



# RIO-ED1 Business Plan Commitments Summary Report

Year Five 2019/20

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## The purpose of this report

Each year we publish a report for our stakeholders, with details of our progress against our eight-year business plan for the RIIO-ED1 price control (April 2015 to March 2023).

In our plan we made 76 commitments in the following six categories.

- **Safety**  
Reducing risk to our staff and the general public.
- **Reliability**  
Improving the performance of our network.
- **Environment**  
Reducing our effect on the environment and supporting the Government's plans for a low carbon energy future.
- **Connections**  
Providing an efficient service for customers connecting to the network.
- **Customer satisfaction**  
Maintaining excellent customer service.
- **Social obligations**  
Supporting customers in vulnerable situations.

Within this report you will find information which demonstrates the commitments we made in our business plan and our performance against these during 2019/20.



# Welcome from our CEO

**WPD has overseen a range of exciting new developments as the business continues to evolve and adapt to the challenges posed by the UK's low carbon transition.**

As the way our customers use and generate energy changes, we are establishing new ways to operate the network and providing enhanced services.

Against this backdrop of change we continue to work hard to ensure that we provide the highest levels of network reliability and service possible to our **7.9 million customers**.

We made a range of commitments for the current eight-year regulatory price control period and this report provides a summary of our performance in year five. We continue to be on track to outperform the majority of these targets as well as responding to the changing requirements associated with a smarter, more flexible energy system.

We have reduced the number of customer interruptions and customer minutes lost that customers experience as a result of power cuts, scored highly for customer satisfaction, reduced our business carbon footprint, beaten targets for the time it takes to deliver a new connection and **supported 18,652 fuel poor customers** to make enduring **annual savings of £10.7m**.

In addition, we have significantly expanded the scope of the flexibility services utilised on our network, procuring 220MW of flexible services, **impacting over 800,000 customers** and achieving **£26.4m of avoided expenditure on reinforcement**.

The close of the 2019/20 regulatory year was overshadowed by the impact of the Covid-19 but the manner in which our staff were able to adapt to these challenges ensured essential services have been delivered with an unwavering focus on customer service. This ability to adapt quickly means I am confident that WPD will continue to deliver excellent service for our customers over the course of the remainder of RIIO-ED1 and beyond.

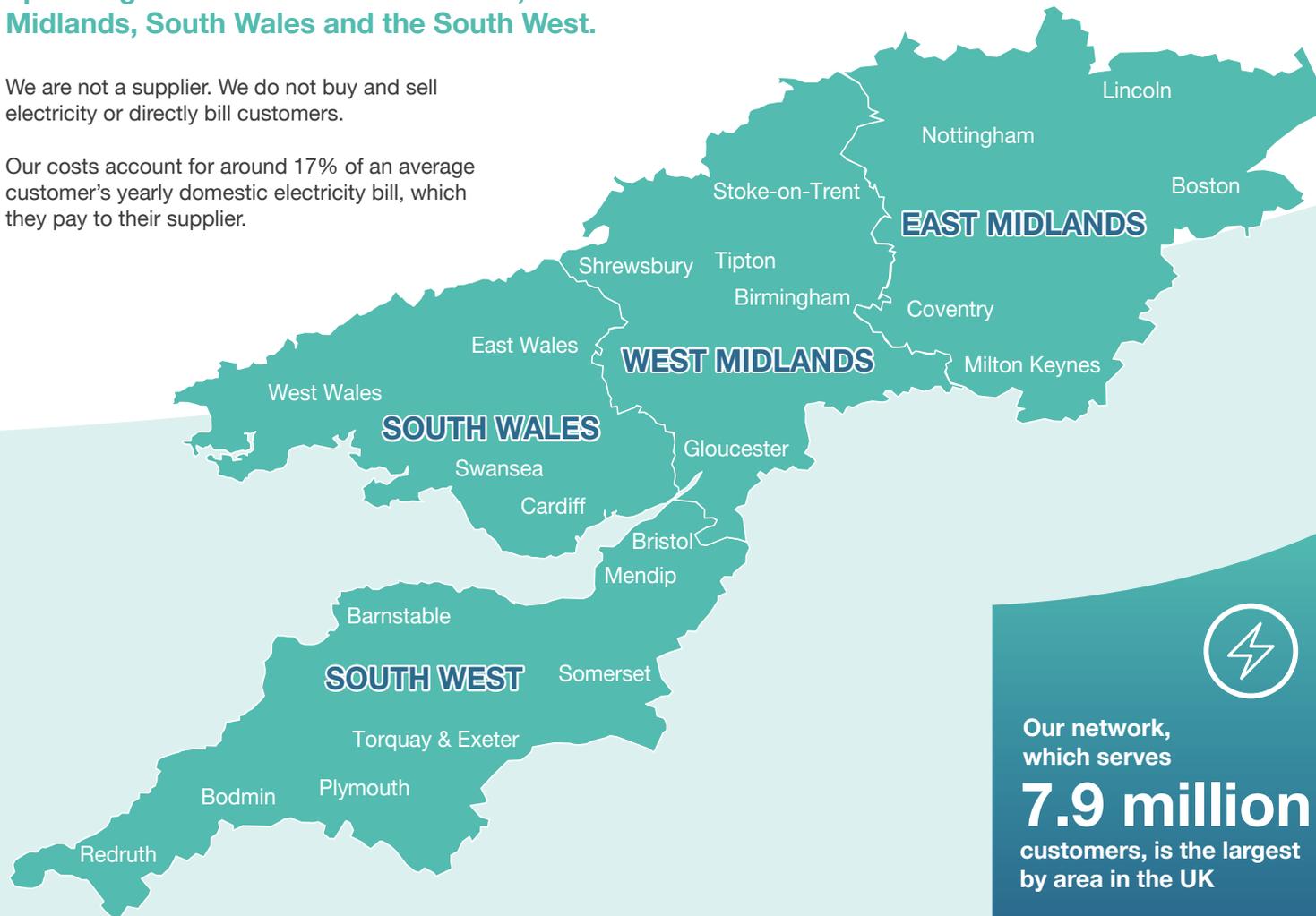
**Phil Swift**  
CEO Western Power Distribution

# Who we are

We are one of six Distribution Network Operators (DNOs) who deliver electricity to homes and businesses. Our network is the largest in the UK, operating from the Lincolnshire coast, across the Midlands, South Wales and the South West.

We are not a supplier. We do not buy and sell electricity or directly bill customers.

Our costs account for around 17% of an average customer's yearly domestic electricity bill, which they pay to their supplier.



  
Our network, which serves **7.9 million** customers, is the largest by area in the UK

# What we do



**Keep the lights on**  
by operating our network assets effectively



**Maintain equipment**  
so that the network remains reliable



**Fix the network**  
if equipment gets damaged or is faulty



**Connect customers**  
by upgrading existing networks or building new ones



**Operate a smart system**  
by managing two-way power flows and flexibility services

# 2019/20 Highlights

Accident rate fell to  
**0.75 accidents**  
per 100 staff



**88%**  
of customers affected by  
a high voltage fault had  
their supply restored  
within one hour



Power cuts  
have reduced by  
**40%**



Reduced leaks from  
oil-filled cables by  
**55%**



**8.99 out of 10**  
for overall customer  
satisfaction



**Over 1 million**  
customers provided  
with safety information



Our average response  
time for fault and  
emergency customer  
calls was  
**1.91** seconds



**£26.4m**  
of reinforcement  
deferred/avoided due  
to flexible services



Engaged with over  
**17,000**  
connection  
stakeholders



**18,652**  
fuel-poor customers  
supported to save  
**£10.7 million**



**20% reduction**  
in our business  
carbon footprint



Our Priority Service  
Register customers  
rated our service as  
**9.5 out of 10**



# Stakeholder engagement



## Updating our plans in line with feedback

**Every year we hold stakeholder engagement workshops in order to understand our stakeholders' priorities. We have implemented significant developments in the way that we engage with our stakeholders recognising that stakeholders expect our plans to address bespoke needs and priorities on an increasingly localised basis.**

In February/March 2020, stakeholders, representing local authorities, domestic customers, consumer bodies, businesses, developers, utilities and other DNOs, attended six sessions across our licence areas.

Feedback from these sessions has enabled us to identify some common themes, including how WPD will prepare the electricity network for the predicted extra demand associated with meeting the Government's target of net zero by 2050 and how we will respond to the more ambitious climate targets of some local authorities.

In response to feedback we continue to update our plans and have taken a range of important actions,

including working more closely with Local Authorities to refine our Distribution Future Energy Scenarios.

We have also consulted on our approach to implementing flexibility services. The consultation 'Delivering a Flexibility First Approach' sought stakeholder input to validate our approach to the use of flexibility as an alternative to conventional reinforcement.

In addition, during the year, over 17,000 customers have engaged with the connections-focused element of our engagement programme, which includes connections specific forums and 241 regional surgeries for connecting customers.

## Planning for the future – co-creating with our stakeholders

Providing the services our stakeholders want remains at the heart of our business. Their input is important in shaping our proposals for the future and the next price control period. We have worked with both our Customer Collaboration Panel and RIIO-ED2 Customer Engagement Group to pursue a programme of engagement which enables co-creation of objectives with our stakeholders.

This was tested with our annual stakeholder engagement workshops in February/March 2020 which resulted in the development of over 800 potential commitments for our RIIO-ED2 business plan.

These proposals will continue to be refined with our stakeholders as we develop our plans for the period 2023-2028.



