

SP Energy Networks

Distribution Annual Report 2018/19



SP ENERGY NETWORKS

2018/19 Highlights

Customer Service – We continually strive to improve and maintain our position as an industry leader in customer service.

9/10
customer
satisfaction score

Continued our progression to be a leader in customer service across the UK by once again improving on our industry measure of customer satisfaction score.

1st



Benchmarked 1st against all UK service sector by Institute of Customer Service, beating out other companies like First Direct, John Lewis and Nationwide.

1st



utilities company in the world to achieve the prestigious BSI Kitemark for Customer Service.

88%

of all complaints were resolved within 1 day.

99.6%

of our customers experienced zero supply interruptions or were restored in 6 hours.

187,000

Our customer awareness campaign has led to 187,000 new households being added to our PSR.

Service Delivery – We have delivered exactly what we said we would in our business plans, continuing to operate a safe and reliable network while saving customers money.

27p
per day



Our customer bills have fallen by 16% since 2015/16, with our customer's paying around 27p per day for our service – less than a Netflix subscription and a 2nd class stamp.



Awarded 'Network of the Year' at the 2019 Network Awards and 'The Smart Cities Award' at the prestigious industry awards.

We connect 1/4 of all GB's onshore wind

SPEN are at the forefront of decarbonising our energy system having connected ~2GW of onshore wind to our distribution network.



We have tendered up to

116MVA

of flexibility services across our service area in March 2019.

Provided financial support to several low-carbon local community projects through our Green Economy Fund, helping Scotland reach its green targets.



Reduced carbon footprint by

15%

We achieved our 2023 target of a 15% reduction in emissions in 2015 and we continue to exceed this reduction year-on-year.

Support EV rollout

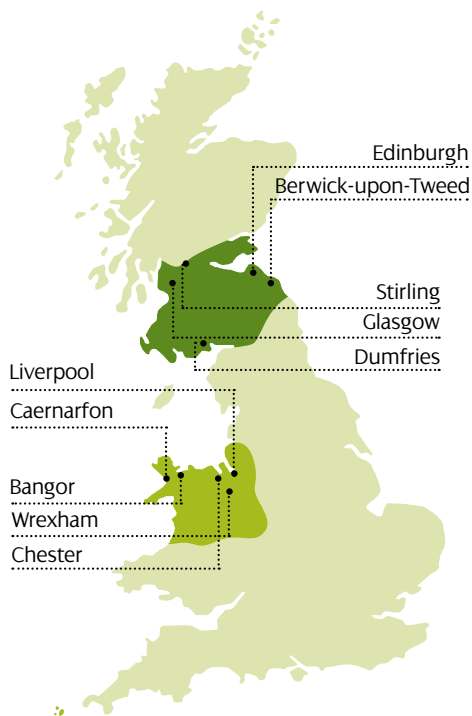
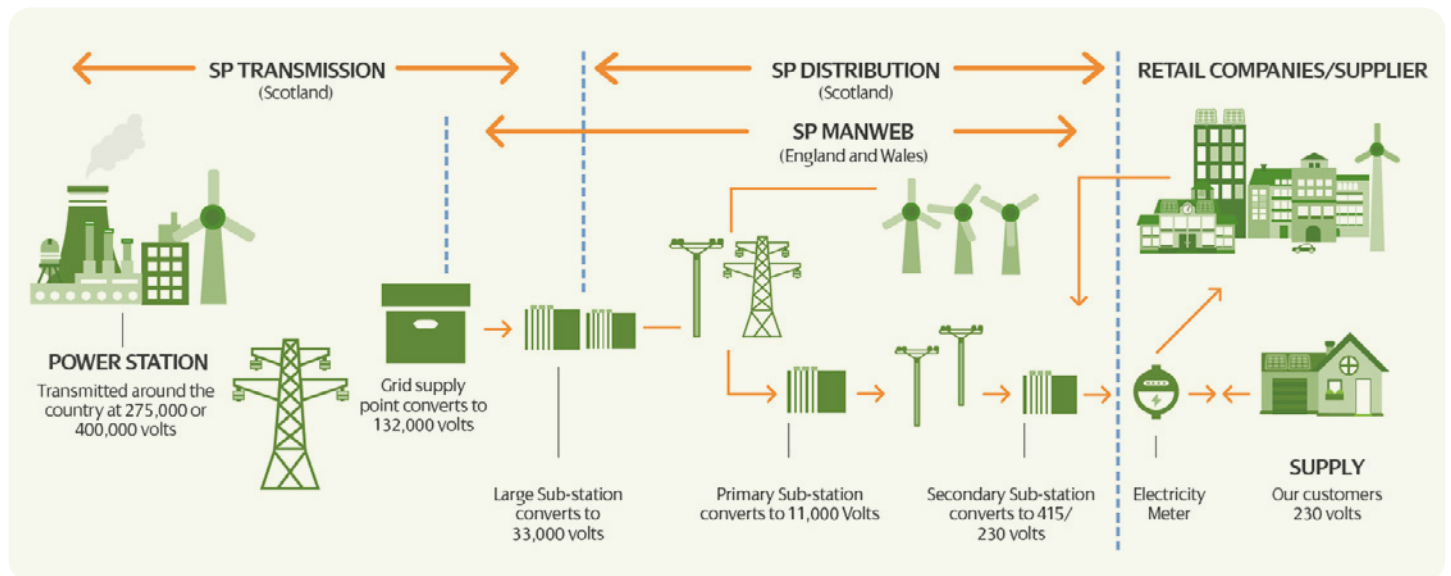
Ensuring people benefit from the wide scale EV uptake by finding innovative and cost-effective ways of developing, managing and operating EV charging infrastructure through our various projects (e.g. Project CHARGE).

Accelerating the development of the DSO concept through projects such as our ANM project in Dumfries & Galloway, which is anticipated to reduce CO₂ emissions equivalent to that produced annually from 110,000 diesel/petrol vehicles.



Our Business

We transmit, distribute and connect electricity to and from homes and businesses over our network.



SP Manweb
1.5 million customers

SP Distribution
2 million customers

SP Energy Networks (SPEN) owns three regulated electricity network businesses in the UK; SP Distribution plc (SPD), SP Manweb plc (SPM) and SP Transmission plc (SPT). This report relates to the performance of our distribution companies, SPD and SPM during 2018/19.

We distribute power on behalf of energy supply companies through a network of cables and power lines that we own and maintain. We transmit, distribute and connect electricity to and from homes and businesses over our network. We work around the clock to keep the lights on 24 hours a day, every day of the year. We serve 3.5 million homes and businesses in three of the UK's largest cities (Liverpool, Glasgow and Edinburgh), as well as three large rural areas (North Wales, Scottish Borders and Dumfries & Galloway).

We take electricity generated from power stations, wind farms and other utilities, reduce it to the low voltage needed for homes and transport it through our vast network of cables and power lines. Our distribution network alone has 33,200 substations, 38,554 km of overhead lines and 67,145 km of underground cables.

We provide customers with new or upgraded connections to our network. For example, to large residential, retail and industrial developments, as well as sports stadia and leisure parks.

As the UK builds towards a low carbon future, the nature of the electricity grid is changing. Consumers no longer rely solely on centralised energy generation to meet their electricity demands. There are increasing volumes of smaller distributed generation and Low Carbon technologies such as electric vehicles being connected to the network. As network operators we need to adapt to meet these challenges whilst maintaining low cost, reliable energy distribution for our customers. It is our view that the right way to adapt is to extend the current role of the Distribution Network Operator (DNO), to that of a Distribution System Operator (DSO), which will allow us to plan and operate our networks more dynamically to meet changing customer needs.

Welcome

Foreword from Frank Mitchell, CEO of SP Energy Networks



Welcome to our fourth Distribution Annual Performance Report which provides our stakeholders with a comprehensive view of how we are tracking against the commitments we made in our Business Plan which covers the regulatory period from 2015/16 to 2022/23. Our report demonstrates that we have listened to stakeholders, and have seen great progress in many of the areas important to them. In our report, we hope it is clear that we have delivered exactly what we said we would in our Business Plans. We are a network operator which prides itself on its ability to follow through on its commitments whilst delivering superior customer service, which is reflected in our performance as the current best GB performing DNO group for Customer Service and as a winner of Network Magazine – Utility of the Year for 2018/19.

We continue to serve our distribution customers in the Central Belt and South of Scotland, Merseyside and North Wales with 99.99% reliability levels for 27p per day. This is at a time when we are facing an unprecedented level of change to the way in which the UK's energy networks operate. With energy decarbonisation, digitisation and decentralisation, we are moving away from the traditional model where DNOs deliver electricity in one direction from centralised power plants to our homes and communities, to one which requires Distribution System Operators (DSOs) to play an active coordinating role between all market participants.

Our stakeholders are extremely important to us. Our new stakeholder engagement strategy embeds, at its core, the four principles of the AA1000 stakeholder engagement standard – Inclusivity, Materiality, Responsiveness and Impact. These ensure we engage at all levels, with a specific focus on those who are hard to reach, determine the most relevant and significant issues for us and our stakeholders, act on the outcome of our engagement - making the necessary changes to our business and then measure the results.

'Net Zero' has become a terminology norm in 2018/19. We are working hard to help the Scottish, Welsh and UK governments deliver their plans for a greener Scotland and UK and to meet the challenges of the low carbon revolution, with a focus on accommodating increasing electrical flows associated with growing low carbon energy sources and meeting the needs of both our current and future customers. We believe all parts of society should benefit from the low carbon evolution, access to electric vehicles and the health benefits of low or zero emissions. There has been much debate around the role of anticipatory investment for low carbon solutions. The future is uncertain, so there is a reluctance to invest ahead of need. However, if we don't invest in our infrastructure now, there will be significant lost opportunity costs if we strangle the pace required to meet Net Zero.

This year we have further facilitated competition by developing design tools to quickly identify reinforcement projects where flexibility is likely to be a viable alternative. These new tools resulted in an initial tender in March 2019 for 116MVA and more recently up to 95MW tendered for flexibility services in our licence areas.

Society rightly expects to consistently receive a reliable supply of electricity at the flick of a switch, which is why we continue to strive to exceed our ED1 regulatory commitments and work with our stakeholders to positively influence the RII0-ED2 Business plan process. We have recently established our ED2 Price control team who will engage with you over the coming 2 years to develop our next set of business plans which will detail our investment decisions for the years 2024 to 2029.

This report shows how our business has performed during 2018/19.

Snapshots

Performance snapshot: SP Distribution Pg 4

Performance snapshot: SP Manweb Pg 5

2018/19 Outputs

Summaries of all of the key indicators and data by area or theme, in total covering all of our commitments.

★ Reliability and availability Pg 7

Keeping the light on. Outputs on the number and duration of power cuts.

● Health & Safety Pg 8

Protecting the public and the people who work on our network.

● Customer satisfaction Pg 9

Keeping our customer well-informed, and responding quickly and efficiently to queries.

● Stakeholder engagement Pg 10

How we are working with our stakeholders, and involving them in our decision-making.

● Consumer vulnerability strategy Pg 11

Supporting our customers and communities and tackling wider social issues.

● Connecting to our network Pg 13

Meeting the needs of households, businesses and generators who want to connect to our networks.

★ Innovation and future networks Pg 14

How we harness technological and commercial innovation to reduce costs and improve service.

● Environment Pg 16

How we promote the low carbon economy, and minimise our own environmental footprint.

Expenditure and Revenues Pg 17

The key facts about our expenditure and revenue, and how it affects your bill.

Looking forward Pg 21

Our view of key up and coming topical issues for 2018/19.

Appendices Pg 26

Further, more detailed and disaggregated information about our performance has been published on our website.

★ Substantially ahead of 2018/19 target

● On 2018/19 target

● Partially or marginally below 2018/19 target

● Substantially below 2018/19 target

SPD performance snapshot 2018/19



Innovation

We were delighted to have been successful with our 2018 NIC project submission CHARGE. This £6.85M project aims to engage with relevant stakeholders across network, transport, and planning to develop and trial electric vehicle charging solutions.

2019 has marked SPEN's Year of Innovation. In support of this we are creating opportunities for wider business engagement in business focused challenges and raising up champions who can drive local innovation.

Safety

We complied with Health and Safety Executive legislation, engaged with 3rd parties and members of the public to enhance safety awareness and continued to deliver our Occupational Health monitoring programme.

