formal quotation

A formal application is an offer from SP Energy Networks to you that is valid for a period of three calendar months. There is no cost to prepare this offer however you will need to submit the correct application form along with the relevant information on application to allow us to process without any hesitation.

To apply for any of the above quotation options please email:

gettingconnected@scottishpower.com or
email our dedicated community email address:
gettingcommunitiesconnected@spenergynetworks.co.uk

Which process should I follow for my scheme?

G98 – Microgeneration project on single premise

Where you wish to install generators on a single premise with an aggregate registered capacity of less than 16A/phase, you are required to provide the project information to SP Energy Networks within 28 days of micro-generation project being commissioned. The Energy Networks Association document G98 Form B provides guidance to providing the required information.

Further information regarding G98 single connections, guidance and forms can be found on [our website](#).

G98 – Microgeneration project on multiple premises

Where you wish to install micro-generation in more than one premise within a close geographic location (<500m), an application must be made to SP Energy Networks in advance. These types of connections will generally fall under the guidance contained within the G98 Form A connection guide.

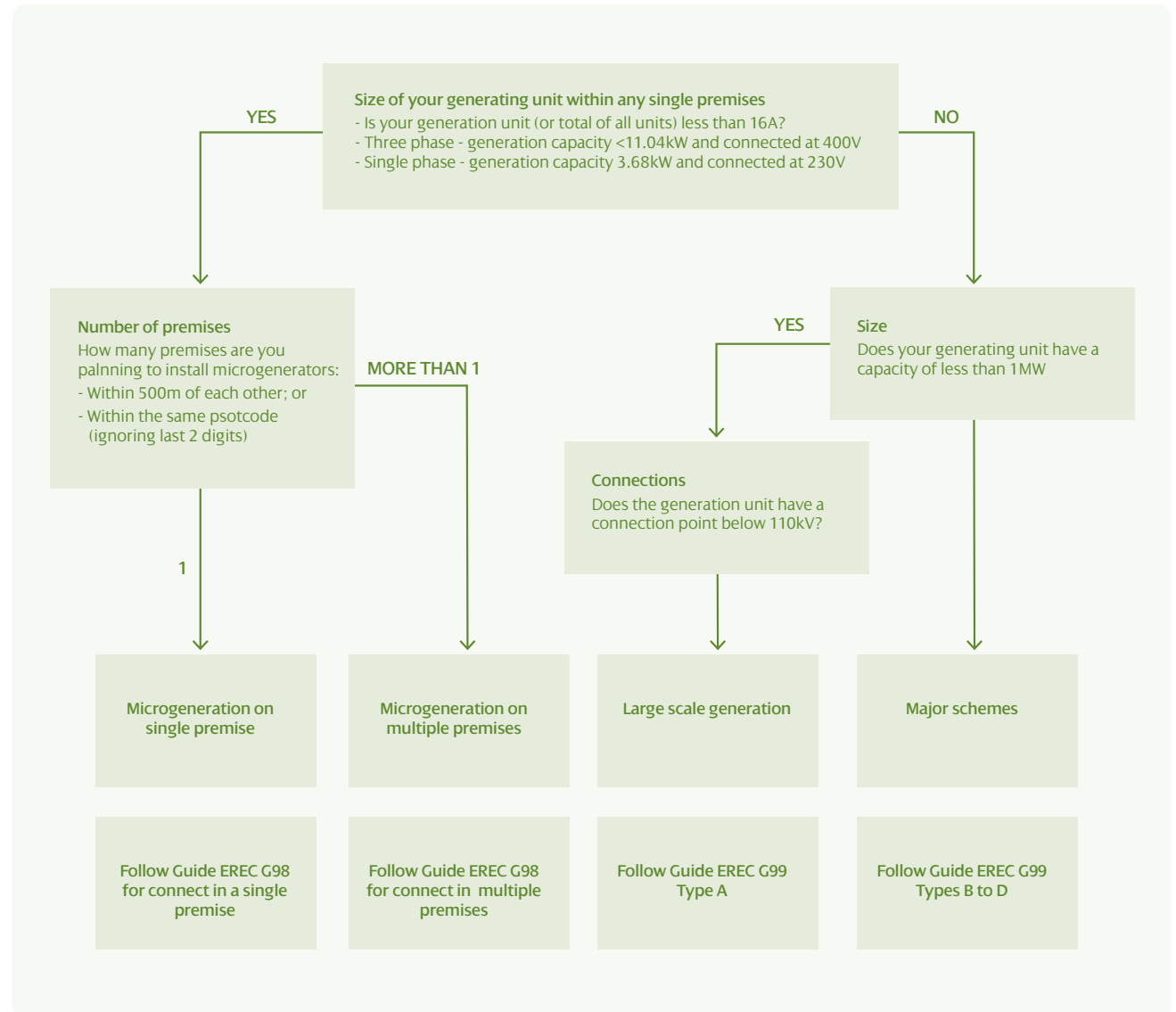
G98 Application Form A must be completed along with the associated equipment test certification in line with EREC G98. Applications should be sent to: gettingconnected@scottishpower.com