# Customer Collaboration Panel's statement



## Independent challenge – the Customer Collaboration Panel's view

"The Customer Collaboration Panel (CCP) is a group of people who meet quarterly. The Panel has been in place for 12 years and currently has a pool of 30 permanent, expert members.

Members continue to bring skills and experience from a wide range of sectors, serving the interests, diverse needs and requirements of WPD's eight million business and domestic customers. The Panel continues to scrutinise WPD's 'Strategic Priorities' (previously agreed by stakeholders).

Our role in WPD's overall stakeholder engagement activities is seen as necessary and valuable. Our discussions resulted in 20 substantive actions and improvements in 2019/20 alone and more than 100 over the last five years.

We remain confident that our contributions, ideas and challenges drive WPD to act in the best interests of customers and look forward to another impactful year."

Some examples from 2019/20 are shown below:

Challenge	Actions and outcomes
<b>Stakeholder Engagement</b>	
"The CCP repeatedly highlighted the role of Local Authorities (LA) and Local Enterprise Partnerships (LEP) in the roll out of regional plans for low carbon technologies, most often in the context Electric Vehicle (EV) charging. The Panel suggested that WPD would need to work closely with LAs to implement local energy plans."	"In response to this WPD developed methods to present data by LA boundaries, making engagement easier. Furthermore, WPD committed to offer engagement to all Local Authorities in its four licence areas on Distribution Future Energy Scenarios – the feedback from that local engagement will be used at WPD's annual Local Network Investment sessions to further engage with and inform stakeholders"
<b>DSO/Smart Networks/Low Carbon Technology</b>	
"Cities within the WPD region have set out aspirations to become 'Net Zero', albeit using different criteria and at different timescales."	"WPD acknowledged the need to respond to these aspirations. Discussions covered future energy scenarios, Distribution System Operator and societal adoption of Electric Vehicles (EV). The Company set out several scenarios for the installation of chargers for EV. To achieve efficient investment the Panel encouraged liaison with Local Authorities. Alignment with congestion charge areas and traffic plans was considered to be a key part of an effective roll out. The Panel stressed the importance that rural customers should not be left out of the transition to Net Zero and access to EV chargers."
<b>Social Obligations</b>	
"'Power Up' is WPD's key fuel poverty action scheme. Every contact with a customer known to be vulnerable during a power cut is offered the opportunity of a direct referral to an expert partner who then offers a range of income, tariff and energy efficiency support and advice."	"The Panel worked with WPD to rebrand the 'Power Up' scheme and refresh the web pages which support this service with relevant and accessible information. In parallel the Priority Services Register (PSR) webpages were refreshed and reviewed. Panel members this year also helped to shape the Social Obligations workshop content, including the addition of a presentation about mental health to the agenda, and made suggestions to increase the breadth of representation among workshop attendees."



## The Customer Collaboration Panel report

More detail on the way in which WPD work with the CCP can be found in a detailed report for 2019/20. The full report can be found at this link:

[yourpowerfuture.westernpower.co.uk/our-engagement-groups/customer-collaboration-panel](https://yourpowerfuture.westernpower.co.uk/our-engagement-groups/customer-collaboration-panel)

# Output performance overview

Safety		
1	HSE Intervention	✓
2	ESQCR clearances	✓
3	Inspection and maintenance	✓
4	Accident frequency	✓
5	Powering Improvement	✓
6	Working with trade unions	✓
7	Investigating accidents	✓
8	Substation security	✓
9	Educational sessions	✓
10	Safety Literature	✓

Reliability		
11	Network performance	✓
12	Speed of restoration	✓
13	12 hour outages	✓
14	Guaranteed standards	⊗
15	Worst served customers	✓
16	Flood defences	✓
17	Tree clearance (resilience)	✓
18	Black start resilience	✓

Environment		
19	Low Carbon Technology (LCT) response time	✗
20	Identifying LCT hotspots	✓
21	Uprating assets – LCT hotspot areas	⊗
22	Developing smart solutions	✓
23	Using smart solutions	✓
24	Oversizing transformers for losses	⊗
25	Uprating cables for losses	⊗
26	Lowering vehicle emissions	⊗
27	Energy efficiency – buildings	✓
28	Reducing waste to landfill	✓

Environment		
29	Reducing Business Carbon Footprint (BCF)	✓
30	Reducing oil leaks from cables	⊗
31	Reducing SF <sub>6</sub> leaks	⊗
32	Installing bunds	✓
33	Undergrounding lines in AONBs	⊗

Connections		
34	Time to connect (all market segments)	⊗
35	Customer service	⊗
36	Customer surveys – distributed generation	✓
37	Online project tracking	✓
38	Online information	✓
39	Connection surgeries	✓
40	Improving processes	✓
41	Guaranteed standards	⊗
42	Raising awareness of competition	✓
43	Extending the scope of contestable work	✓

Customer Satisfaction		
44	Broad Measure of Customer Satisfaction (BMCS)	✓
45	Customer Service Excellence (CSE) certification	✓
46	Telephone response times	✓
47	Abandoned calls	✓
48	Call taker availability	✓
49	Providing restoration times	✓
50	Customer call backs – faults	✓
51	Customer call backs – non faults	✓
52	On demand services	✓
53	Self service options	✓
54	Customer Collaboration panel	✓
55	Stakeholder workshops	✓
56	Stakeholder report	✓

Customer Satisfaction		
57	One day complaint resolution	✓
58	Ombudsman complaints	✓
59	Power for life	✓

Social Obligations		
60	Understanding of vulnerable customers	✓
61	Training staff to recognise vulnerability	✓
62	Contacting Priority Services Register (PSR) customers	✓
63	Improving PSR data	✓
64	Working with suppliers on PSR issues	✓
65	Publicising the PSR	✓
66	Providing crisis packs	✓
67	Contacting medically dependent customers during faults	✓
68	Practical support during power cuts	✓
69	Feedback from customers	✓
70	Working with local resilience forums	✓
71	Database of referral agencies	✓
72	Fuel poverty website links	✓
73	Awareness campaigns of fuel poverty assistance	✓
74	Fuel poverty training for staff	✓
75	Identification of vulnerable households	✓
76	Outreach services	✓

Key	
✓	Achieved an annual output
⊗	Output on track, some aspects require further progress
✗	Not met an annual output

[Click here](#) to view the Glossary of our terms

# Safety Performance Summary 2019/20



Meeting health and safety law		
1	No improvement notices, prohibition notices and prosecutions from the Health and Safety Executive.*	No improvement notices or HSE prohibition notices were issued during 2019/20.
2	Complete work programmes to meet the Electricity, Safety, Quality and Continuity Regulations (ESQCR) 2002. ESQCR requires that overhead lines are a safe distance from either structures or the ground.	We have completed the programme for clearance distances to structures for all regions. We have completed 100% of the work scheduled in 2019/20 relating to the required ground clearance distances.
3	Complete inspection and maintenance programmes every year.	We've completed nearly all of the work scheduled for completion during the year.
Reducing accidents		
4	Reduce our overall rate for the frequency of accidents by 10%.*	Our accident rate in 2019/20 is better than the 10% improvement target set for the whole of RIIO-ED1.
5	Continue to play an active part in the ENA's 'Powering Improvement' initiative, which aims to lead to improved safety performance.	We took part in events designed around the ENA 'Powering Improvement' themes, including reviewing progress to date and ensuring last year's recommendations are implemented.
6	Work with our trade unions to improve safety performance, including the use of more 'behavioural safety' initiatives.	During RIIO-ED1 WPD has delivered a wide variety of behavioural safety training to its staff. Using this training as a foundation, during 2019/20 we have continued to reinforce key behavioural safety principles.
7	Investigate all accidents involving members of the public, contractors or our own staff to make sure that learning points are quickly understood and communicated.**	We investigated all 87 incidents that happened during the year (49 staff accidents, 29 contractor accidents and 9 significant incidents involving the public).
Substation security		
8	Improve security measures at 50 substation sites to reduce the number of repeat break-ins.*	The number of repeat break-ins has been lower than predicted. To date in RIIO-ED1, we have upgraded security measures at 19 sites that have had repeat break-ins.
Educating the public		
9	Organise and run over 1,000 educational sessions to provide safety information to over 400,000 schoolchildren.*	So far in RIIO-ED1, we have delivered a total of 15,840 educational sessions to 376,686 schoolchildren.
10	Continue to publish literature on maintaining safety around electrical apparatus and send more than 500,000 copies of this literature to targeted landowners, businesses or leisure operators.*	To date in RIIO-ED1, we have issued over 3.6 million safety leaflets and made these available to targeted groups through social media.