Environmental

We have reduced the amount of fluid leaked from our fluid filled cables by 63% in 2018/19. This is a direct result of our ongoing policy of strategic leak repair management and targeted asset replacement of oil-filled cables. By 2015/16 we had reached our 2023 target of a 15% reduction in emissions. Since our 2013/14 baseline year SPD and SPM have achieved a 29% reduction in business carbon footprint excluding losses.

*excludes exceptional events

Performance Snapshot for our licensed area in Scotland (SP Distribution).

Our network spans over once
round the globe

Network	Actual
Number of customers	2,002,889
Total network length (km)	58,579

Reliability and Availability	Actual 2018/19	Exceeding our CI Regulatory target of	Exceeding our Regulatory CML target of
Customer interruptions* (Recorded per 100 customers in 2018/19)	49.3	51.1 by 3.4%	43.4 by 19%
Customer minutes lost* (Average number of minutes our customers had their supply interrupted)	35.0		

Customer Satisfaction	Actual 2018/19	9%
Customer satisfaction survey score out of 10	8.94	This is 9% better than the Regulatory target of 8.2. We are also 1.7% above our stretched internal business plan commitment.

Connections	Actual 2018/19	Our aim is to reduce how long it takes to provide a connection offer and the time it takes to make it all happen. This year we took on average less than 4 days to turnaround our connection quotations.
Time to quote (single premises)	2.9 days	
Time to connect (single premises)	54.3 days	
Incentive on Connections Engagement (ICE)	No penalty	

Stakeholder Engagement and Social Obligations	Actual 2018/19	Our positive score reflects the activities we do and relationships we have with a wide variety of stakeholders.
Stakeholder Engagement and Consumer Vulnerability score	6.71 out of 10	

Financials	Actual 2018/19 (2012/13 prices)	Our daily charges are considerably cheaper than a second class postage stamp, a TV Licence or typical domestic broadband services.
Unrestricted Domestic Tariff Charge for a typical domestic customer	£80.51	
Total expenditure	£220.4m	
Percentage of allowed expenditure	113%	

SPM performance snapshot 2018/19

Performance Snapshot for our licensed area in England and Wales (SP Manweb).



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*excludes exceptional events



Network	Actual	Not all electricity networks are the same. Large parts of the SPM network are configured as an interconnected mesh whereas other distribution networks are mainly radial.
Number of customers	1,512,275	
Total network length (km)	47,151	
Reliability and Availability	Actual 2018/19	Exceeding our CI Regulatory target of
Customer interruptions* (Recorded per 100 customers in 2018/19)	36.1	37.0 by 2.4%
Customer minutes lost* (Average number of minutes our customers had their supply interrupted)	35.6	40.6 by 12%
Customer Satisfaction	Actual 2018/19	10% This is 10% better than the Regulatory target of 8.2. We are also 2.5% above our stretched internal business plan commitment.
Customer satisfaction survey score out of 10	9.01	
Connections	Actual 2018/19	
Time to quote (single premises)	4.8 days	
Time to connect (single premises)	52.8 days	
Incentive on Connections Engagement (ICE)	No penalty	
Stakeholder Engagement and Social Obligations	Actual 2018/19	Our positive score reflects the activities we do and relationships we have with a wide variety of stakeholders.
Stakeholder Engagement and Consumer Vulnerability score	6.71 out of 10	
Financials	Actual 2018/19 (2012/13 prices)	Our daily charges are considerably cheaper than a second class postage stamp, a TV Licence or typical domestic broadband services.
Unrestricted Domestic Tariff Charge for a typical domestic customer	£87.52	
Total expenditure	£251.2m	
Percentage of allowed expenditure	124%	

2018/19 Outputs



2018/19 Outputs

Reliability and availability

A reliable supply of electricity to homes and businesses is priority number one; a message that our stakeholders consistently endorse. This includes when the network is put under pressure by extreme weather events.

Targets met (and in some cases exceeded) and good performance across range of indicators.

Examples of our performance in action

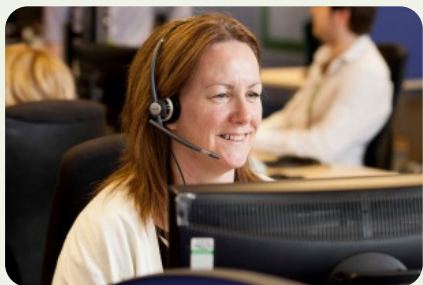
Storm Ali

'Storm Ali' impacted 96,898 customers across both SP Distribution and SP Manweb. 97% of all customers were restored within 24 hours.

LSS (Logic Sequence Switching)

We already manage the network by automatically restoring a proportion of customers after a fault.

We now have 1,828 LSS schemes built enabling 1.4 million customers to be restored within 3 minutes should they experience a power cut. That's 40% of our customer base.



Enhancing network resilience

We are currently ahead of our commitments to Ofgem and The Department of Business Energy and Industrial Strategy (BEIS), having achieved 100% compliance with the flood resilience standard (ETR138) in 2015. Subsequently, updated flood modelling and maps have been issued by the relevant environmental agencies. A further 82 sites were identified as potentially at risk of flooding; 20 of these have had detailed risk assessments which confirm they are flood resilient, with mitigation work completed at a further 12. We are currently assessing the implications of the latest issue of ETR138 which recommends additional level of resilience to substations with 10,000 customers. This is another significant step towards our long-term goal of making our whole network resilient to severe weather events.

No power cuts of more than 12 hours

By 2023 we aim to have no customers experiencing a power cut of more than 12 hours. An overall reduction of 69% was delivered by March 2019.

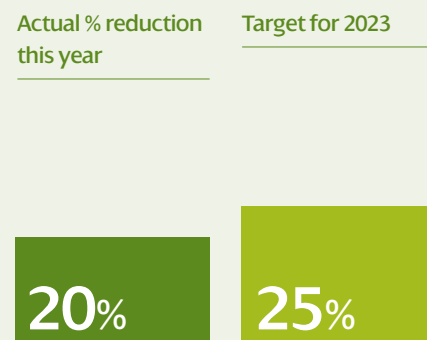
Fewer and shorter power cuts

By 2023 we aim to have reduced the average amount of time our customers are off supply by 25%, by reducing interruptions by 16% and the duration of interruptions by 27%. By reducing average time off supply by 20% in the past year, we are well on the way to exceeding this target.

Reductions in the number of customers experiencing power cuts of more than 12 hours



Reductions in the average time our customers are off supply



2018/19 Outputs

Health & Safety

Electricity infrastructure is dangerous. The health and safety of the public and of the people who work on our network is paramount. We pride ourselves on our excellent track record and our rigour in retaining this world class level of performance.


✓
Targets met and good performance across a range of indicators.

Examples of our performance in action

Safety Central, Lymm, Cheshire



Theatr Clwyd Pilot



Compliance

We can only be leaders in Health and Safety if we comply fully and demonstrably with relevant laws and regulations. In 2018/19 we continued our constructive engagement with the Health and Safety Executive, and were not subject to any prosecutions.

Public education

Over the last 4 years we have delivered clear, useful information on electrical safety to c190,000+ individuals of which c72,000 children visited safety centres and c31,000 pupils attended 'Crucial Crew' events.

We supported the development of a construction safety film with the ENA called 'The Accident' under the 'Look Out Look Up' campaign.

We have attended numerous regional agricultural shows, which attracted c440,000 visitors and we continue our support of the Welsh Rugby Union, the Glasgow Warriors and Rygbi Goglrdd Cymru (RGC) rugby team who have assisted in our engagement with local communities.

Mental health

We recognise that mental wellbeing is of equal importance to physical wellbeing. To improve our understanding of mental health issues and ensure better knowledge of the support services we can provide to our employees mental wellbeing, we embarked on a mental health awareness campaign in 2018.

During this campaign we introduced training for mental health first aiders through an initial pilot where we trained employees to be capable of identifying signs of and supporting those presenting with mental health issues. Following the success of this trial we have extended the provision of mental health first aiders by training 13 voluntary employees through specialised courses.

Making our networks safer

In 2018/19 we continued to reposition services and cables in older flats and tenement buildings to make them safer as part of our ongoing programme. We have also made progress on our programme to eradicate all low overhead line clearances across roads.

Keeping our staff and contractors safe

In 2018/19, we saw an improvement in performance to meet our targets for lost time incidents for both staff and contractors. We continue to strive for zero injuries and continue to record very low rates of incidence.

Substation security: protecting people from themselves

This year we continued to target and implement heightened security at various substations, which we analysed as prone to intrusion. Illegal entry into substations in order to steal metal is highly dangerous for the individual, and reduces protection for the local community.

Further background

- [Powerwise – educational website from SP Energy Networks that teaches children and young adults all about electricity and how to stay safe around it](#)

2018/19 Outputs

Customer satisfaction

Our customers have every right to expect a good experience when they interact with us – whatever the reason. We are committed to delivering this, and to improving year-on-year against the standard industry-wide metrics.

Exceeding targets in most areas, and continuing a trend of strong, sustained improvement, resolving nearly 90% of all complaints within 1 day and exceeding customer satisfaction targets.



Examples of our performance in action

Raising customer awareness:

We are continuing to raise awareness of who SP Energy Networks are, and to provide our customers with information of when and how to contact us.

As a result of our targeted awareness raising activities since 2015 the campaign has seen the number of people who know who call in a power cut (SPEN via the 105 number) rise from 13% to 21% and awareness of the Priority Services Register increase from 8% to 29%.



Customer satisfaction



Our vision for 2023 is to achieve a score of 9.42 out of ten for Customer Satisfaction in Ofgem's survey of DNO performance and to be a leader in Customer Service across the UK. This year's score of 8.94 in SPD and 9.01 in SPM is a result we are proud of and puts us ahead of where we committed to be on our journey to a score of 9.42.



Complaint handling



Our customers also need to trust us to handle any complaints properly. We handled 5683 complaints, and exceeded our target to resolve 80% of complaints within 1 day and 95% within 31 days. We received zero 'repeat' complaints, and none of the six complaints which were escalated to the Energy Ombudsman were upheld.

See appendix A.

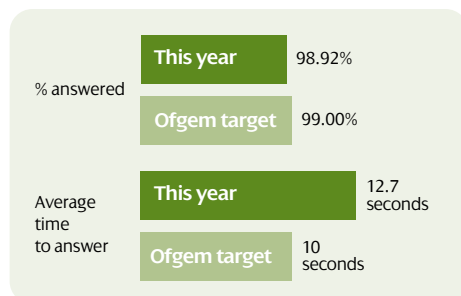
Further background

- [Contact us](#)
- [Helpful advice during a power cut](#)
- [Home visits](#)
- [Flooding and power supply](#)

Responding and communicating



Our customers need to know that they can pick up the phone and talk to us. We received 761,000 calls this year – of which 565,000 related to power cuts. Our average time to answer the 565,000 calls was 12.7 seconds with only 1.08% of calls being abandoned. Our speed of answer was impacted due to very high volumes of customer calls during Storm Ali and Storm Hector.



Substantially ahead of 2018/19 target

On 2018/19 target

Partially or marginally below 2018/19 target

Substantially below 2018/19 target

2018/19 Outputs

Stakeholder engagement

Stakeholder engagement has never been as valuable as we transform our business to help the UK meet its climate change goals.

In global top 16% of companies audited as part of AccountAbility stakeholder engagement health check. Increased results in Ofgem's annual stakeholder engagement incentive from a score of 6.35 last year to 6.76 this year.



Examples of our performance in action

Based on stakeholder feedback, our stakeholder engagement strategy has been enhanced to ensure a more targeted approach with to drive measurable results.

418 engagement events held in 2018/19 with over 107,441 stakeholders engaged through dialogue, consultation and information gathering/giving.

Continuing to work in alignment with principles of Accountability Stakeholder Engagement Standard AA1000 – Inclusivity, Materiality, Responsiveness and Impact.

Supporting the Decarbonisation of Transport

With ambitious targets to ban the sale of new petrol and diesel cars by 2032, our proactive approach to engagement means we are addressing the needs of our customers and stakeholders and taking a leading role in the decarbonisation of transport.

We have developed new partnerships with national governments, local authorities, businesses and transport bodies to inform and facilitate their local plans for electric vehicle charging. By working closely with local community organisations, other DNOs and transport providers, we are tackling the issue of inclusiveness by supporting communities to have equal access to the electric future.