We will consider the application and advise of any work, cost and associated timescales. Further information regarding G98 multiple connections, guidance and forms can be found on our [website](#).

G99 – Larger scale and major schemes

In general, for generators in excess of 16A per phase, the connection must comply with Engineering Recommendation G99, published by the Electricity Networks Association.

Further information regarding G99 for larger schemes, guidance and application forms can be found on our [website](#).



Guaranteed standard of service

In 2010, the Office of Gas and Electricity Markets (OFGEM) developed new Connections Standard Licence Conditions (SLC) and Guaranteed Standards of Performance (GSoP) pertaining to metered and unmetered electricity connections services provided by DNOs.

The purpose of the standards is to ensure that customers are guaranteed a good level of service and are compensated when they do not.

The standard sets out our commitment for the provision of contestable and non-contestable connection services. The services covered by this condition are:

- Providing Point of Connection Quotations.
- Responding to design submissions in relation to connections.
- Completing Final Works and Phased Energisation as non-contestable connections services.

The standard specifies definite timelines for the provision of the above services and insists on monitoring and reporting. For generation quotations our standards of service are 45 working days for Low Voltage connections and 65 working days for High Voltage connections.

For generation quotations our standards of service are:

45

working days for
Low Voltage connections

65

working days for
High Voltage connections



Choice – contestable and non-contestable works

You have a choice in deciding who will undertake your connection works.

New Distributed Generation network connections can be provided by an Independent Connection Provider (ICP), Independent Distribution Network Operator (IDNO) or SP Energy Networks. These connections may be adopted by SP Energy Networks or an IDNO.

We publish a full list of Alternative Connection providers on our [website](#). Alternatively a full list of all accredited Connections Providers can be found on the [Lloyd's Register NeRS website](#).



Charges of methodology

We publish details on our charging methodology to help you understand how we arrive at your connection charge.

We are bound by our statutory and licence obligations to ensure our offer is the 'The Minimum Scheme'. This is the scheme with the lowest overall capital cost (as estimated by us), solely to provide the requested capacity that you would like to connect. The Minimum Scheme shall be consistent with our statutory and licence obligations including the requirement to develop, maintain and operate efficient, co-ordinated and economical electricity Distribution System.

We may recover the reasonable costs incurred, both direct and indirect, in providing a connection and may, where allowed by our Licence, apply a margin on some of those costs.

Costs

The costs to be charged to you as a connection charge may be split into three categories:

- Costs for providing the connection which are to be paid in full by you.
- Costs for providing the connection which are to be apportioned between you and SP Energy Networks (an example of this could be Reinforcement of the network that adds capacity (network or fault level) to the existing network).
- Costs to be paid by you in respect of works that have previously been constructed or are committed and are used to provide the connection.

Some costs may be borne in full by us and will not be included in your connection charge.

The full details of how we calculate your connection charge is detailed in our statement of methodology and charges. To view our statement of methodology and charges [click here](#).



A formal acceptance and relevant payments are required to progress with your connection. Once we have received your acceptance we will inform you who has been assigned as your project manager and begin to work with you to achieve your required project timescales.

Depending on the nature of your connection and the equipment required, timescales can vary significantly. However, for a standard connection, within an unconstrained area we will be able to be on site within 8 weeks from acceptance. However, there are a number of items that are required for completing your connection that may have an impact on timescales:

Plant: Where equipment or plant is required for your project we require 16 weeks from the date of acceptance to place orders and receive the order.

Legal agreements: the sooner that legal discussions are initiated the better, as often discussions and reaching agreement can become protracted, especially if a third party is involved.

Road openings: we must comply with NRSWA (New Roads and Street Works Act) and traffic restrictions enforced by the council on certain roadways.

Construction

Our project manager will meet you on site and explain what to expect when we come to complete your works. They will also explain what your site responsibilities are and what works we will be undertaking.