\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

\*\* Target to be achieved each year of RIIO-ED1

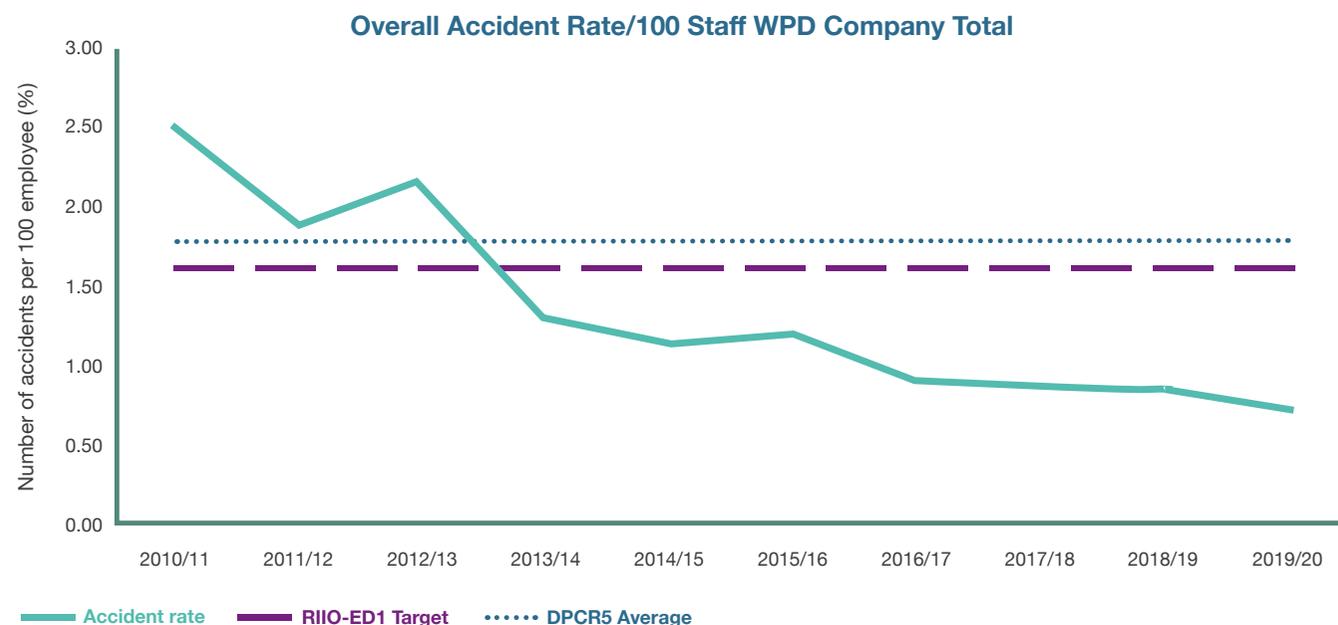
# Safety



## Accident frequency rates

Safety is at the heart of everything we do. We continually monitor accident rates and aim to improve our performance each year by involving our staff to tackle the underlying causes of accidents.

The number of accidents that have taken place remained low. We have already achieved our target for the price control period, but will strive to reduce the accident rate further. Our accident frequency rate for WPD as a whole during 2019/20 was 0.75 accidents per 100 staff.



## Safety Climate Survey

The ratings and feedback from a Safety Climate Survey, undertaken in 2018/19, highlighted a number of areas where our existing approach to safety could be enhanced. These findings have been incorporated into the company 2020 Safety Action Plan. Some actions, such as the implementation of the new lone working system have already been completed. We are also improving access to policy and guidance documents by the creation of a policy search app on all company mobile devices.

## New for 2019/20

During 2019/20 we have implemented a range of initiatives to promote safety and employee wellbeing, such as:



The introduction of a new lone working system 'LOST' across the business to improve communication and awareness of staff working alone



Actions to reduce vehicle accidents: including the installation of dashboard cameras and a Driver Behaviour System trial



Appointment and training of Mental Health First Aiders including attendance at a Mental Health First Aid certificated course



Continuing to add to the resources available to staff on the WPD Safety & Training website (e.g. the addition of videos promoting 'Mental Health Awareness').

# Safety

## Educating the public about electrical safety

Children and other members of the public may not always be aware of the possible dangers of the electricity distribution network. We have committed to providing 1,000 educational sessions to 400,000 schoolchildren over the course of RIIO-ED1.

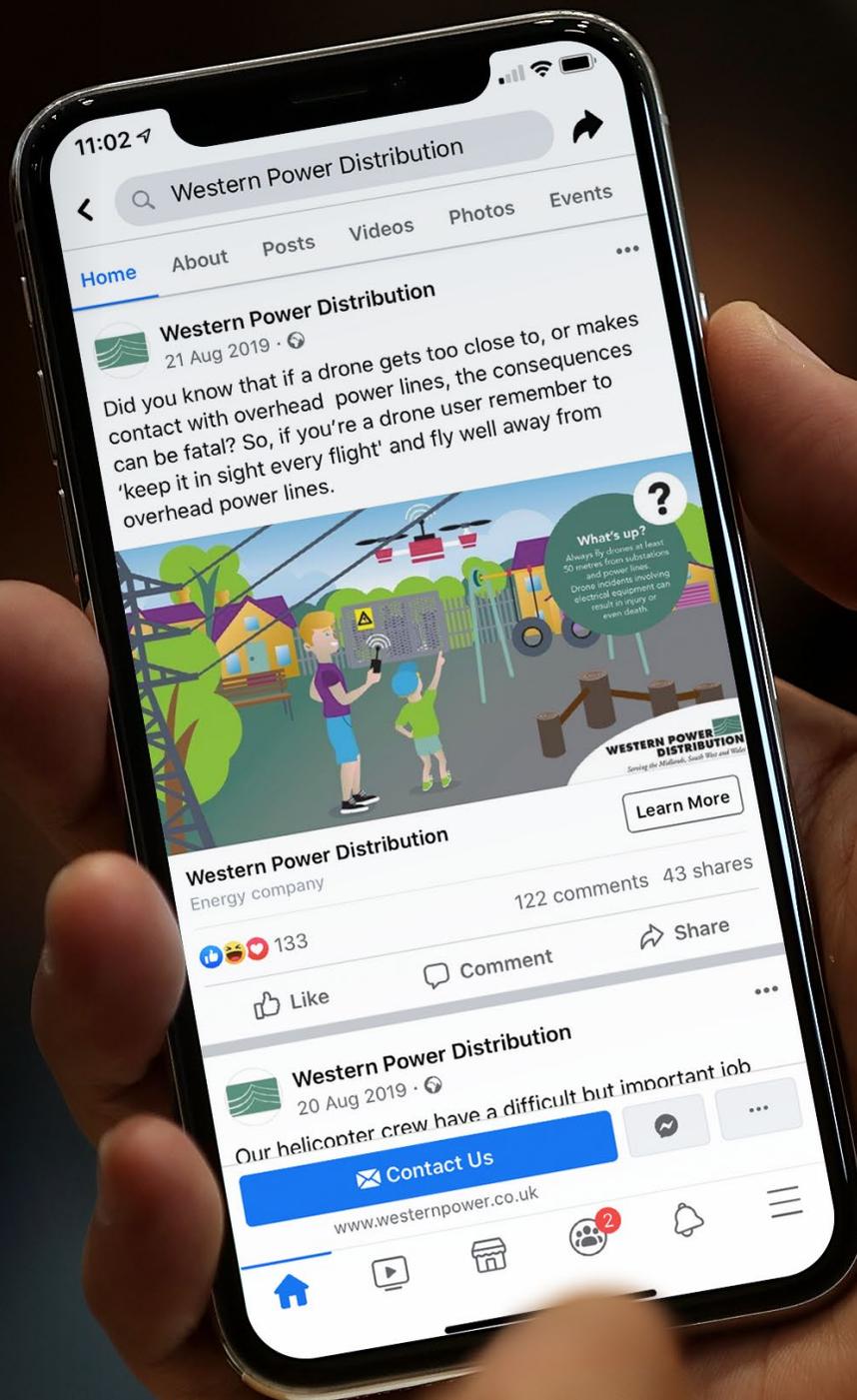
As well as safety sessions, we have also committed to distributing 500,000 safety leaflets over the course of RIIO-ED1 and we've used a variety of methods to reach over 3.6 million people to date.

This includes using social media to target groups who may be more at risk of coming into contact with electricity as a result of their leisure activities, and providing safety information to landowners who have equipment on their property.

## Public safety

We continue to utilise social media to promote safety to a wide range of people. During 2019/20 our Facebook campaigns to promote electrical safety appeared in the newsfeeds of 585,268 users.

This consisted of posts promoted to those in the agricultural industry and participants in leisure activities such as angling, camping and flying drones.



## Educational sessions

We carry out educational sessions in schools and at a range of events throughout the year, such as the Three Counties Show in Malvern.

These sessions allow us to raise awareness of the importance of electrical safety through a variety of engaging approaches, which include the use of virtual-reality technology, safety demonstrations and competitions.



During RIIO-ED1

**376,686**

schoolchildren have attended 15,840 educational sessions

# Reliability Performance Summary 2019/20



Network performance		
11	Improve network performance by the end of RIIO-ED1 so that, on average, customers will have 16% fewer power cuts and have their electricity supplies restored 23% quicker.*	Customer interruptions have reduced by 40% and customer minutes lost have reduced by 50% from the underlying performance benchmark.
12	Make sure that at least 85% of customers have their power restored within an hour of a high voltage fault happening.**	88% of customers had their power restored within one hour of a high voltage fault.
Guaranteed Standards of Performance (GSOPs)		
13	Reduce by 20% the number of customers experiencing a power cut which lasts for 12 hours or more.*	The number of customers without electricity for more than 12 hours (where the GSOP applied) was 70, an improvement of over 97.5% on our 2012/13 benchmark performance. Customers received a set payment where we failed to achieve the GSOP.
14	Achieve no failures on all other GSOPs.**	We had no failures against most GSOP categories. However, we failed to notify 14 customers of planned interruptions to their electricity supply and failed to meet the standard for restoring supply following a storm for 12 customers.
Worst served customers		
15	Reduce by 20% the number of customers classified as worst served.*	To date, projects to reduce the number of worst served customers have been put in place for 12,681 customers. Our target for the whole of RIIO-ED1 was 6,812 customers.
Making our network more resilient		
16	Apply flood defences to 75 substations, reducing the risk of both damage to equipment and power cuts due to flooding.*	We are on track to achieve our RIIO-ED1 targets. To date, we have installed flood defences at 72 substations.
17	Speed up the programme of tree clearance (specifically related to storm resilience) by 40%, with the aim of clearing 700km of overhead lines per year (delivering the programme five years earlier than suggested by Government guidelines).*	The programme is ahead of plan. We have completed 65% of the programme of tree clearance for resilience that we committed to for the whole of RIIO-ED1.
18	Improve substation battery life to last for 72 hours if there is a major, network-wide power loss.*	All programmes are ahead of plan. <b>Protection batteries</b> – 85% of eight-year programme complete. <b>SCADA batteries</b> – 81% of eight-year programme complete. <b>Telecommunications sites</b> – 92% of eight-year programme complete.