Leading the Transition to Distribution System Operator (DSO)

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 are already transitioning to the new model quickly and at the best value to customers.

We have carried out extensive engagement to demonstrate the benefits of distribution system operation 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 have been engaging with our stakeholders on what the new world might look like, sparking debate on how the system will look, helping us build their priorities into future strategies and plans.



SPEN Stakeholder event

Collaborating for a Cleaner Future



Recognising our key role in facilitating the low carbon economy, this year we have formed a ground-breaking partnership with a major home builder to plan and develop policy and guidance which will be shared with the whole industry. The aim is to illustrate the impact of modern living on energy consumption, taking into account new technologies such as electric vehicles, solar panels and heat pumps.

This forward-thinking collaboration is the first of its kind and will provide vital information for future planning, understanding of customer behaviours and their impact on the network.

We are now extending these learnings to new partnerships and collaboration across Business, Government, Utility Associations and Manufacturing organisations to meet the changing needs and expectations of the house building market.

External validation

Our annual assurance review from external auditors reported further improvement in our strong performance across various elements of our Stakeholder Engagement processes scoring us at 72%. The DNO-wide assessment by Ofgem's external panel gave us a score of 6.76/10 for the stakeholder engagement incentive which demonstrates significant progress from last year.

Further background

- [Stakeholder events](#)
- [Stakeholder reports](#)
- [Stakeholder registration](#)
- [Join our online community](#)

Enhanced our Stakeholder Engagement Strategy and improved supporting tools and processes. Changes have been made to the Stakeholder Engagement database Tractivity to make the process of recording activities, actions and feedback easier for our users.

Substantially ahead of 2018/19 target

On 2018/19 target

Partially or marginally below 2018/19 target

Substantially below 2018/19 target

2018/19 Outputs

Consumer vulnerability strategy

The direction and focus of SPEN's consumer vulnerability strategy has been formed through a structured process of engagement with customers, stakeholders, vulnerability experts and key staff (including our executive team) but finds its deeper roots in a strong connection with the communities we serve.

As part of the development of our new strategy, we have also looked for expert guidance, directly integrating feedback from Ofgem, the independent panel, AccountAbility's AA1000SES audit, our vulnerability partnerships and an independent gap analysis by Sia Partners, a recognised expert in the area, to signpost our improvement efforts.

This process of evolution brings us to our new vulnerability strategy – we have developed this to focus our efforts in supporting vulnerable customers and meeting our ambition to deliver bespoke services, based on every customer's needs, in cost-effective ways. The role of this strategy is to translate our aspirations to action, embedded across the whole company.

Our new vulnerability strategy consists of two elements:

- A mission statement which provides our central objective and presents what SPEN wants to achieve when it comes to supporting vulnerable customers; and
- A set of action statements that state how we will develop the capabilities we need to achieve our mission statement – these statements shape the day-to-day actions we will take.

Ultimately, the strategy is supported by a set of tools and processes which we have designed to ensure our staff are empowered to make the right decisions and act when it matters. We will introduce some of the most important ones across this document.

SPEN's definition of vulnerability

Vulnerability is when personal circumstances combined with a situation arise to make a citizen more likely to suffer detriment. The situation can be both energy and non-energy related and can be both permanent or temporary.



Our consumer vulnerability mission statement

SP Energy Networks aims to be a service leader in the UK. We will strive to minimise the impact we have on our communities and provide bespoke support to our customers in vulnerable situations. We will do so by offering the appropriate support to those who need it the most, in cost effective ways.

SPEN's mission statement provides a clear and concise direction to all our efforts in the sphere of consumer vulnerability. This statement builds on the vision of our former strategy, and is informed by Stakeholder feedback from customers and expert stakeholders to ensure it is fit for purpose.

To realise it, we needed to clarify and build several capabilities; a clear example of this is the challenge of delivering the most cost-effective support type to meet the needs of each customer. To do so, we had to develop the tools necessary to ensure we considered various options to satisfy a given customer need and, crucially, methods to estimate the costs and benefits of each potential initiative. In response to this challenge, we have introduced a ground-breaking approach to measuring benefits (introduced on Page 9, Part 1).

★ Substantially ahead of 2018/19 target

● On 2018/19 target

● Partially or marginally below 2018/19 target

● Substantially below 2018/19 target

2018/19 Outputs

Consumer vulnerability strategy

Our action statements

Our 5 action statements complete our strategy by specifying the areas on which we will focus to achieve our mission to: deliver bespoke support to those who need it the most in the most cost-effective ways.

1. Engagement

SP Energy Networks will engage customers in vulnerable situations directly and through its partners to identify the support that these customers want and need. We will embed tools and processes to ensure that all aspects of our strategy and approach are shaped by those we support.

2. Services

SP Energy Networks will develop a portfolio of free services that effectively address the needs of customers affected by our work and alleviate the situations of vulnerability that stem from wider social issues. SP Energy Networks will strive to ensure that services represent value for money and that all customers are aware and informed on the support available to them.

3. Partnerships

SP Energy Networks will develop a network of partnerships to reach and deliver support to vulnerable customers in ways that maximise our impact, consistently across our networks. We will review our partnerships to ensure that they reflect the dynamics of the communities we serve and that they can support whenever we are not best placed to take action.

4. Data

SP Energy Networks will strive to gather and maintain up-to-date and reliable data on its customers through a wide range of appropriate methods. Data will be a key asset in informing and constantly improving our strategy and practical approach to dealing with situations of vulnerability appropriately across our networks.

5. Training

SP Energy Networks will provide training and support to its staff and service partners to ensure that they are well placed to identify situations of vulnerability and to apply the embedded tools and processes we have developed to support our customers.

Some of our 2018/19 achievements

187k New
PSR households added

New Toolkit
For Partnerships & Services & updated Strategy

1st
In the world to achieve BSI CS Kitemark & Vulnerability standard

Benchmarked 1st
Against all UK service sectors in the Institute of Customer Service benchmarking exercise

1.4m
Customers benefited from our services this year

£5.54 SROI
Generated (The value SPEN delivered for every £1 spent)

99.6%
Of our customers experienced zero supply interruptions or were restored in 6 hours

AA Standard
In Accessibility achieved for our website


Created Total £2.11m Economic Value
Through our services (Sum of all benefits – costs)


920k
Households Registered for PSR 26% of our base


New Vulnerability Tool
To measure gaps in our PSR against national data & community demographics. Made public and shared with partners & stakeholders

32%
Of customers in our Low Resilience Communities Registered for PSR

 Substantially ahead of 2018/19 target

 On 2018/19 target

 Partially or marginally below 2018/19 target

 Substantially below 2018/19 target

2018/19 Outputs

Connecting to our network

We go the extra mile for our customers – far beyond the typical energy business remit – engaging through social media, innovating and preparing for the future.

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.

4 Demand Workshops

6 SPD and SPM Connections Stakeholder Panels

4 SPD and SPM Land & Planning Stakeholder Panels

4 RAdAR Working Group Sessions

Over **10,000** customers surveyed during 2018/19

6 SPD and SPM Strategic Stakeholder Panels

Stakeholder Engagement Reach

Through our robust and regular engagement programme, such as stakeholder engagement panels and in-depth annual customer surveys, we have been able to ensure that we support the needs, aims and aspirations of our stakeholders.

In 2018/19, we have received excellent feedback on content, level of engagement and events hosted for our connections stakeholders. We are delighted to confirm we have made significant progress on the delivery of our 13 strategic improvement actions. Also, in response to stakeholder feedback from last year asking for enhanced opportunities to get involved, we have increased the number of ways to engage and reach more stakeholders than ever before.

Further detail on our performance in 2018/19 can be found within [our latest ICE plan](#).

Over **4,000** customers invited to our events in 2018/19

2 Community Energy Workshops

4 ICP/IDNO Workshops

4 DER Forums (formerly DG Workshops)

Monthly and Annual Survey Results have increased

Provision of Quotations

In 2018/19, we received 29,579 enquiries. 22,352 quotations were issued.

In SPD, our average time to quote was 2.9 working days for single premises, and 5.7 days for multiple premises. The corresponding average time to connect was 54.3 days and 69.3 days, from accepted and payment.

In SPM, our average time to quote was 4.8 working days for single premises, and 9.6 days for multiple premises. The corresponding average time to connect was 52.8 days and 66.6 days, from accepted and payment.

3 Owner Operator Forums and various visits to our Control Centres

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

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

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

Annual Land Rights score has shown an improvement

2018/19 Outputs

Innovation and future networks

Our innovation focus remains firmly centred on our customers and stakeholders, who shape both our Innovation Strategy and innovation project portfolio, helping towards the successful delivery of our RIIO ED1 Business Plan.

Benefits of innovation projects are being realised and embedded into our business.

2019 SPEN's Year of Innovation

2019 has marked the beginning of a drive to strengthen our culture of innovation; 2019 is SPEN's Year of Innovation! This initiative addresses the most fundamental element of innovation – People! This will set the foundations of a three year campaign to strengthen our culture of innovation and get more people actively engaged in innovation across the business. To this end, we are creating opportunities for the wider business to engage in business focused challenges, raising up champions (to date we have recruited over 90 Innovation Champions) who can drive local innovation and driving initiatives to enable our people managers to be more innovative and deliver a better future quicker.

Distribution Innovation Strategy

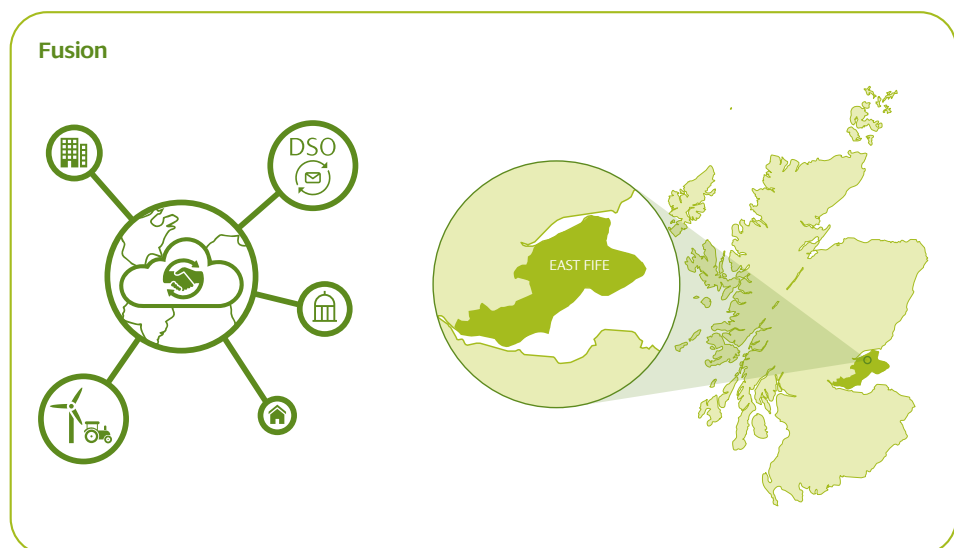
Further to the launch of our revised Distribution Innovation Strategy in March 2018, which is designed to ensure our customers and stakeholders are at the heart of what we do, over the last six months we have taken the opportunity to review and enhance our internal processes for delivering innovation projects into business as usual. Through engaging with internal and external stakeholders and carrying out benchmarking against other companies' innovation processes, we have identified a number of improvement opportunities.

A detailed plan has been produced to implement new streamlined working practices, including a rigorous governance framework that will track innovations projects through the lifecycle of the project to ensure they remain viable.

Fusion

Our 2017 Network Innovation Competition (NIC) project FUSION is a 5-year Distribution System Operator (DSO)-transition project focused on the development and implementation of a trial structured competitive market at a local scale for the trading of commoditised demand side flexibility using the Universal Smart Energy Framework (USEF). This flexibility is designed to address network constraint issues found in the distribution network, and to defer network reinforcement.

Project FUSION will harness the value of this commoditised local demand side flexibility via the introduction of an online trading platform and structured market-based trading framework in East Fife in Scotland. Since October 2018, FUSION has started an exercise to quantify the amount of flexibility in East Fife, alongside a due diligence and public consultation on USEF. The project has also been working collaboratively with the other two NIC projects; Transition and EFFS.