Metering

SP Energy Networks are not responsible for the installation of your meter, this is the responsibility of your energy supplier and your chosen meter operator. Once you have decided to proceed with your project, you must appoint both a supplier and a meter operator. A list of retail companies and their contact details can be found on the [OFGEM website](#).



Legal Consents Requirement

To get you connected to our network, we often need to secure legal agreements in order to locate our equipment or cables on your land or a third parties land.

The agreements that we require are detailed below:

- Where we require to locate apparatus on third party land, we require the transfer of the freehold or alternatively the grant of long leasehold of any substation site which forms part of the contestable or non-contestable works.
- We require the grant of a permanent servitude / easement (deed of grant) for any electric line (overhead or underground) that forms part of the contestable or non-contestable works which will not form part of an adopted or prospectively adopted highway. In certain individual circumstances we may accept a wayleave as an alternative. This will be determined on a case by case basis.
- If the land rights required cannot be obtained on a voluntary basis through negotiation, we may, after discussion with you, exercise our powers of compulsory purchase under the Electricity Act 1989 or apply to the Secretary of State or the Scottish Ministers for a necessary wayleave.

We will always work with you to minimise the need for legal consents, as we know that gaining these can affect the time taken to deliver your project and we cannot proceed with our works until these are in place.

Network constraints

The introduction of Distributed Generation to our network has led to it becoming increasingly constrained, meaning that during peak times, parts of the network equipment are operating close to their voltage or thermal limits. This means that we need to reinforce our network to accommodate further connections, often this reinforcement is required at transmission level. We recognise that communities are unable to move the location of their project and therefore we recognised the need to provide flexible arrangements.

Our [DG Heat Maps](#) provide an understanding of our network and areas that there are still potential connection opportunities without the need to reinforce.



Flexible arrangements

SP Energy Networks have worked collaboratively with National Grid who operate the transmission network to identify ways in which embedded generation projects can be connected in advance of the transmission reinforcement works being completed. Examples of this include:

- the development of the commercial arrangements to facilitate projects connecting under our Accelerating Renewable Connections (ARC) project.
- the ability to connect on a restricted availability access basis at constrained Grid Supply Points (GSPs) ahead of the completion of GSP upgrades.

If you would like further details or to discuss if these flexible arrangements could be applied to your installation, please [click here](#) or contact flexibility@spenergynetworks.co.uk

Statement of works process

Small generators wishing to connect to the distribution network will not necessarily be connected to the transmission network however due to the volume of distributed generation connections, often this may have an impact on the transmission network. National Grid will be contacted to assess whether there is a need to reinforce the transmission network as a result of the new distribution connection, and this is called a Statement of Works (SOW).

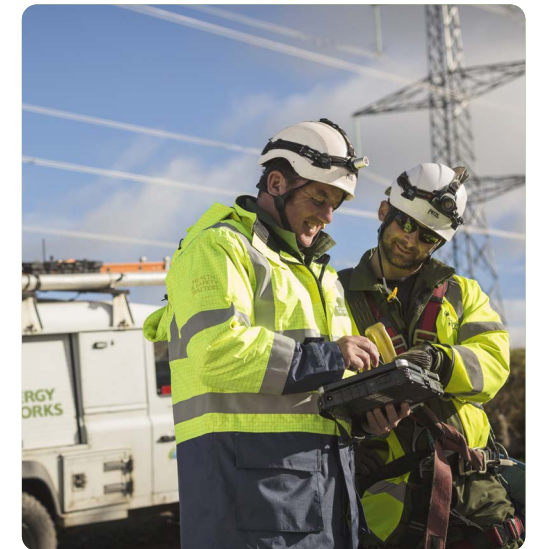
This may mean additional costs to your project and/or your project cannot proceed until the transmission network has been reinforced. We will work with you through this process and keep you informed.

Statement of works process

Export limiting devices provide a mechanism for customers to increase the amount of generation installed to counterbalance their import requirements. SP Energy Networks are taking an industry leading position on this and are collaborating with the Energy Networks Association to develop an industry standard. Further details just [click here](#).

Interactivity

There are occasions where we receive two or more applications for connection which make use of the same part of the distribution system. “Interactive connection applications” result in circumstances where the distribution system is unable to accommodate the connection of both (or all) applications without additional works being carried out and costs incurred. To ensure fairness and equality of treatment between competing applicants we have an interactivity process which is detailed within our SPEN statement of methodology and charges. For further information of our Interactivity Process [click here](#).