\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

\*\* Target to be achieved each year of RIIO-ED1



# Reliability

## Continuing to improve our network reliability

Network reliability remains a top priority. We regularly inspect, maintain, and if necessary replace our equipment to ensure our network performs effectively.

As we move towards a low carbon future, the way stakeholders use and generate electricity is changing and so it is important that our network can allow the connection of electric vehicles and heat pumps, and provide the means to distribute locally produced generation.

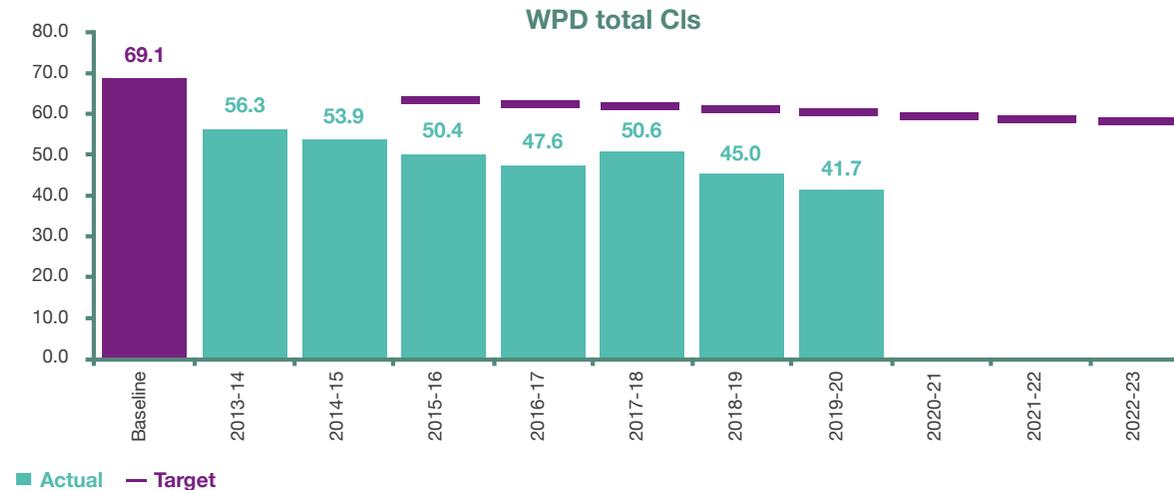
We reinforce our network where required to ensure it has the capacity to cope with the demands placed on it.

To ensure that the impact of faults on customers is minimised, we reduce the time that power cuts last by using automation on the network to redirect supplies and prioritise restoring customers' electricity supplies quickly.

All of these actions mean that our performance is better than our targets.

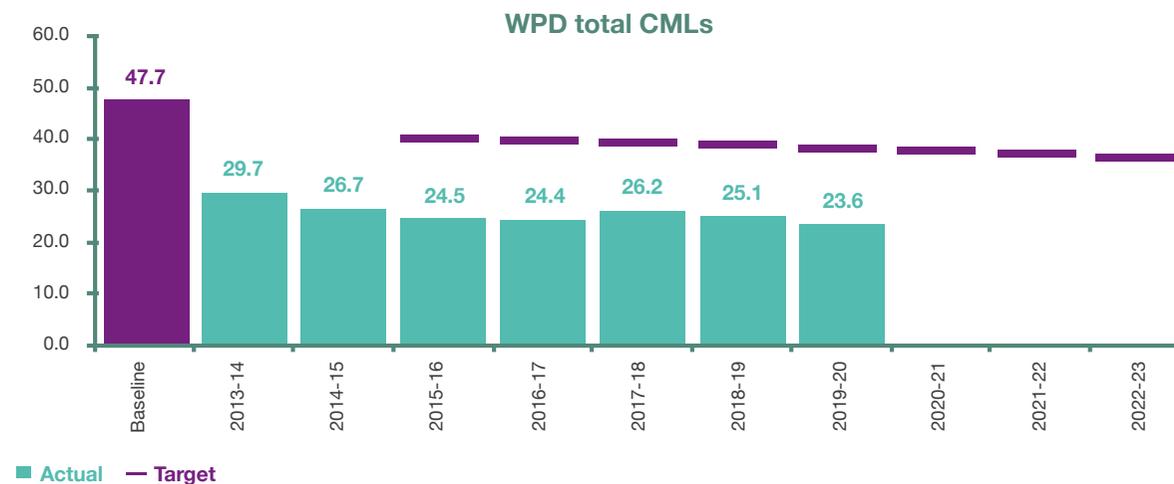
## Customer interruptions (CIs)

Customer interruptions measure the average number of power cuts per 100 customers.



## Customer minutes lost (CMLs)

Customer minutes lost measure the average length of time that each customer is without power.



# Reliability

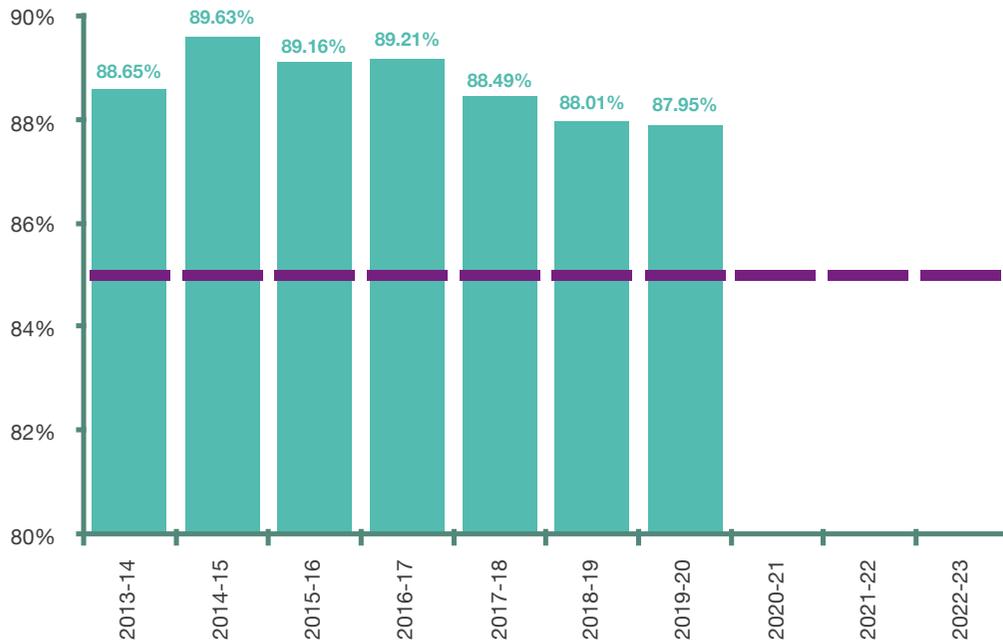
## Beating our restoration targets

We have an internal target ('Target 60') which aims to make sure that over 85% of customers have their electricity supply restored within one hour when there is a high voltage fault.

When there is a fault, engineers in our control centres are automatically notified and restore most electricity supplies immediately using remotely controlled switches to redirect the route of electricity. We also send staff to the site to carry out local switching where this is needed.

Our priority is to get our teams to the source of the problem and restore customers' electricity supplies. Our performance continues to exceed the target.

WPD T60 performance



■ Actual — Target



## Storm Case Study

During February 2020, Storm Ciara brought 83mph wind speeds and widespread disruption to our licence area. Overall, 215,000 customers were affected by power cuts.

Thanks to planning, resilient systems and the support of our staff, we were able to minimise the impact of the storm and restore those affected as quickly as possible.

We restored power to over 99% of customers within 12 hours.

Typically, our preparation for such events will include:



Ensuring additional operational, engineering, control and call centre operatives are on standby and available



Postponing non-essential work to make extra resources available



Securing the availability of helicopters to survey badly affected areas and speed up repairs

# Environment Performance Summary 2019/20



## Make it possible for more people to use low carbon technologies (LCTs)

19	Improve by 20% the time taken to provide a response to customers who want to use LCTs.*	We are receiving increased volumes of notifications which we are addressing quickly, but the volumes of enquiries mean that we have not been able to improve our response times.
20	Identify LCT hotspots using information from smart meters, expert organisations and local authorities, and use this information when making decisions.	The project LCT Detection has proven that a model can be developed to spot unregistered LCTs connected at household level. The data gathered from this project has been used to refresh the LCT hotspot data held in our asset register database and mapping system.
21	Selectively replace assets using larger assets in areas where more LCTs may be connected to our network.	We carried out 27 asset replacement projects using larger assets, as a result of using information about LCT hotspots.
22	Reduce costs for future customers by developing smart solutions to provide alternative and innovative techniques for managing our network.	We had a wide range of innovation projects in progress during the year.
23	Provide additional network capacity by using traditional or 'smart' methods.	We have continued to develop the Flexible Power brand and increased the number of substations utilising flexibility from 71 in 2018/19 to 122 in 2019/20.