2018/19 Outputs

Innovation and future networks

Our innovation focus remains firmly centred on our customers and stakeholders, who shape both our Innovation Strategy and innovation project portfolio, helping towards the successful delivery of our RIIO ED1 Business Plan.

LV Engine

Our LV Engine project is a key enabler of a future DSO by bringing flexibility and controllability to LV Networks. Funded by Ofgem's 2017 NIC, this 5 year flagship smart grid project will carry out a globally innovative network trial of Smart Transformers to facilitate the connection of low carbon technologies whilst delivering value for money for our customers. We lead the project in partnership with UK Power Networks and a number of other external partners. We have developed the detailed technical requirements of the Smart Transformer and LV automation equipment. We will appoint the manufacturing partners designing and building the Smart Transformer for the installation in the trial sites which have been identified for the live demonstration of the LV Engine solution. The project team has also successfully engaged with external stakeholders to reach agreement with LV DC customers to join the trial of the LV Engine project. If successful, LV Engine will demonstrate an alternative approach to conventional network design and operation providing the DSO with a number of tools necessary to operate more intelligently within the LV distribution network.

The Smart Cities Award

We were delighted to receive The Smart Cities Award for our Glasgow Smart Street work in association with Glasgow City Council at the UK Network Awards. The Network Awards are the UK's first ever awards dedicated to the gas and electricity sectors. Judged by a panel of 10 industry leading experts.

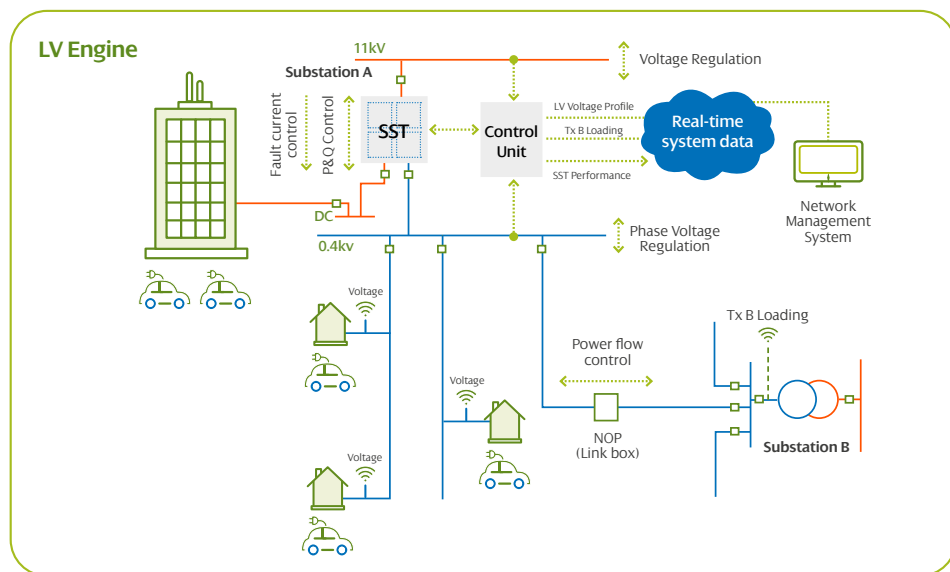
The Smart Cities Award recognised our industry-leading partnership with Glasgow City Council to deliver an innovation programme which brings smarter cities to life through technological innovation and creating sustainable networks.

With Glasgow leading the way to become one of the most sustainable and smart cities in Europe, the judges were impressed by this outstanding example of collaboration. By working closely with our partners this project developed new technology for an intelligent integrated network and is helping us to create a flexible network of the future.

CHARGE

SPEN was delighted to have been successful with our 2018 Network Innovation Competition NIC. This project aims to engage with relevant stakeholders across network, transport, and planning to develop and trial electric vehicle (EV) charging solutions. The project will investigate the ability of smart control, storage, and active network management systems to provide lower connection and operational costs to customers. The project aims to develop a Distribution Network Operator led strategy to facilitate and accelerate the electrification of transport, and more specifically, the connection of charging infrastructure.

Project CHARGE will investigate several smart charging solutions which will enable easier and cheaper connection of high numbers of EV chargers to the electricity networks. The project will test EV charging technology and procedures in Liverpool, North Wales and parts of Cheshire and Shropshire that could then be rolled out across Great Britain.



Further background

- [Network innovation allowance report](#)
- [Innovation strategy](#)

2018/19 Outputs

Environment

We have a key role in enabling greater adoption of low carbon technologies (LCTs), such as Electric Vehicles and micro-generation. We are also focussing on reducing the environmental impacts of our own operations.

In this 2018/19 distribution report we provide an overview of our environmental performance against our ED1 Commitments and give examples of the specific initiatives driving progress as part of our longer term strategic plan.

Our own carbon footprint

We achieved our 2023 target of a 15% reduction in emissions in the reporting year 2015/16 and continue to exceed this reduction year on year. Our BCF for SPD & SPM has reduced by a further 10% in 2018/19 and emissions have reduced across several areas of our carbon footprint. We undertook successful repairs in SPM SF₆ equipment resulting in a 44% reduction in SPM's SF₆ leakage.

Visual amenity in Areas of Outstanding Natural Beauty (AONB), National Scenic Areas (NSA) and National Parks

We continue to target measures to reduce the visual impact of our network by 2023 by removing over head lines from AOB. We are currently behind in our target, which can be attributed to long waits for planning consents in these sensitive areas and the need to minimise adverse effects. This year we removed a further 0.84 km of overhead line and installed 0.69 km of underground cable in areas of Outstanding National Beauty (ANOB), National Scenic Areas (NSA) and National Parks. This year in SPM we have carried out undergrounding works in SPM around Clwydian Range & Dee Valley AONB. The areas selected were tranquil, remote sites with high visitor numbers forming part of the national trail. The pictures to the left of the Horse Shoe Falls from the viewing car park where the OHL was removed show a markedly enhanced sight for onlookers.

Increasing the use of electric vehicles and charging points

Since the start of ED1 we have installed 39 vehicle charging points at 18 of our offices. This compliments the introduction of 29 electric vehicles to our fleet of pool cars. We continue to investigate the use of electric vans in our fleet, initial trials were extremely positive and we hope to see these included in the coming years.

Reduce oil leaks by 50% through the replacement of poorly performing 132kV cable in SPM

We have reduced leaks from cables by 63% in SPM exceeding our ED1 commitment to reduce leaks by 50%. This reduction has been achievable as a result of our policy of strategic repair and asset replacement.

Monitoring and reducing the energy used within our site portfolio

Energy consumed within our depots and substations is our second biggest emissions contributor, and it is therefore imperative that we work to reduce the energy we consume at our sites. In this reporting year we have carried out energy efficiency upgrades at six of our sites. Five sites have received LED lighting and motion sensors. Three sites have benefited from draft prevention measures including replacement windows and draft prevention doors. Our buildings energy use continues to reduce in both SPM and SPD for KWh consumed. Our Kilmarnock depot has gained the Keep Scotland Beautiful (KSB) gold accreditation in their National Award for Environmental Excellence. The accolade recognises our continued commitment to sustainable business practices by our business and staff – making sure that the depot is safe, clean and welcoming.



SPEN and First Glasgow's all-electric commercial bus

Green Economy Fund

SPEN is an active supporter of Community Energy and we have recently provided financial support to local community projects through our £20m Green Economy Fund. The fund was established by SP Energy Networks in 2018 to support initiatives helping communities invest in low-carbon technology, building the infrastructure and the learnings needed for the changes expected over the next decade.

Projects that have been funded through the Green Economy Fund include one of Scotland's most ambitious regeneration projects in Dalrnarnock, which introduces a self-sufficient local energy supply through introducing heat pump technology into its waste water treatment centre as well as a project which has seen two sustainable energy facilitators in the Southern Uplands assist developing local community-based energy initiatives. The fund has established two new EV car clubs in North Ayrshire and Hawick in the Scottish Borders, and has also led to the introduction of Glasgow's first large electric bus route operating within the city centre.

Further background

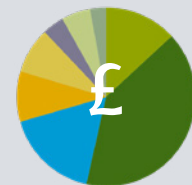
- [Environmental report](#)
- [Losses strategy – Reducing network energy losses and greenhouse gas emissions](#)

★ Substantially ahead of 2018/19 target

● On 2018/19 target

● Partially or marginally below 2018/19 target

● Substantially below 2018/19 target



Expenditure and revenues

'RIIO' is Ofgem's framework for setting price controls for network companies. RIIO stands for Revenue = Incentives + Innovation + Outputs. Effectively, this means that we are only rewarded for delivering exceptional performance in our incentive, outputs and innovation.



Expenditure and revenues

Our financial performance

The key facts about revenues and expenditure this year:

Our allowed revenues

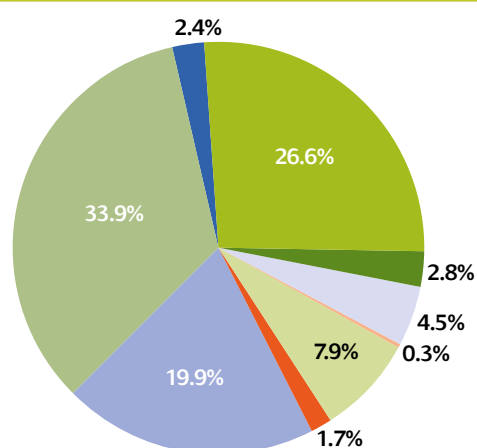
The amounts we are permitted to recover from our customers for using our network services during 2018/19. In total, and what it implies for our Unrestricted Domestic Tariff Charge:

	SPD (£m)	SPM (£m)
Total Allowed Revenue	422.1	348.1
	SPD (£)	SPM (£)
Unrestricted Domestic Tariff charge	80.51	87.52

Our expenditure on our network (2012/13 prices)

A breakdown of how we are using our revenues to strengthen and extend our networks:

	SPD (£m)	SPM (£m)
Engineering and support Activities	82.3	77.8
Asset Replacement and Refurbishment	47.0	78.5
Network operating costs	41.9	51.8
Rising lateral mains	8.2	4.9
ESQCR low ground clearances	11.0	10.3
General reinforcement	21.5	15.5
Non operational capex	3.6	4.2
Connections	0.5	0.9
Others	4.3	7.2
Total (£m)	220.4	251.2



Total Expenditure across SPEN (SPD and SPM) (2012/13 prices)

Asset Replacement and Refurbishment	26.6%
Rising Lateral Mains	2.8%
ESQCR (Low Ground Clearances)	4.5%
Connections	0.3%
General Reinforcement	7.9%
Non Operational Capex	1.7%
Network Operating Costs	19.9%
Engineering & Corporate Support Activities	33.9%
Other	2.4%

Expenditure and revenues

Our financial performance

The key facts about our performance this year under the various financial incentives that all Distribution Network Operators are subject to.

In 2018/19, we earned a £16.00m reward for going above and beyond delivering a safe, secure and reliable service to our customers and meeting our stakeholders' needs (2012/13 prices).

Performance-related financial incentives

How our performance this year translates to rewards or penalties under the various financial incentive mechanisms put in place by the regulator, Ofgem, and applied to all Distribution Network Operators (DNOs).

	SPD (£m)	SPM (£m)
Reward or penalty schemes		
Interruptions incentive	+5.0	+1.9
Customer satisfaction	+2.8	+3.3
Penalty-only schemes		
Incentive on Connections engagement	0	0
Reward-only schemes		
Stakeholder engagement incentive	+0.9	+0.9
Customer vulnerability incentive		
Time-to-connect incentive	+0.6	+0.6
	+9.3	+6.7
Total licensees combined (£m)		+16.0



Interruptions incentive example: Maintaining our network and being well prepared for severe weather events.



Stakeholder engagement and consumer vulnerability incentive example: Tackling wider social issues such as loneliness, social isolation, depression, anxiety and independence.