Account Managers

Name	Job title	Location	Email	Telephone
Stuart Walker	Customer Engagement Manager	Scotland	stuart.walker@spenergynetworks.co.uk	07725 410382
Fay Morris	Customer Engagement Manager	England & Wales	fay.morris@spenergynetworks.co.uk	0775 362 4921
Louise Taylor	Customer Engagement Manager	England & Wales	louise.edwards@spenergynetworks.co.uk	0775 362 4442
Rachel Shorney	Stakeholder & Community Engagement Manager	England & Wales	Rachel.Shorney@spenergynetworks.co.uk	0775 362 3898



Generation Experts

Name	Location	Email
Colin Ferry	Edinburgh & Borders	colin.ferry@spenergynetworks.co.uk
Kenny Spence	Glasgow & Clyde North	kenneth.spence@spenergynetworks.co.uk
Stuart Love	Dumfries	stuart.love@spenergynetworks.co.uk
Harry McDade	Central & Fife	harry.mcdade@spenergynetworks.co.uk
Paul Dynes	Ayrshire	pdynes@spenergynetworks.co.uk
Derek Jessamine	Lanarkshire	derek.jessamine@spenergynetworks.co.uk
Helen Settle	Wirral	helen.settle@spenergynetworks.co.uk
Tony Mills	Dee Valley & Mid-Wales	tony.mills@spenergynetworks.co.uk
Paul Ritchie	Mid Cheshire	paul.ritchie@spenergynetworks.co.uk
Gwynfor James	North Wales	gwynfor.james@spenergynetworks.co.uk
Alastair Oldfield	Merseyside	alastair.oldfield@spenergynetworks.co.uk

Term definition

Accreditation	The appropriate qualifications to allow alternative connection providers to operate on our electrical network.	CIC Industry Code	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 customers of their choices.	Customer Surgeries	These are held monthly for any customers who wished to discuss a project with us at any time in the process.
ANM	Active Network Management; using technology to enable generators to connect in constrained areas on a commercially un-firm basis.	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.	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.
ARC	Accelerating Renewables Connections; SPEN 'Low Carbon Networks' funded project to consider innovative methods for connecting DG quicker and cheaper.	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 your choice. Non-contestable works must be completed by the DNO, i.e. SP Energy Networks.	DNO	Distribution Network Operators, responsible for owning operating, and maintaining the electrical network in their licensed geographical area.
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.	Contracted Capacity Register	This lists generators that are contracted but not physically connected to our Network.	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.
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.	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.	Export Management Device	These are devices which seek to manage the local demand alongside any generator, essentially restricting export to our network.
BMCS	Broader Measures of Customer Service.	CRM	Under our SP brand name of Athos, CRM is our new Customer Relationship Management system which will help us better serve our customers.	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.
CCCM	Common Connection Charging Methodology.	Customer	A customer is defined as someone who is or has applied for a connection to our network.		
CIC	Competition in Connections; ability for a customer to seek connection to the network using a Lloyds accredited ICP of your choice.				

Term definition

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.
G98	G98 is the industry standard for small scale embedded generators for connections up to 16 amp per phase.
G99	G99 is the industry standard for generators greater than 16 amp per phase.
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 HV 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.

IFI	Innovation Funding Incentive (IFI) was introduced by Ofgem to encourage Electricity Distribution, Electricity Transmission Network Operators to apply technical innovation in the pursuit of investment in and operation of their networks. It will be replaced by the Network Innovation Allowance (NIA) in 2015.
Joining	Joining is a method of connecting two sections of cable together.
LCNF	Low Carbon Networks (LCN) Fund was established by Ofgem as part of the electricity distribution price control that runs until 31 March 2015. The fund offers capital to support projects sponsored by the Distribution Network Operators (DNOs) to try out new technology, operating and commercial arrangements.
Link boxes	A link box provides a point of isolation at the interface of an IDNO (Independent Network Operators) and a DNO 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.

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.
POCs	Point of Connection to the electrical network.
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.
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.
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.

Connections contact details

Central and Southern Scotland

Telephone:
0845 270 0785

Fax:
0141 614 0085

Email:
gettingconnected@scottishpower.com

In Writing:
SP Energy Networks
Network Connections
55 Fullarton Drive
Cambuslang
Glasgow, G32 8FA

Cheshire, Merseyside, N. Wales and N. Shropshire

Telephone:
0845 270 0783

Fax:
0151 221 2190

Email:
gettingconnected@scottishpower.com

In Writing:
SP Energy Networks
Network Connections
PO Box 290
Lister Drive
Liverpool, L13 7HJ