## Reduce technical network losses

24	Install oversized transformers when replacing assets in areas where demand for power may become higher than equipment can cope with.	We installed 27 oversized transformers.
25	Use larger cables when installing new network in LCT hotspots.	We installed 2.93km of larger cable in LCT hotspots.

## Reduce the carbon footprint of the business

26	Make sure all replacement vehicles have lower CO <sub>2</sub> emissions than those they are replacing.	WPD operational vehicle emissions have reduced by 11% compared to 2018/19, but there have been increases in vehicle emissions reported to us by our contractors. This means we have slightly missed our target for 2019/20.
27	Make sure all new or substantially refurbished buildings meet, as a minimum, the 'excellent' standard under the Building Research Establishment Environmental Assessment Method (BREEAM).**	We have not completed any depot construction or refurbishment works during 2019/20.
28	Reduce the amount of waste sent to landfill by 20% over the first two years of RIIO-ED1 and 5% per year after this.	We have seen a reduction in the amount of waste sent to landfill, and we have achieved our target for the whole of RIIO-ED1.
29	Reduce our carbon footprint by 5%.*	Our business carbon footprint has reduced by 20% compared with 2012/13. We have beaten our in-year target.

\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

\*\* Target to be achieved each year of RIIO-ED1



## Reduce the environmental risk of leaks from equipment

30	Reduce by 75% the amount of oil lost through leaks from oil-filled cables.*	The leak volume from oil-filled cables has significantly decreased. We have beaten our in-year target.
31	Reduce by 17% the amount of SF <sub>6</sub> gas that is lost from switchgear.*	The amount of SF <sub>6</sub> gas lost as a percentage of the total amount of SF <sub>6</sub> used on our network has reduced from 0.47% in 2015/16 to 0.19% in 2019/20 for the whole of our area. However, we missed our in-year target in the South West.
32	Install effective oil containment 'bunds' around plant containing high volumes of oil.*	We have completed work on 173 new and refurbished bunds so far in RIIO-ED1, going further than our forecast of 104 bunds.

## Improve the appearance in National Parks and Areas of Outstanding Natural Beauty (AONBs)

33	Replace 55km of overhead lines in National Parks and AONBs with underground cables.*	To date during RIIO-ED1, we have replaced 29.12 km of overhead lines with underground cables for visual amenity in AONBs.
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\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year  
 \*\* Target to be achieved each year of RIIO-ED1

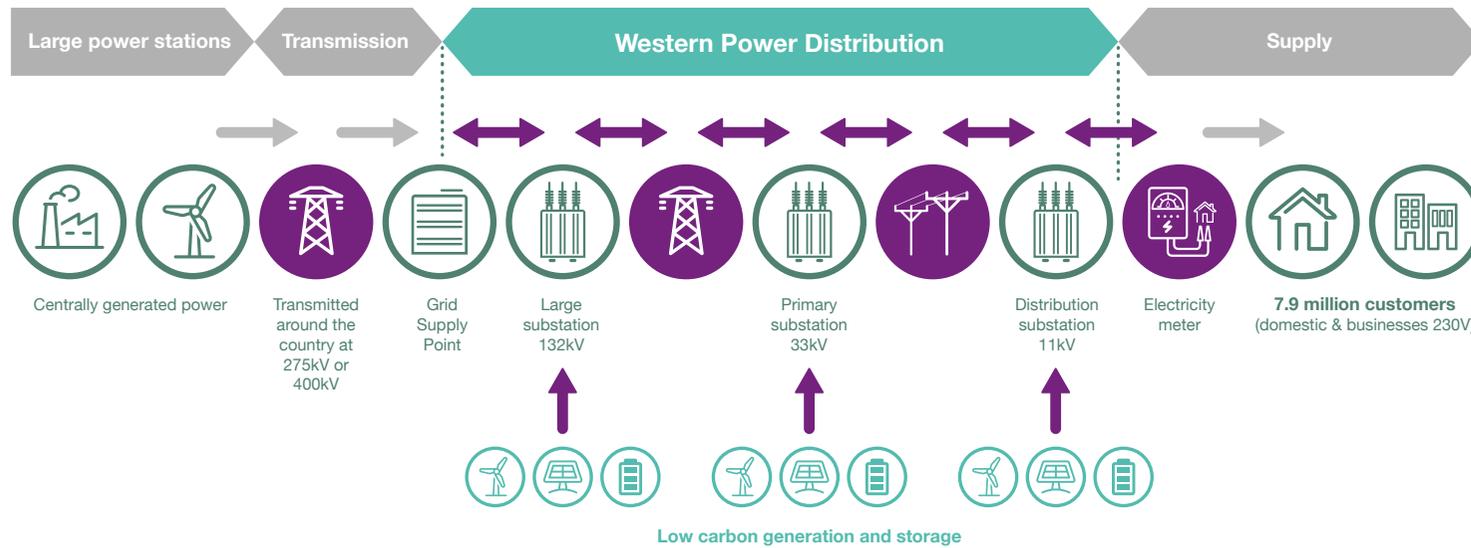
# Environment



## Planning for the future of electricity networks

The way energy is produced and how customers use energy is changing. As a result we need to change the way we run our electricity network. We will have a greater need to forecast energy generation and use, and actively manage energy flows across the network.

To do this we are moving from the relatively passive role of Distribution Network Operator (DNO) to a more active role as Distribution System Operator (DSO). This will give us more responsibility for balancing sources of energy and demand.



Many large power stations are closing as they come to the end of their lives.

Intermittent renewables (e.g. wind farms) and other forms of electricity generation are now directly connected to the local distribution network. The generation patterns of these types of technology are often much more complex to predict.

We expect rapid adaptation to new forms of electricity demand. Electric vehicles are quickly becoming mainstream and new technologies (e.g. battery storage, heat pumps and electric heating) could further disrupt traditional energy use.

## DSO actions taken in 2019/20

In 2019/20 we updated and published our DSO strategy and DSO Forward Plan which details the benefits of the DSO transition for customers and stakeholders in eight core areas.

-  Neutral Supply Market Facilitation
-  Enhancing Security of Supply
-  Electric Vehicle Readiness
-  Whole System Planning
-  Enabling Decarbonisation
-  Communities and Localism
-  Enabling Economic Growth
-  Flexibility Services

# Environment



## In addition we have:



Published details of our roadmap to achieving digitalisation of the energy system and to achieve an 'open data' approach.



Launched an interactive Energy Data Hub providing easy access to a range of network data.



Introduced new mechanisms for engaging with Local Authorities to enhance the data used and assumptions for our existing future energy scenarios.



Significantly expanded the scope of the flexibility services utilised on our network, procuring 220MW of flexible services during 2019/20, impacting over 800,000 customers and achieving £26.4m of deferred/avoided reinforcement.



By Western Power Distribution

# Environment



## Reducing the effect of our activities on the environment

Our activities can affect the environment in a variety of ways. Business Carbon Footprint (BCF) is one measure of our impact that brings together information on activities that affect the environment. This includes the energy that we use in our buildings, the fuel we use in vehicles, and leaks of polluting gases. Each year we compare our performance against a benchmark year of 2012/13, and we have committed to reducing our BCF by 5% during RIIO-ED1.

We continuously look for ways to improve the scope and accuracy of our BCF data. This means that the data that is currently collected is different to the data used when our benchmark performance was set.

We therefore show our performance on an actual and like-for-like basis.

In 2019/20 we have achieved a 20% (like-for-like) reduction in our overall BCF compared with 2012/13.

### Highlights:



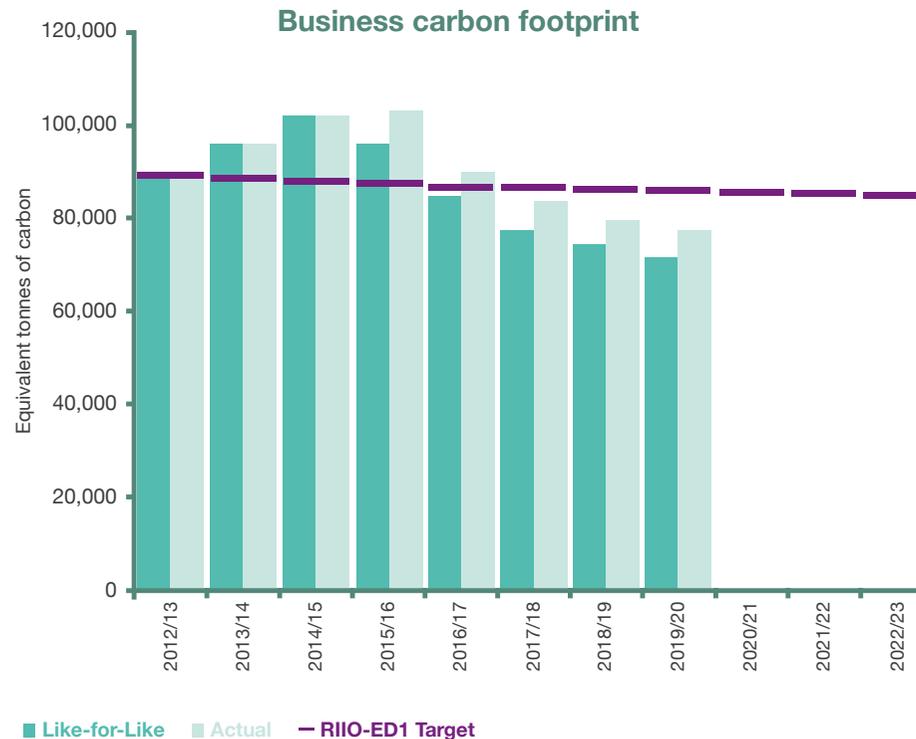
**BCF has decreased for the fifth consecutive year**



**Electricity usage in offices and depots has reduced by 51% since 2012/13**



**WPD business vehicle emissions has reduced by 28% since 2012/13**



## Reducing oil leakage from fluid filled cables

Older types of higher voltage cables (33kV and above) contain oil based fluids to assist in the insulation of the cables. These cables sometimes leak, either as a result of third party damage, age related degradation or ground movements.