Further background

- [Interruptions Incentive](#) (See pages 33-35 of Ofgem's ED1 Strategy Decision)
- [Customer Satisfaction](#) (See pages 62-64 of Ofgem's ED1 Strategy Decision)
- [Incentive on Connections Engagement](#) (See pages 81-82 of Ofgem's ED1 Strategy Decision)
- [Stakeholder Engagement Incentive and Consumer Vulnerability Incentive](#)
(See Ofgem's Stakeholder Engagement and Consumer Vulnerability Incentive Guidance)
- [Time to Connect Incentive](#) (See page 81 of Ofgem's ED1 Strategy Decision - Outputs, incentives and innovation annex)

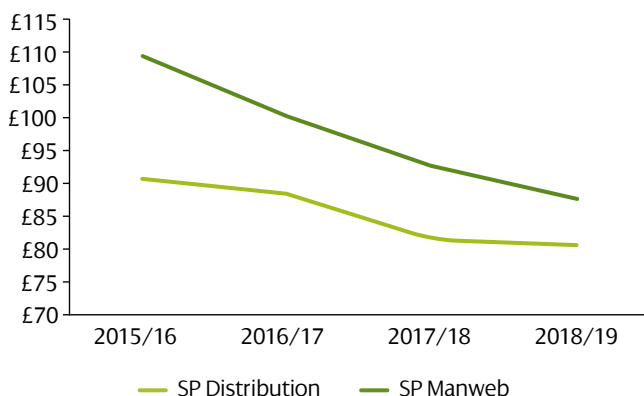
Expenditure and revenues

Bill impact

The key facts about the make up of distribution network costs which represent your annual domestic electricity bill in 2018/19.

SPEN's Distribution component of domestic customer bills has fallen by 16% in real terms since the start of the current price control.

SPEN's Distribution component of domestic customer bills (12/13 prices per annum)

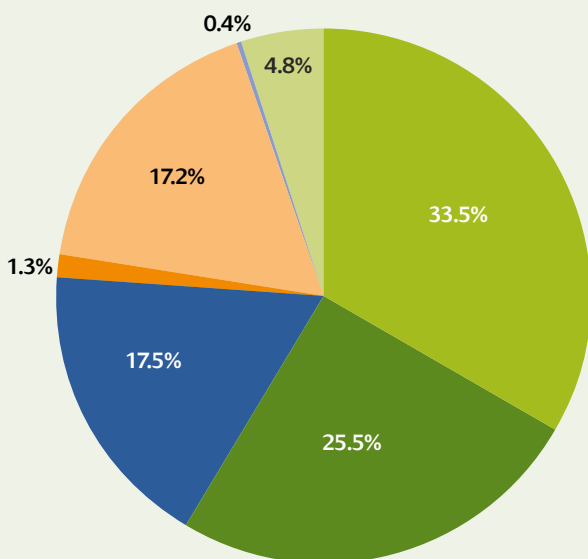


27p per day

SPEN's Distribution component of domestic customer bills is around 27p per day – less than a Netflix subscription and a second class stamp. Average customer bills have also fallen by 16% in real terms since the start of the current price control.

Breakdown of an average electricity bill 2018/19

Electricity bill make up

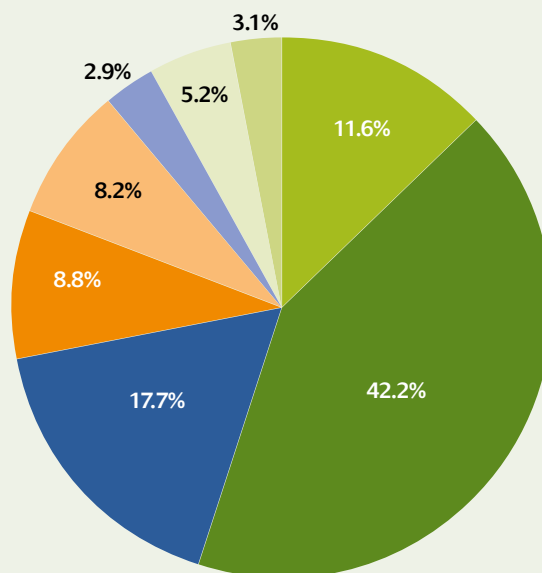


Wholesale costs	33.5%
Network costs (includes Transmission Costs)	25.5%
Environmental and social obligations	17.5%
Other direct costs	1.3%
Operating costs	17.2%
Supplier pre-tax margin	0.4%
VAT	4.8%

Further Split: 2018/19 Distribution Costs included in 25% opposite

Distribution component of electricity bill

(SPD and SPM Combined 2018/19)



Cost of maintaining the network	11.6%
Future proofing our network	42.2%
Financing	17.7%
Business Rates	8.8%
Legacy Pensions	8.2%
Regulatory Incentives	2.9%
Transmission Charges	5.2%
Other	3.1%

Looking forward



Looking forward Smart meters

By 2020 energy supply companies will have offered 50 million customers a smart gas and electricity meter.

Although the installation of Smart Meters is carried out by energy supply companies, Distribution Network Operators (DNOs) have an important role to play.

Smart Meter Systems and data

When Smart Meters are installed, our Smart Meter Systems team focus on the data which will be useful to a DNO to create benefits for customers.

As the amount of data available increases we will have more detailed information about the end points of our network. This will better inform the design and management of the network as we respond to the uptake of low carbon technologies, help us identify power outages and consequently improve our service to customers.

To access this data we have a new IT platform in place to connect to the centralised industry system, the Smart Data Communications Company (DCC).

This new platform allows us to securely access Smart Meter data.

The roll out of the Smart Metering has proved to be slower than originally envisaged as has the delivery of the new IT platform and accordingly these benefits have not been fully realised. We hope to see better progress on this in the coming year.



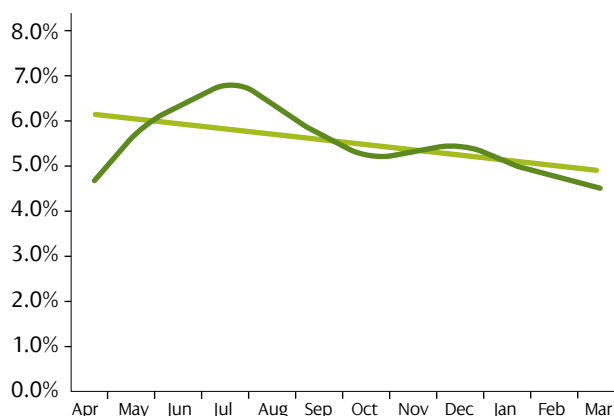
Championing a better customer experience

In a number of properties we are required to upgrade our assets to enable the fitting of a Smart Meter or to respond to an emergency situation. These are known as interventions.

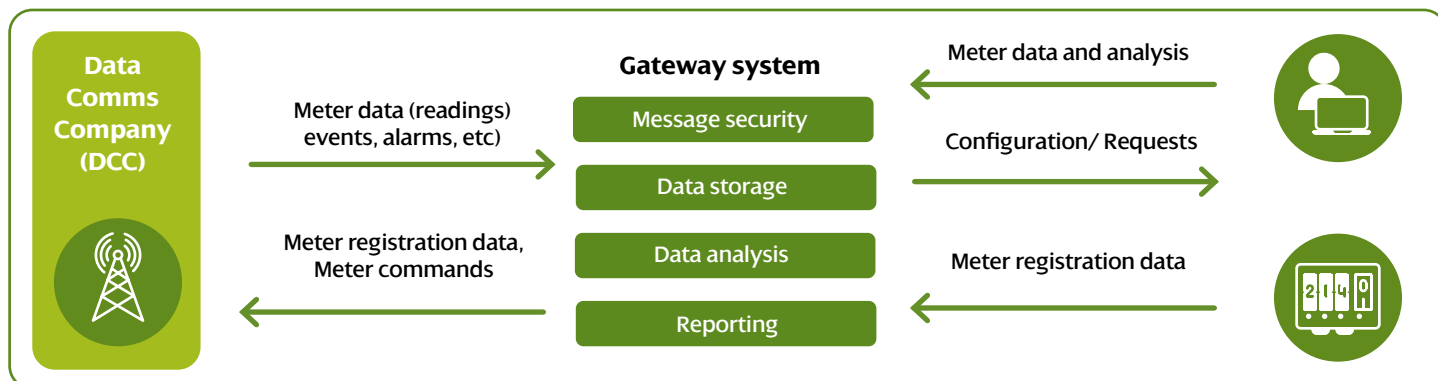
In many cases the experience of the meter installer was such that they were unable to correctly identify valid interventions. Working with a multi-party team including DNOs, Suppliers, Meter installers, BEIS and Ofgem we have provided training materials, in video format, to allow interventions to be correctly identified (and importantly to stop the incorrect reporting of issues).

This reduces the number of incorrect reports, prevents abortive meter installations and unnecessary inconvenience of our customers.

Intervention rate (SPD)



We will roll this learning out in our SPM area in the coming year.



Looking forward

The distribution system operator

Network companies are key facilitators in increasing productivity by introducing new technologies to support economic growth and increasing the working age population as a result of job creation.

The UK's Network Operators have a significant part to play in meeting Government carbon reduction targets. Our ultimate aim is to empower our cities and communities to achieve the economic and health ambitions which can be realised from a low carbon economy.

EVs

There is a growing certainty that the rate of uptake and ultimate scale of EVs will have a major impact on electricity networks in the future. This impact will be a function of: the rate of uptake; charging technology; customer charging behaviour and; the level of electric vehicles (EV) charging management that can be implemented.

Combined with the Scottish Government's target to remove the need for carbon emitting cars by 2032 and the prediction that EV will become cheaper than traditional vehicles by 2022, we can expect mass uptake of EV in the next decade. To enable the wide scale roll out of EVs, it is key that the UK's electricity networks can facilitate suitable charging infrastructure for customers at a reasonable cost. We anticipate that we need to invest around £300m in each of our electricity network areas in the next decade in order to cope with the increased demand from the electrification of transport – Charging an average domestic EV at home every night would almost double the electricity consumption of the home.

This year we kicked off our flagship Innovation Project Charge. This project will, for the first time, integrate network planning with transport planning to identify optimal locations for EV chargers. We have also engaged extensively with a range of stakeholders to support this project including Welsh Government, Liverpool City Council, local authorities and local businesses.

We have also been working closely with the Scottish Government, Transport Scotland and Local Authorities to accelerate the uptake of EV charging infrastructure in Scotland and to help meet Scottish Governments EV aspirations.

We have recently announced a joint-funded project between SPEN, SSEN and the Scottish Government, which will focus on innovative ways to deliver EV charging infrastructure and will help us understand how to integrate charging infrastructure into our grid in a way that not only reduces pressure on the network, but also benefits consumers.

We are also trialling solutions for public EV charging on the provision of ground-breaking infrastructure to make Glasgow the UK's first 'Net Zero' city.

Heat

The complete decarbonisation of heat is also essential by 2050 if the UK's carbon reduction targets are to be achieved. Whilst the UK's strategy is currently considering all possible technologies for this transition under all scenarios electrification of heat has a major role to play and may be the dominant solution. Should this happen it has the potential to place additional demand on networks several times that of customers adopting EVs due to the higher energy requirements of these systems.

As with EVs, facilitating this transition will require major network reinforcement. However, what is currently less certain is the predictability of the uptake of electric heating. As a DNO/DSO, we have to ensure we are prepared to meet this challenge and are capable of deploying this reinforcement efficiently and ahead of customer need. As such, we will remain vigilant on national policies and the uptake of decarbonised heating by our customers.

To help understand the impact that the decarbonisation of heat will have on the electrical network we have engaged with Cala Homes to monitor new housing developments that are pioneering the use of a range of heat pump and renewable technologies. By understanding how customers use these technologies we will be better informed to both provide future ready networks and to engage in national debate on how we meet the Government Net Zero targets. We also presented on these challenges at our 1st Annual Scottish homes of the future conference bringing together a range of stakeholders from the building industry, renewables sector, local authorities and Scottish Government.

Did you know?

1% of new domestic buildings have oil boilers installed



1/3 of UK emissions caused by heating in homes and businesses

170,000 households use coal or other solid fuels as their main heat source



62,000 non-domestic buildings use oil or liquid petroleum gas



Looking forward

The distribution system operator

The UK's Network Operators have a significant part to play in meeting Government carbon reduction targets. Our ultimate aim is to empower our cities and communities to achieve the economic and health ambitions which can be realised from a low carbon economy.

DSO Role

The UK's energy networks have been operating under a traditional model whereby the DNOs deliver electricity in one direction from centralised power plants, to our homes and communities.