New cable designs do not use this technology so the problems associated with these cables will reduce over time as the populations are reduced through replacement.

WPD has committed to reduce the volume of oil escaping from fluid filled cables by 75% over the 8 year RIIO-ED1 period.

During 2019/20 there has been a significant decrease in the volume of oil leaked from fluid filled cables compared to 2018/19 and the leakage rate was less than half of baseline value. We continue to use methods that speed up leak location, enabling us to carry out repairs quickly and minimise the amount of oil leaked.

# Connections Performance Summary 2019/20



Provide a faster and more efficient connections service		
34	Meet Ofgem's targets for the overall 'time to quote' and 'time to connect' for single domestic connections and small commercial connections. Improve the overall time taken to provide a quote for all other customer groups by 20%.*	We outperformed Ofgem's targets for 'time to quote' and 'time to connect' for single domestic connections and small commercial connections. We have also beaten targets for three of the other customer groups.
35	Provide excellent customer service so that customers continue to rank us as the top-performing DNO group in customer satisfaction surveys.**	We are one of the top performing DNOs for the Connections Customer Survey in Ofgem's Broad Measure of Customer Satisfaction, scoring an average of 8.99 out of 10 for our DNO group.
36	Carry out surveys with distributed generation customers to find out if they are satisfied with our service and identify where we could improve.	We achieved a score of 9.44 out of 10 for distributed generation customer satisfaction surveys. We have specified a range of improvements within our work plan for the Incentive on Connections Engagement (ICE).
Improve communication with customers		
37	Develop and improve the way we process online connection applications and make it easier for customers to track the progress of their application online.	We have made amendments to our online connections information in line with stakeholder requirements. These have been published in our ICE work plan.
38	Make sure that the information we provide in documents and online is effective.	We have improved the information we provide in documents and online in line with stakeholder feedback.
Enhance engagement with major customers		
39	Host 'surgeries' every three months to help connection customers to understand our processes.	241 connection surgeries took place across our four licence areas.
40	Work with major customers to identify where our processes can be improved and quickly put in place any changes.	We engaged with over 17,000 stakeholders through events and over 1,700 through customer satisfaction surveys. The actions in our ICE work plan are based on suggestions we received from these events and surveys.
Guaranteed Standards of Performance		
41	Aim to achieve no failures of the connection GSOPs.**	There were only 11 failures against the connection Guaranteed Standards of Performance during 2019/20. We had a further seven failures against Competition in Connection standards, which relate to services we provide that cannot be carried out by competitors.
Further developing a competitive market		
42	Improve customer awareness of other connection providers and regularly check that customers understand the options available to them.	We provide clear information for customers explaining that they can use other connection providers. We carry out a yearly survey to measure customer awareness. The 2019/20 survey showed that 87% of customers who had a new connection were aware of other providers.
43	Work with other connection providers to extend the type of work they can carry out, including high voltage and reinforcement work.	We host a group to focus on the specific needs of other connection providers. Two sessions took place during 2019/20 and we used feedback to improve our processes.

\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

\*\* Target to be achieved each year of RIIO-ED1

# Connections

## Acting on customer feedback

We continue to expand the scale of our connection customer engagement further. We recognise that stakeholders may have time and availability constraints and therefore we have become more flexible in our approach to engagement by increasing the range of ways we can share information with and obtain feedback from stakeholders.

In 2019/20, updates via Webinar and Twitter reached over 27,000 users, and in early 2019 WPD launched a bespoke website to provide all connection customers the opportunity to engage with us. These feedback mechanisms enable us to identify and adapt to connection customer priorities at all levels.

Some of the actions targeted to those priorities for 2019/20 included:



Producing clear and concise guidance to help customers navigate the application process, including the level of information required when submitting an application



Updating our website to raise the profile of Connection Surgery appointments resulting in a 73% increase in surgeries compared to the previous year



Launching the Distribution Future Energy Scenarios website providing improved access and information on the projections for energy usage through geographical representations of the scenarios



Updating our 'Getting Electric Vehicles Moving' guide and holding a bespoke Electric Vehicle stakeholder event. This also led to the development of the EV capacity map which indicates the capacity available across our network to support EV charging.



## Ofgem's Incentive on Connections Engagement

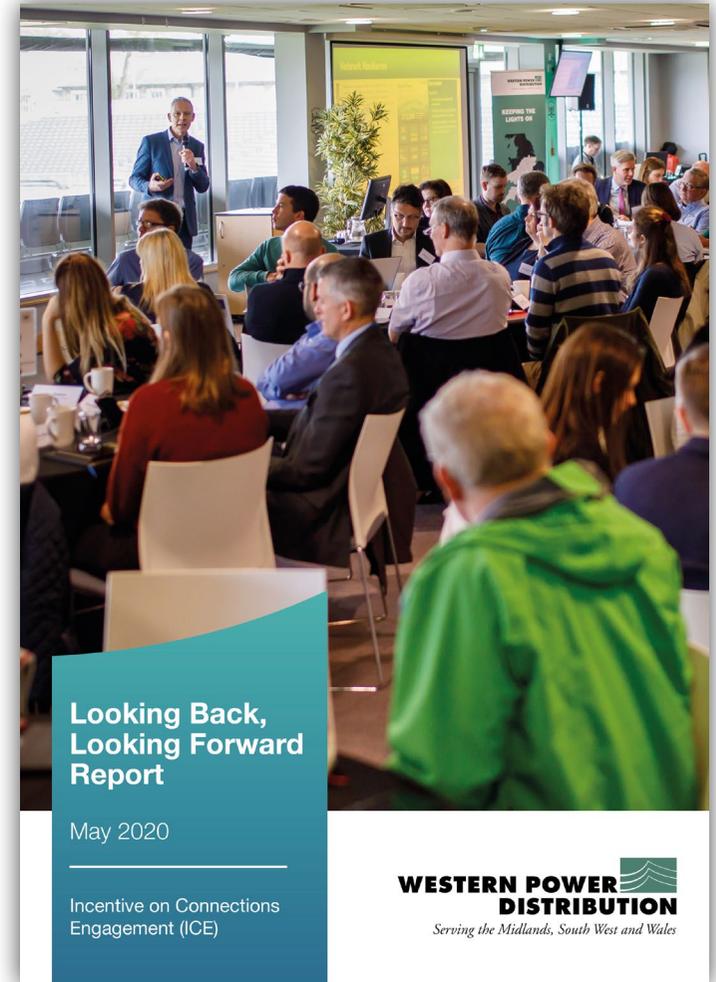
Under the Incentive on Connections Engagement (ICE), DNOs must engage with customers, develop improvement plans and put changes in place.

Every year, we submit reports to Ofgem explaining the actions we have taken and our plans for the future.

To find out more about the work we do to improve our connections service, and to see our reports, please visit our website:



[yourpowerfuture.westernpower.co.uk/our-engagement-groups/connection-customer-engagement/incentive-for-connections-engagement](http://yourpowerfuture.westernpower.co.uk/our-engagement-groups/connection-customer-engagement/incentive-for-connections-engagement)



### Looking Back, Looking Forward Report

May 2020

Incentive on Connections Engagement (ICE)

**WESTERN POWER DISTRIBUTION**  
Serving the Midlands, South West and Wales

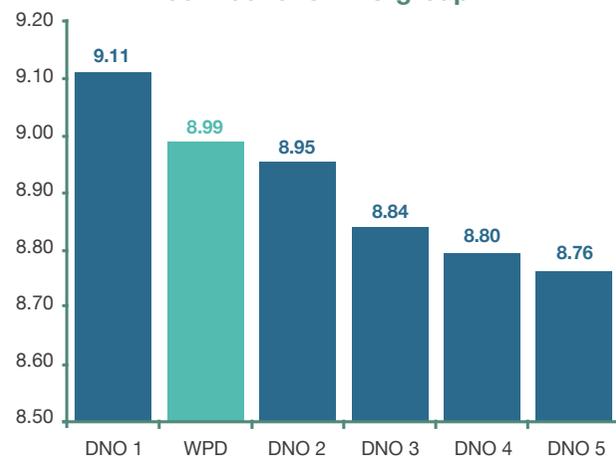
# Connections

## Customer satisfaction for connections customers

Providing excellent customer service to connection customers is a priority. We assess the satisfaction of connections customers using Ofgem's Broad Measure of Customer Satisfaction (BMCS).

Part of the BMCS includes a customer satisfaction survey for customers who need a minor connection. As a group, we remain one of the highest scoring DNOs in this survey. All scores are out of 10.

BMCS customer survey score - connections DNO group



WPD's performance is achieved through a strong culture of customer service embedded throughout the organisation, supported by a variety of management performance indicators which ensure customer service is treated as a priority.

## Providing a fast and efficient connection service

Ofgem sets targets for minor connection customers. These include single domestic connections (referred to as LVSSA), and projects which require two to four domestic connections or a small commercial connection which doesn't need reinforcement work (referred to as LVSSB).

The targets measure the time taken to provide a quote and, once the quote is accepted, the time taken to provide the connection.

In 2019/20 we outperformed all the targets for LVSSA and LVSSB.

License Area	Time to Quote (average number of days)		Time to Connect (average number of days)	
	LVSSA	LVSSB	LVSSA	LVSSB
West Midlands	2.27	2.81	28.68	34.81
East Midlands	2.20	3.46	27.55	33.98
South Wales	1.98	3.66	24.58	30.35
South West	3.12	3.66	26.91	32.45
Ofgem target	4.84	7.84	39.28	47.94

We also carry out two further surveys to test the opinions of customers who need major connections and distributed generation customers.

For 2019/20, we continued to score highly for all three customer groups.

**8.99** Minor Connections

**8.73** Major Connections

**8.59** Distributed Generation

# Customer satisfaction Performance Summary 2019/20



Customer service		
44	Continue to be the top-performing DNO group across all elements of the Broad Measure of Customer Satisfaction.**	WPD is a top-performing DNO group for overall customer satisfaction. The rating combines results of the three surveys for supply interruptions, connections and general enquiries.
45	Maintain certification to show that we meet the Customer Service Excellence standard.**	We were awarded 'Compliance Plus' status for 45 of the 57 standards. We were the highest-scoring organisation out of all those accredited.
Telephone response		
46	Respond to phone calls quickly, answering them within two seconds.**	Our average response time for customer calls was 1.91 seconds for fault and emergency calls.
47	Limit the number of calls that are abandoned before we can answer them to less than 1%.**	Only 0.16% of calls were abandoned.
48	Always provide customers with the option to talk to a member of staff when they call our contact centre.	Our systems allow us to make sure that customers are always provided with the option to talk to a member of staff.
Communication with customers		
49	Provide a restoration time for every power cut.**	All power cuts have an estimated restoration time which is updated as further information is provided by field teams.
50	Contact all customers who have been in contact about a fault.**	We contacted 98.6% of customers who contacted us about a fault.
51	Contact customers within two days of receiving an enquiry which was not about a fault.**	We contacted 99.6% of customers who contacted us with an enquiry which was not about a fault within two days.
52	Provide 'on-demand' messaging through text and social media for customers who want to be kept informed in other ways, rather than a phone call.	We provided on-demand messaging through text and social media. We sent 896,608 text messages during high voltage power cuts.
53	Develop 'self-service' options for customers to find information online.	We hosted 18,561 webchat conversations, our app for reporting power cuts was downloaded 18,078 times and we had 2.4 million hits on our online map showing details of individual power cuts.

\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

\*\* Target to be achieved each year of RIIO-ED1

# Customer satisfaction Performance Summary 2019/20



## Involving stakeholders

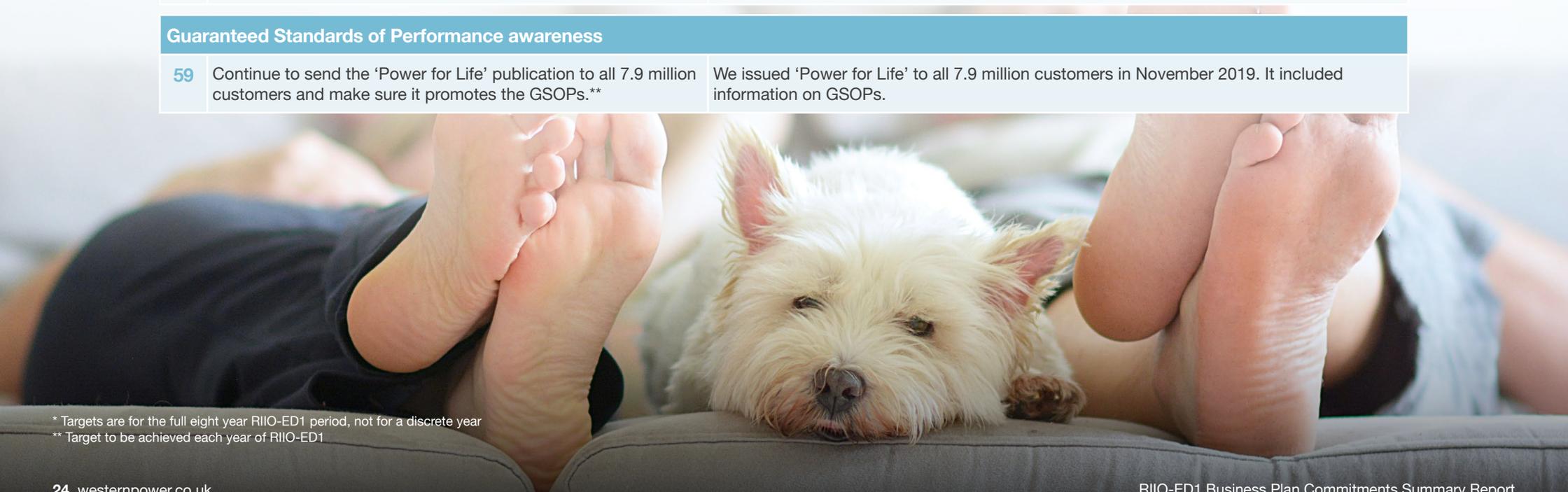
54	Continue to host a customer collaboration panel where our CEO will meet with our expert stakeholders four times a year.	The Customer Collaboration Panel met four times during the year. We continued to work with the new Customer Engagement Group to enable the members to challenge our plans for the next price control period.
55	Continue to host at least six stakeholder workshops each year.	We hosted six general sessions, attended by over 380 stakeholders across our licence areas.
56	Continue to produce a stakeholder report every year providing an update on the actions we have taken as a result of stakeholder involvement.	This yearly Business Plan Commitments summary report and the separate detailed report replace the stakeholder report.

## Complaints

57	Resolve at least 70% of complaints within one day.**	We resolved 89% of complaints within one day.
58	Continue to have a target of no complaints where the Ombudsman has to get involved.**	There were five complaints referred to the Ombudsman. In all cases the ombudsman did not rule against WPD.

## Guaranteed Standards of Performance awareness

59	Continue to send the 'Power for Life' publication to all 7.9 million customers and make sure it promotes the GSOPs.**	We issued 'Power for Life' to all 7.9 million customers in November 2019. It included information on GSOPs.
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\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year  
 \*\* Target to be achieved each year of RIIO-ED1

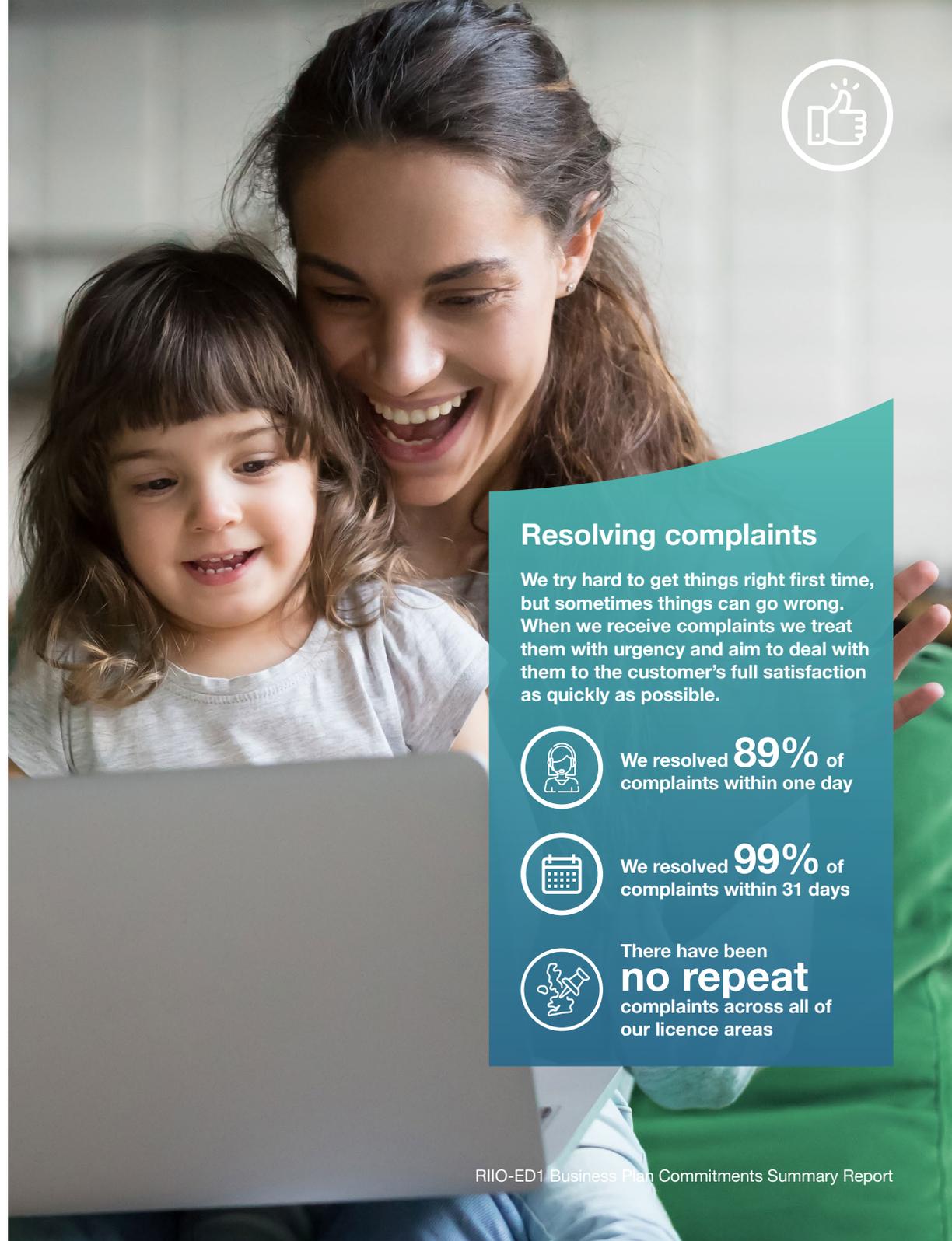
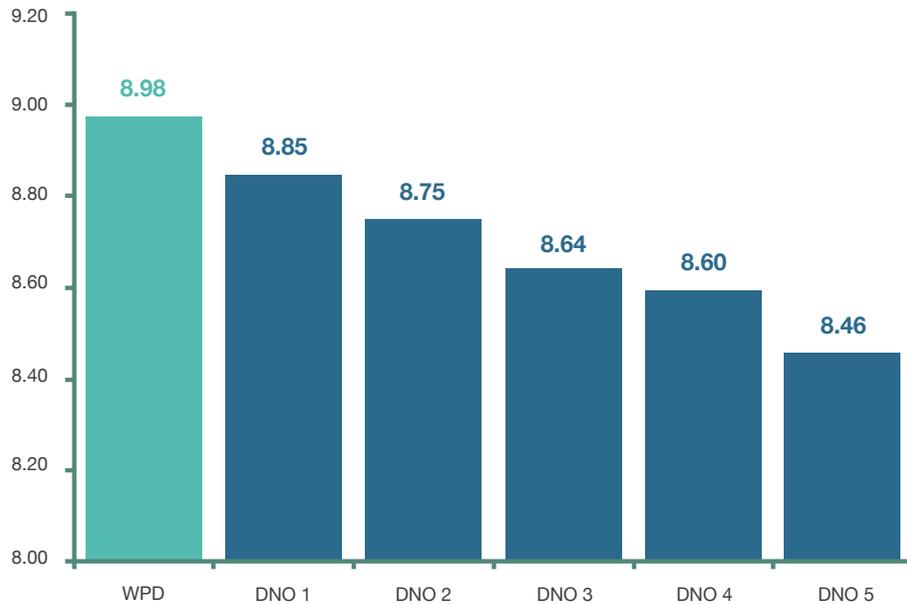
# Customer satisfaction