Looking forward, the evolution of the energy sector towards a smarter system will only be possible if Distribution Network Operator's (DNOs) play an active coordinating role between all market participants, facilitating the markets and services in a neutral and non-discriminatory manner.

This can be achieved by extending the current role of DNOs to that of Distribution System Operators (DSOs). We developed our DSO Vision in 2016 as we recognised the key role that DNOs will play in facilitating our customers' adoption of low carbon technologies, and the significant impact that innovative/flexible solutions can have on enabling this pace of change. To support an increasingly flexible and decentralised energy system, DNOs should be allowed to transition to DSOs quickly to ensure that coordinated, regional and local plans can be developed in time to address and respond to the challenges, utilising the most appropriate solutions.

A recent report from Baringa estimated that the DNO becoming the DSO will provide best value to customers through the avoidance of up to £3.5bn in costs by 2030 and up to £21bn by 2050. We are already demonstrating benefits of system operator through transport planning, digital substations and artificial intelligence in our Active Network Management (ANM) and sequence switching schemes, as well as our new market-making flexibility tool. Our ANM project in Dumfries and Galloway will help to achieve a reduction in CO2 emissions of 522k tonnes by 2031 – equivalent to the annual emissions produced from 110,000 diesel/petrol vehicles.

This year we appointed a dedicated Head of DSO whose responsibility it will be to establish a DSO team and to actively drive the changes necessary to realise our capabilities as a future DSO. Key to this will be to deploy practical applications of DSO activity across our network, allowing us to demonstrate how a DSO will operate and to address some of the technical, social and regulatory challenges that need to be overcome if we are to realise a low carbon future.

Flexibility

Flexibility refers to the ability to react to the fluctuating needs of the electricity system and is primarily used to reduce peaks on electricity network demand while maintaining security of supply. The flexibility introduced by storage, digitisation and smart devices (including EVs) will not only keep costs of upgrading the electricity network down but will be key to facilitating the pace of change required to support the low carbon transition as we may not always be able to build new assets in time to meet the demands of EVs or heat Pumps.

By agreeing to turn up or down demand or generation at specific times customers can support our network and be reimbursed for doing so. We believe that we are at the forefront of promoting and developing flexibility, and that we should be seeking to use flexibility where it is the best value solution for current and future consumers. To do so, it is essential to understand the true value of flexibility, and therefore important to be transparent about how that value is calculated.

We are already delivering significant progress in this area, having developed design tools to quickly identify reinforcement projects where flexibility is likely to be a viable alternative. This resulted in an initial tender in March 2019 for 116MVA of flexibility services across three different areas. Following this, we will have also tendered for up to 110MVA of flexibility services across England, Scotland and Wales, with contract lengths ranging from 1-4 years. As part of this, we believe that we will be the first DNO to tender specifically for reactive power services (MVar) to help with voltage constraints.



Contact us

How you can get involved

Stakeholder engagement workshops

If you are interested in our services and projects, if our work has the potential to impact you, or if you have an influence over the work we do, then you are a stakeholder. We want to know your views on our plans, so that we can deliver the best service possible.

We already work with a wide range of stakeholders, including domestic customers, local authorities, charities, other utilities, people wishing to connect to our network, school pupils, vulnerable customers and innovators amongst others.

Registering as a stakeholder is easy, and enables you to have your say on our projects and services. Please register here:
www.spenergynetworks.co.uk/register



General enquiries

Please call us free on: 0330 1010 444
Email: customercare@spenergynetworks.com

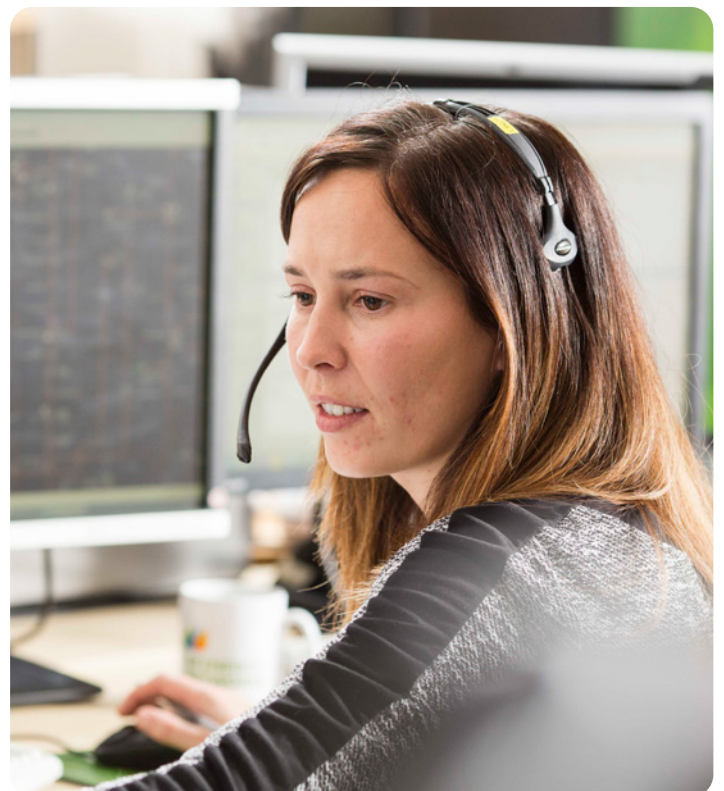
Central and Southern Scotland Customer Service SP Energy Networks SP House 320 St Vincent Street Glasgow G2 5AD	Cheshire, Merseyside, N. Wales and N. Shropshire Customer Service SP Energy Networks PO Box 168 Prenton CH26 9AY
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To report a power cut or damage to electricity power lines or substations, call the new national Freephone number – 105.

**POWER CUT?
CALL 105**

You can still reach us on our existing numbers:

Central and Southern Scotland 0800 092 9290	Cheshire, Merseyside, N. Wales and N. Shropshire 0800 001 5400
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SP Distribution and SP Manweb

Annual Performance Report 2018/19










Appendix A

Our business plan
commitments in full

Appendix A:


Reliability and availability


We are committed to improving the reliability of supply to our customers. Strong stewardship of our assets is achieved through knowing the health and criticality of our equipment in order to target our investment appropriately.

Commitment	SPD this year	SPM this year
 Reduce by 100% the number of customers experiencing a power cut greater than 12 hours by 2023.	A reduction of 46% by March 2018 against our baseline. Still on track to achieve target by 2023.	A reduction of 94% against our baseline by March 2018. Well on track to achieve target by 2023.
 Reduce the average number of times our customers lose their power supply by 7%. Reduce the length of time those customers are without power by 16%. By doing this reduce the average time our customers are off supply by 25%.	Interruptions down by 4%, and average duration of each interruption down by 20%. Well on track.	Interruptions increased by 6%, however, the average duration of each interruption reduced by 22%. Well on track.
 Improve service to 40% of our poorly served customers.	Improved service to 14%. Well on track for 2023.	Despite initial improvements, Storm Ali in September 2018 caused performance to slip.
 Mitigate pluvial flood risk at 28 high risk grid and primary substations.	Action completed in 2015 – continuing to monitor and mitigate against new risks.	Action completed in 2015 – continuing to monitor and mitigate against new risks.
 Ensure all rural customers benefit from resilient to severe weather events network by 2034.	Incorporated into investment/modernisation plans, on track to deliver.	Incorporated into investment/modernisation plans, on track to deliver.
 25% of rural high voltage network and a further 16% of low voltage resilient to severe weather by 2023.	Incorporated into investment/modernisation plans, on track to deliver.	Incorporated into investment/modernisation plans, on track to deliver.
 Deliver a guaranteed standard to reconnect our customers within 36 hours after storm events.	908 customers were off supply greater than 36 hours due to Storms Ali and Callum.	0 customers were off supply greater than 36 hours.
 Accelerate Fluvial Flood protection plans to complete by March 2015.	Action completed in 2015 – continuing to monitor and mitigate against new risks.	Action completed in 2015 – continuing to monitor and mitigate against new risks.
 Increase substation resilience to 72 hours.	Action completed in 2015 – continuing to monitor and mitigate against new risks.	Action completed in 2015 – continuing to monitor and mitigate against new risks.

 Substantially ahead of 2018/19 target

 On 2018/19 target

 Partially or marginally below 2018/19 target

 Substantially below 2018/19 target

Appendix A:

Customer satisfaction

We engage regularly with our customers to understand what they want from us and act on feedback to improve our service. We have made consistent sustained improvement which has made a significant impact on customers experience.

Commitment	SPD this year	SPM this year
● Answer calls in less than 10 seconds and never force disconnect.	12.8 seconds average due to Storm Ali and Storm Hector and 0 calls forced disconnected.	12.5 seconds average due to Storm Ali and Storm Callum and 0 calls forced disconnected.
● Ensure abandoned calls are less than 1%.	1.18% in Faults and Emergencies due to Storm Ali and Hector.	0.92% in Fault and emergencies.
● Provide restoration time for every outage.	Embedded in standard business process.	Embedded in standard business process.
★ Write to all customers in advance of planned interruptions and day before reminder by SMS (text).	Embedded in standard business process plus face to face visits targeting 100% Vulnerable Customers ahead of every planned outage.	Embedded in standard business process plus face to face visits targeting 100% Vulnerable Customers ahead of every planned outage.
★ Respond and resolve all complaints quickly.	89.3% of all complaints resolved within 1 day.	87.3% of all complaints resolved within 1 day.
● Reduce number of complaints by understanding root causes.	Ongoing data analytics, e.g. observed impact of severe weather in 2018/19.	Ongoing data analytics, e.g. observed impact of severe weather.
★ Achieve a 20% improvement in industry measure of customer satisfaction scores by 2023.	Actual score of 8.94 puts us well on track for 2023 target.	Actual score of 9.01 puts us well on track for 2023 target.
● Hot meals and accommodation provided after 48 hours to all customers during exceptional events (after 12 hours for vulnerable customers).	Embedded in standard business process.	Embedded in standard business process.
★ Benchmark industry performance utilising Institute of Customer Service.	ICS Benchmarked SP Energy Networks 1st place against ALL UK service sectors.	ICS Benchmarked SP Energy Networks 1st place against ALL UK service sectors.
● Invest in people at every level.	Designed in to management systems and reporting.	Designed in to management systems and reporting.
● We will include info about our Guaranteed Standards of Performance (GSOP) in our annual customer awareness campaign.	GSOP information is communicated to customers annually.	GSOP information is communicated to customers annually.
● We will contact customers impacted by an outage to keep them informed via different channels.	We communicate with customers through multi channels during power outages.	We communicate with customers through multi channels during power outages.
● We will use Smart Meter data to proactively help customers.	The volume of smart meters which we can communicate with was expected to accelerate in 2018. This would have allowed us to monitor network load and voltage, enabling us to make improvements to our network for the benefit of our customers. The forecasted increase in Smart Metering installations has not materialised. Accordingly we have not been able to fully realise the benefits of Smart Metering.	The volume of smart meters which we can communicate with was expected to accelerate in 2018. This would have allowed us to monitor network load and voltage, enabling us to make improvements to our network for the benefit of our customers. The forecasted increase in Smart Metering installations has not materialised. Accordingly we have not been able to fully realise the benefits of Smart Metering.

★ Substantially ahead of 2018/19 target

● On 2018/19 target

● Partially or marginally below 2018/19 target

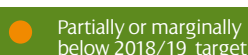
● Substantially below 2018/19 target

Appendix A:

Consumer vulnerability strategy

We now deliver a range of services available to all vulnerable customers which have been developed in our most vulnerable communities. We strive to exceed our business plan commitments to ensure that the customer receives the best service possible.







Commitment	Jointly across SPD and SPM this year
● Send a welcome letter and info pack to every new customer on the Priority Services Register (PSR).	Embedded in standard business process.
● Contact vulnerable customers every 4 hours during an unplanned outage.	Embedded in standard business process – with flexibility for more frequent contact if needed.
★ Contact all vulnerable customers in advance of planned power interruptions.	Embedded in standard business process to contact by letter and phone – face to face visits targeting 100% Vulnerable Customers ahead of every planned outage.
● Hot meals, drinks and company offered to vulnerable customers after 12 hours during exceptional events.	Embedded in standard business process.
● Winter packs issued to PSR customers.	Delivered to all of our PSR registered customers who request a pack as a standard business process – with assistance from Red Cross partners during significant events.
● Automatic compensation payments following a fault to all PSR customers post 12 hour restoration during exceptional events.	Embedded in standard business process.
● Proactively contact all PSR customers at least every 2 years.	Embedded in standard business process.
★ We will always ensure our people are trained to recognise and deal with vulnerable customers sensitively.	288 staff completed Institute of Customer Services training this year gaining qualifications building on the training delivered to all front line staff last year.
● We will continue to establish mechanisms to share information on vulnerable customers with other agencies and authorities.	Data sharing through informed consent in place. 146 partnerships helping to shape our strategy, provide delivery services to our customers, and support customers throughout events.
★ We will engage with our communities to make them aware of our Priority Services Register and work in local communities impacted by outages to ensure they have access to hot meals, drinks and company. We will continue to work with Emergency Planning Officers to provide support to our vulnerable customers during outages.	Targeted awareness carried out to promote Priority Services Register in our communities through a number of channels specifically aimed at reaching vulnerable customers. Stretching targets in place to ensure we have 80% of customers signed to our register for each category where they are eligible.
● We will establish an additional fund within ScottishPower's existing Energy People Trust to target initiatives to help vulnerable customers.	As part of our ongoing review of our social plan and in conjunction with our stakeholders we have removed this from our plan and have focused our initiatives in areas of greater need.
★ We will deliver initiatives that will help the fuel poor by working with agencies such as Energy Action Scotland, National Energy Action, Scottish Government Fuel Poverty Group, etc.	We work with 66 local partnerships to deliver 10 support services to our customers, of which 2,654 services were delivered this year. In total across the 32 support services (10 delivered by partners, 22 by SPEN) we delivered a total economic value of £2.11m.
● We will continue to work with agencies to understand how we can collaborate to best support our customers and communities.	We have worked closely with a number of agencies to understand vulnerability, customer needs and how we can best offer support.




Appendix A:


Stakeholder engagement


We put stakeholders at the heart of what we do; it's part of our culture. Our comprehensive strategy has grown in maturity, and is embedded in our organisation at all levels. We deliver it with passion, belief and strong executive leadership, placing robust, meaningful engagement at the core of all our activities.

Commitment	Jointly across SPD and SPM this year
 We will continue our annual customer awareness campaign to raise awareness of who SP Energy Networks are, and information of when and how to contact us.	<p>Over a 2 year period APR17-APR19 the % of calls to 105 vs non-105 increased from 27.20% to 45.75%.</p> <p>We had 187,000 new registrations this year taking our Priority Services Register (PSR) to 920,000, which is 26% of our customer base.</p> <p>We have had our most successful year of press coverage with a reach of over 5 billion.</p>
 We will report our performance against plan and outputs at an annual stakeholder event.	<p>Performance reported to stakeholders at Strategic Stakeholder Panels and annual district updates. We have introduced two new stakeholder conferences to enable a more diverse cross section of stakeholders to engage directly with CEO and Executive Team. We have introduced a new quarterly stakeholder report, published on SPEN website.</p>
 We will provide an annual stakeholder communication on our engagement activities and actions.	<p>Annual stakeholder engagement report provided to Ofgem and key stakeholders and publicised on our website. Regular online newsletters to stakeholders with details of industry developments, innovations and investment. We have also introduced a new online diary of events on the SPEN website, allowing stakeholders to register online and view contact details for the direct teams involved.</p>
 We will further develop our online community to support our stakeholder, customer and employee engagement programmes.	<p>Online community improved with extensive investment in portal making it more user friendly and creating better opportunity for stakeholder engagement.</p>
 We will introduce an annual programme so stakeholders know what engagement to expect.	<p>Embedded business processes for engagement planning supported by our IT system are providing a robust, multi-layered annual engagement programme. We have rising numbers of internal users on the system, allowing for greater sharing of engagement knowledge.</p>
 We will embrace stakeholder engagement as 'business as usual' and will build on the approach of more focused and centralised engagement.	<p>Our score has risen from 6.35 in 2018 to 6.76 in 2019 for the Stakeholder Engagement Incentive, also increasing our ranking amongst DNO's. This demonstrates impressive progress year-on-year in an incentive scheme which requires significant annual improvement to maintain score.</p> <p>Following robust analysis of our governance, processes and procedures from external accreditors – Accountability, our maturity score has risen to 72%, up six percentage points, placing us in the top 16% of companies assessed globally since 2012.</p>

 Substantially ahead of 2018/19 target

 On 2018/19 target

 Partially or marginally below 2018/19 target

 Substantially below 2018/19 target

Appendix A: Connections

Our network is expanding to accommodate renewable generation more quickly than any other DNO. We are providing a better service for new connections by adhering to our business plan commitments.

Commitment	SPD this year	SPM this year
● Contact the customer within 1 working day of receiving their application to provide a single point of contact to manage their project through our quotation process.	We endeavour to contact the customer within 1 working day of receiving their application as a standard business process.	We endeavour to contact the customer within 1 working day of receiving their application as a standard business process.
● Reduce the average time taken to issue quotations year on year.	Improved our average from last year of 3.2 to 2.9 days for single premises.	Maintained our average from last year of 4.8 days for single premises.
● Contact the customer within 2 working days of receiving their payment to provide a single point of contact to manage their project through our delivery process and where possible provide a date for connection.	80.2% contacted within 2 days.	90.5% contacted within 2 days.
● Engage and proactively work with our customers to meet their preferred completion and 'power on' date.	97.7% of completion dates are as agreed with customer.	99.3% of completion dates are as agreed with customer.
● Reduce the average time to deliver connections year-on-year. (The Time to Connect targets are 42.08 for a single property and 52.70 working days for multiple properties).	Our average time to connect was 54.3 working days for single premises, and 69.3 days for multiple premises.	Our average time to connect was 52.8 working days for single premises, and 66.6 days for multiple premises.
● A 'Process Explained' leaflet will be issued to all customers at initial enquiry stage and is available on the website.	Embedded in standard business process.	Embedded in standard business process.
● Ask our customers when they want their quote and work with them to deliver a fast-track quotation and connection when they need it.	77% of quotes provided within timescales agreed with customer.	63.3% of quotes provided within timescales agreed with customer.
● Continually develop and improve our processes, based on our customer's expectations and customer feedback.	Ongoing activity – as per our ICE plan.	Ongoing activity – as per our ICE plan.
● Our processes and internet site will be continually developed and improved, based on our customer expectations and feedback.	Wide range of customer-facing improvements delivered with supporting feedback received from our Major Customer Monthly Survey.	Wide range of customer-facing improvements delivered with supporting feedback received from our Major Customer Monthly Survey.
● Incentive on Connections Engagement ICE.	Engagement drove 13 improvement actions – 100% of which already delivered.	Engagement drove 13 improvement actions – 100% of which already delivered.
● Ensure our average time to deliver connections is in the top group of DNOs.	8th in the DNO league table in Ofgem's 2017/18 Annual Report.	11th in the DNO league table in Ofgem's 2017/18 Annual Report.
● Reduce our general load investment trigger by 20%, enabling quicker connections in future.	We are on-target and delivering against our load related reinforcement plan to facilitate capacity in demand congested areas of network.	We are on-target and delivering against our load related reinforcement plan to facilitate capacity in demand congested areas of network.

Appendix A:

Connections (*continued*)

Commitment	SPD this year	SPM this year
● Use innovative solutions to meet the uptake of low carbon technologies.	We have connected customers using non-firm flexible connections and will be deploying wide scale Active Network Management over the next few years.	We have connected customers using non-firm flexible connections and will be deploying wide scale Active Network Management over the next few years.
● Ensure our customers are kept informed of the connection process throughout every stage.	Embedded into business process – monitoring and reporting in place to deal with exceptions.	Embedded into business process – monitoring and reporting in place to deal with exceptions.
● Be proactive in our approach, minimising the need for customers to have to contact us – we will contact them first.	Embedded into business process – monitoring and reporting in place to deal with exceptions.	Embedded into business process – monitoring and reporting in place to deal with exceptions.
● Communicate with our customers through their media channel of choice.	Customers preference of available channels captured in our systems.	Customers preference of available channels captured in our systems.
● Develop communication plans tailored to meet individual needs.	Customer communications recorded in our systems, monitoring in place to drive continuous improvement.	Customer communications recorded in our systems, monitoring in place to drive continuous improvement.
● Through our communication plans we will remove any uncertainty.	Ongoing activity – as per our ICE plan.	Ongoing activity – as per our ICE plan.
● Actively engage customers and stakeholders through events, monthly surgeries, surveys and one to one meetings to understand their ongoing needs.	Ongoing activity – as per our ICE plan.	Ongoing activity – as per our ICE plan.
● Continue to work with our major customers to further improve the service we offer.	Ongoing activity – as per our ICE plan.	Ongoing activity – as per our ICE plan.
● Build our business, operating and improvement plans around the needs of our customers and stakeholders.	Ongoing activity – as per our ICE plan.	Ongoing activity – as per our ICE plan.
● We will continue to work proactively with 3rd party groups wishing to connect to our network.	Partnerships and bi-annual workshops established in 2017.	Partnerships and bi-annual workshops established in 2017.
● We will continue to promote competition in every way we can.	Covered in our adoption of Competition in Connection Code of Practice, for example additional data on loadings and network maps provided.	Covered in our adoption of Competition in Connection Code of Practice, for example additional data on loadings and network maps provided.
● We will continue to engage with Ofgem and ICPS to extend the boundaries of competition.	Ongoing engagement – including 2 dedicated workshops in SPD's area.	Ongoing engagement – including 2 dedicated workshops in SPM's area.

★ Substantially ahead of 2018/19 target

● On 2018/19 target

● Partially or marginally below 2018/19 target

● Substantially below 2018/19 target

Appendix A: Environment

We recognise the significance of our impact on the environment, both as a direct result of our operations and, indirectly, by helping stakeholders achieve their own environmental goals.

Commitment	Jointly across SPD and SPM this year
<ul style="list-style-type: none"> ● Utilise Smart Meter technology to ensure all generation sources are supported quickly. 	<p>SPEN has implemented an IT solution which allows us to connect to the UK's smart metering infrastructure. SMETS2 installations in 2018/19 were lower than the Supplier forecasts, so the number of smart meters connected to our system is low, and as a result we have very low volumes of useful data. Now that SMETS1 meters are no longer being installed, we expect the volume of SMETS2 meters to increase significantly in 2019/20.</p>
<ul style="list-style-type: none"> ● Connect 4.5GW of Distributed Generation by 2018, with up to 5.5GW of generation connected to our network by 2023. 	<p>Across both licensees to date we have connected 4.23GW of generation to the existing network across a variety of sources.</p>
<ul style="list-style-type: none"> ● Carry out 'Smart' asset replacement — using future proofed assets where justified. 	<p>Our LV Engine is a flagship £8.3m innovation project carrying out a globally innovative network trials of Smart Transformers to facilitate the connection of LCTs. This along with our portfolio of 17 innovation projects enhance our innovation strategy to think big, start small and scale fast.</p>
<ul style="list-style-type: none"> ★ Identify low carbon technology hotspots using network monitoring, data from Smart Meters and stakeholder engagement. 	<p>We have now fully implemented the next generation of heat maps. These have been developed through extensive consultation with our stakeholders and are available on our website: www.spenergynetworks.co.uk/pages/connection_opportunities.aspx</p>
<ul style="list-style-type: none"> ● Underground 85km of overhead lines in Areas of Outstanding Natural Beauty. 	<p>We continue to target measures to reduce the visual impact of our network by 2023 by removing over head lines from AOB. We are currently behind in our target, which can be attributed to long waits for planning consents in these sensitive areas and the need to minimise adverse effects. This year we removed a further 0.84 km of overhead line and installed 0.69 km of underground cable in areas of Outstanding National Beauty (ANOB), National Scenic Areas (NSA) and National Parks.</p>
<ul style="list-style-type: none"> ● Install lower transformers to reduce losses by 50% at more than 1,111 of our secondary substations. 	<p>Since the start of ED1 we have installed 270 lower loss transformers, with 63 installed in reporting year 2018/19.</p>
<ul style="list-style-type: none"> ★ Reduce our carbon footprint (excluding network losses) by 15% by 2023. 	<p>We achieved our 2023 target of a 15% reduction in emissions in 2015 and continue to exceed this reduction year on year. Our BCF for SPD & SPM has reduced by a further 10% in 2018/19.</p>
<ul style="list-style-type: none"> ★ Use electronic vehicle management system to optimise our vehicle utilisation keeping vehicle numbers, broadly similar in ED1. 	<p>Our vehicle tracking system continues to allow us to track our mobile assets and their emissions effectively. Vehicle numbers remain the same as we progress with the purchasing of new fleet vehicles.</p>

Appendix A:

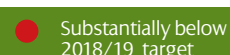
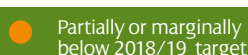
Environment *(continued)*

Commitment	Jointly across SPD and SPM this year
<ul style="list-style-type: none"> ● Monitor and reduce the energy used within our substations, invest in lower carbon buildings and reduce energy use in existing buildings. 	<p>Energy consumed within our depots and substations is our second biggest emissions contributor after losses, and it is therefore imperative that we work to reduce the energy we consume at our sites. In this reporting year we have carried out energy efficiency upgrades at six of our sites. Five sites have received LED lighting and motion sensors. Three sites have new heating systems, and two sites have benefited from draft prevention measures including replacement windows and draft prevention doors. Our buildings energy use continues to steadily reduce in both SPM and SPD with a 1.2% reduction in this reporting year for kWh consumed.</p>
<ul style="list-style-type: none"> ● Reduce costs to customers by developing modern "Smart Grid" network solutions. 	<p>We are actively involved in the industry-wide collaboration project Open Networks which aims to find solutions to the network challenges we face by redefining how electricity networks operate, and laying the foundations of the smart grid in Great Britain. Within our own network we continue progress on our projects that encourage greater network flexibility such as Dumfries and Galloway Integrated Network Management and Fusion with our planned East Fife trial.</p>
<ul style="list-style-type: none"> ● Increase the use of electric vehicles and charging points. 	<p>Since the start of ED1 we have installed 39 vehicle charging points at 18 of our offices. This compliments the introduction of 29 electric vehicles to our fleet of pool cars.</p>
<ul style="list-style-type: none"> ● Install oil containment around all new and high risk plant containing high volumes of oil. 	<p>In 2018/19 we have worked 20 of our sites installing oil containment around plant equipment.</p>
<ul style="list-style-type: none"> ● Exceed IEC international standards for SF6 switchgear by specifying a maximum leakage rate five times more stringent for 33kV and below and twice as stringent for higher voltages. 	<p>We have embedded this in our processes and systems for procuring and specifying equipment.</p>
<ul style="list-style-type: none"> ★ Reduce oil leaks by 50% through the replacement of poorly performing 132kV cable in SPM. 	<p>Our policy of strategic leak repair and asset replacement of oil filled cables has resulted in a 63% reduction in fluid leaks since the beginning of ED1.</p>
<ul style="list-style-type: none"> ● Engage on the environmental impacts of our developments from a very early stage. 	<p>We have a dedicated Environment and planning team who engage with our engineers and legal teams in our developments early stages as a standard business process.</p>
<ul style="list-style-type: none"> ● Utilise low carbon alternatives to travel, through the use of technology and smarter ways of working. 	<p>In 2018/19 our Business Transport for SPD & SPM combined has reduced by 6%. The reduction is a result of accurate apportionment between our licenses, travelling less, competitive rail pricing and increased staff awareness of carbon emissions from travel.</p>

Appendix A: Health & Safety

Health and safety goes right to the heart of all our operations, it cannot be achieved successfully unless it is fully integrated with all other aspects of day-to-day business management.

Commitment	Jointly across SPD and SPM this year
● Lead the industry for public safety.	Zero Improvement Notices, Prohibition Notices or Prosecutions.
● Maintain a positive relationship with the Health and Safety Executive (HSE) through positive engagement.	A range of discussions held with the HSE on a number of network related topics including HSE Priority Interventions with all Distribution Network Operators, managing public safety and metal theft.
● Lead an effective risk based public safety programme.	Wide range of initiatives including demonstrations and stalls at numerous agricultural shows including the Royal Highland Show, Anglesey Show and Royal Cheshire Show, support of safety education centres and Crucial Crew events.
● Safeguard residents of flats and tenement buildings by continuing our major investment programme to modernise service positions and cables.	SPEN spent £15.2m modernising the electricity supply to residents of flats and tenement buildings in 2018/19.
● Eradicate all low overhead line clearances across roads by April 2015 and continue to enhance public safety by upgrading all of our overhead line clearances to the latest industry technical standards by 2020.	SPEN spent £24.7m on OH Clearances in 2018/19.
● Increase the rate at which we modernise our substations by over 20%, improving safety and security of supplies at a lower overall cost.	SPEN replaced 1,168 items in High Voltage Substations in 2018/19.
● Meet or improve upon our accident rate performance metrics defined within our internal continuous improvement Health and Safety operating plans.	Staff Lost Time Accident Rate improved from 0.18 to 0.10.
● Conduct thorough incident investigations, learn lessons quickly and implement changes to make our business safer.	8 Panels of Inquiry were conducted and a review of the governing process was completed in 2018/19.
● Help our contracting teams to reduce their accident rate.	The Contractor Lost Time Accident Rate improved from 0.58 to 0.30.
● Put the 'Health' into Health and Safety – our employees will benefit from a risk based occupational health monitoring programme.	735 employees attended Health Surveillance Monitoring appointments in 2018/19.
● We will safeguard our staff, members of the public and minimise disruption to supplies by implementing additional security measures to reduce the impact of interference and metal theft at our high-risk substations.	Substation security continues to improve with the fitting of new encoded padlocks.



SP Distribution and SP Manweb

Annual Performance Report 2018/19

Appendix B

Our business

Appendix B: Our biggest assets are our people

Develop and train our staff for a 'smarter' future and replenish our ageing workforce from the communities that we serve so that the investment that we make in recruitment and training continues to deliver in the long-term.

We have moved forward with our plans to develop our internal team members and new recruits to the business. We recruited our traditional programmes of Apprenticeships and Graduates complemented by our Adult Apprenticeship for candidates that have joined the business with enhanced skills and maturity. In addition, we have recruited Power Engineering Apprentices and introduced a new conversion programme for Engineers from related industries to increase the Engineering capability across the business.

For our internal teams we have delivered a new wave of Engineering Trainees for our Industrial Staff Trainee programme which will upskill our Industrial Team Members to Operational Engineers within the business. The combination of these programmes has seen the business spend over 61,000 hours of Technical Training in our Technical Training Centres at Hoylake and Cumbernauld.

Industrial Trainees

We delivered against our plans to continue to grow our own talent and develop our teams from grass roots. To achieve this we recruited 28 Apprentices and 23 Trainee Craftspersons to complement our industrial trainee talent pool. We are developing this team to reach multi craftsperson level across all three trade types of Fitting, Jointing and Overhead lines.

Engineering Skills

We provide a consistent level of support in this area. We have attended 27 High Schools, 8 Universities, 9 Colleges and 25 Community, Volunteering and Primary School events, both locally & regionally. We have piloted our new Bright Futures scheme, giving a week's work experience to pupils from areas with second and third generation unemployment. By supporting these organisations we are positively promoting our business, supporting the communities we serve and are providing opportunities for our trainees to develop their interpersonal skills, providing them with a more holistic training programme.

69

events promoting
engineering
opportunities



51

Industrial trainees
recruited



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Appendix C

Glossary

Appendix C:

Areas of Outstanding Natural Beauty (AONB)

Means protected landscapes in England, Wales and Northern Ireland as defined in the National Parks and Access to the Countryside Act 1949 (and includes National Scenic Areas in Scotland, as comparable to AONBs). Ofgem provide DNOs with an allowance for undergrounding overhead lines in these areas.

Customer Satisfaction Broader Measure of Customer Satisfaction (BMCS)

This is an industry-wide survey of the views of our customers on our levels of service. It covers customer satisfaction, social obligations, complaint handling and how we engage with our stakeholders. It both rewards and penalises performance against the targets.

Customers Interrupted (CI)

The number of customers in every 100, whose supplies have been interrupted per year over all incidents, where an interruption of supply lasts for three minutes or longer, excluding re-interruptions to the supply of customers previously interrupted during the same incident.

Customer Minutes Lost (CML)

The duration of interruptions to supply per year – average customer minutes lost per customer per year, where an interruption of supply to customer(s) lasts for three minutes or longer.

Distributed Generation (DG)

Generation connected to the distribution network, such as wind turbines, domestic solar panels, photovoltaic farms, hydroelectric power and biomass generators.

Distribution Network Operators (DNOs)

DNOs are the organisations that look after the networks transporting electricity to end users such as homes and businesses. In England and Wales, DNOs manage the network from 132,000 down to 230 volts. In Scotland, DNOs manage the network from 33,000 volts to 230 volts. The UK distribution network is divided into 14 distribution areas and these are managed by 6 DNOs.

Distribution System Operator (DSO)

The DSOs role will be to maintain system security and quality of service in distribution networks in order to serve network customers. The DSO will help with market facilitation, encourage transparent and non-discriminatory access, and ensure security of system and quality of service.

ED1

ED1 (Electricity Distribution) 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.

Exceptional Event (Often referred to as a Severe Weather Event or Significant Event)

An event where the number of incidents caused by the event at distribution higher voltage in that period is equal to or greater than the commencement threshold number. In SPD the threshold is 76 and in SPM the threshold is 68. 'Distribution Higher Voltage' means any nominal voltage of more than 1,000 volts up to and including 132 kilovolts (except in Scotland, where it means any nominal voltage of more than 1,000 volts but less than 132 kilovolts).

Appendix C:

Fluvial Flood

Flooding that occurs as a result of flooding from rivers and watercourses.

Guaranteed Standards of Performance (GSOPs)

These are the minimum levels of service to be met across a range of customer facing activities, including how we manage power cuts, connections and customer complaints. If we fail to provide the level of service required, we make a payment to the customer affected. There can be certain exemptions to these compensation payments, for example during extreme weather events.

Health and Safety Executive (HSE)

The government body responsible for enforcing health and safety legislation.

Incentive on Connections Engagement (ICE)

This is an incentive designed to encourage DNOs to improve the way they communicate with major connections customers.

Interruption Incentive Scheme (IIS)

The Interruptions Incentive Scheme (IIS) sets targets for planned and unplanned electricity power cuts. Performance is measured by both number and duration of power cuts. The mechanism both rewards outperformance and penalises underperformance against the targets.

Low-carbon Technology (LCT)

Technologies designed to reduce the amount of carbon we use, including electric vehicles, heat pumps, wind turbines and solar panels.

National Parks

Means the areas that are designated as protected areas as defined in the National Parks and Access to the Countryside Act 1949.

National Scenic Areas

Means the areas that are defined in the Town and Country Planning (Scotland) Act 1997 as being of outstanding scenic value in a national context.

Network Operating Costs

Expenditure on operating and maintaining the network, e.g. fault repair, tree cutting, inspection and maintenance, engineering and business support costs.

Appendix C:

Priority Service Register (PSR)

Our register of vulnerable customers, enabling us to provide additional support when required. Stakeholder Engagement and Consumer Vulnerability (SECV) Incentive Drives network companies to engage with stakeholders and address consumer vulnerability issues. The SECV Incentive is designed to only reward network companies for high quality activities or outcomes that go beyond business as usual. Network company provide a submission to the regulator in relation to engagement activities carried out during the regulatory year in question. The regulator will assess this submission in three stages (internal assessments, panel assessment and an external consultant assessment for the consumer vulnerability).

Smart Meter

Advanced gas and electricity metering technology that offers customers more information about, and control over, their energy use (such as providing information on total energy consumption in terms of value, not only volume), and/or allows automated and remote measurement.

Time to Connect and Time to Quote

This new incentive will measure the time taken from initial application received to the issue of a quotation and the time taken from quotation acceptance to connection completion. The incentive will capture minor connections customers. No exemptions apply.

The Time to Quote targets are 8.21 working days for a single property and 11.73 working days for multiple properties.

The Time to Connect targets are 42.08 for a single property and 52.70 working days for multiple properties.

Unrestricted Domestic Tariff

The estimated annual cost of distribution to the typical domestic customer under the Common Distribution Charging Methodology, assuming a certain level of consumption for the chosen customer category and the total allowed income that is being targeted (reflecting previous under/over recoveries and various incentives).



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