## Customer satisfaction survey results

We are committed to providing excellent service to our 7.9 million customers. Ofgem's Broad Measure of Customer Satisfaction (BMCS) provides one way of measuring our success in this area. Every year a random selection of our customers are surveyed by an independent survey company to find out how they rate the service we provide.

WPD was a top-performing DNO group in 2019/20 for overall customer satisfaction (amalgamating results for the three surveys for connections, supply interruptions and general enquiries) when compared with the other DNOs. WPD also remains the top performing DNO group compared with other DNOs for the RIIO ED1 period.

BMCS - average RIIO-ED1 weighted score by DNO group



## Resolving complaints

We try hard to get things right first time, but sometimes things can go wrong. When we receive complaints we treat them with urgency and aim to deal with them to the customer's full satisfaction as quickly as possible.



We resolved **89%** of complaints within one day



We resolved **99%** of complaints within 31 days



There have been **no repeat** complaints across all of our licence areas

# Customer satisfaction

## Maintaining customer satisfaction

Providing excellent customer service remains a high priority and we work hard to continually improve our performance by promoting a strong culture of customer service and implementing new strategies to ensure we remain a top-rated DNO for customer satisfaction.

To gain an extra, independent view of our performance we are assessed against the Government's Customer Service Excellence Standard and the British Standards Institution's standard for Inclusive Service Provision.

During 2019/20 we were successfully assessed against both these standards.

Staff training is vital to make sure that our staff can identify customer needs and provide a tailored service. Each year, contact centre staff receive training from a range of partner agencies. For 2019/20 this included sessions on the implications of power cuts for dialysis patients.



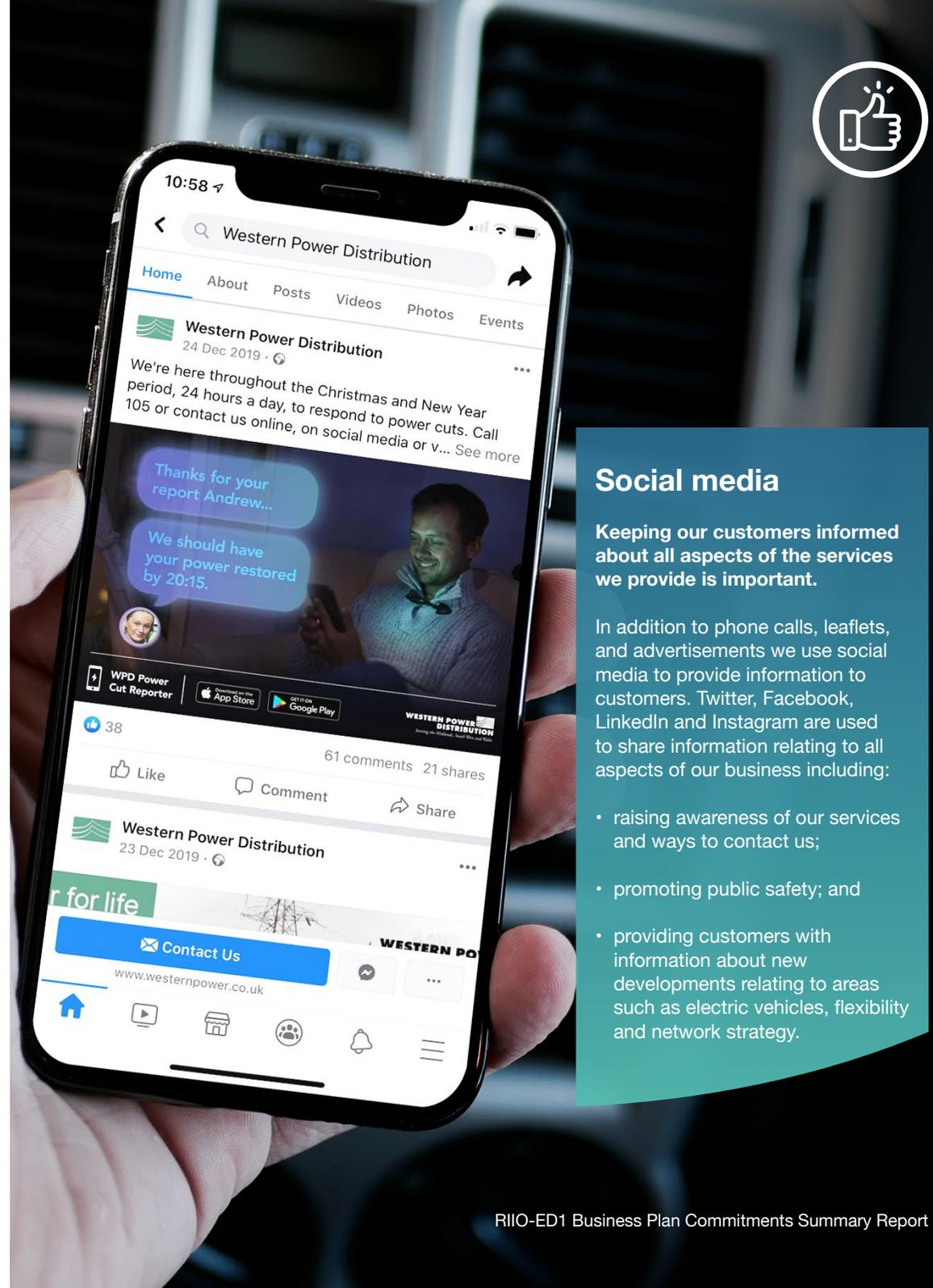
We always provide customers with the option to **talk to a member of staff** when they call our contact centre



Our average response time for fault and emergency calls was **1.91 seconds**



We called back **98.6%** of customer who contacted us about a fault



## Social media

Keeping our customers informed about all aspects of the services we provide is important.

In addition to phone calls, leaflets, and advertisements we use social media to provide information to customers. Twitter, Facebook, LinkedIn and Instagram are used to share information relating to all aspects of our business including:

- raising awareness of our services and ways to contact us;
- promoting public safety; and
- providing customers with information about new developments relating to areas such as electric vehicles, flexibility and network strategy.

# Social obligations Performance Summary 2019/20



## Improving understanding of vulnerability

<b>60</b>	Work with expert partners to improve our understanding of the needs of customers in vulnerable situations.	We worked with a wide range of expert partners and were certified to the British Standards Institute Standard BS18477, which specifies requirements for responding to customers in vulnerable situations.
<b>61</b>	Train staff to recognise the signs of vulnerability.	We provided specialist training to the Priority Services Register (PSR) teams and contact centre staff. Field staff are trained on registering customers to the PSR.

## Improving the data held on the Priority Services Register

<b>62</b>	Contact vulnerable customers at least once every two years to check the details we hold on the Priority Services Register.	We contacted over 950,000 PSR customers during 2019/20, which allowed us to update 30% of our records.
<b>63</b>	Improve the quality of Priority Services Register data by working with other agencies and sharing information.	We increased the number of referral partners that we work with. We added 19 new partners, with the aim of achieving a better balance in the types of agencies that we work with.
<b>64</b>	Co-ordinate meetings with suppliers to agree criteria for vulnerability.	27 new 'common needs codes' are now in use across the industry.

## Improving the services provided for customers in vulnerable situations

<b>65</b>	Raise awareness of the Priority Services Register.	We worked with a range of organisations, including a mental health organisation and fire and rescue services, to raise awareness of the PSR.
<b>66</b>	Make 10,000 crisis packs available.*	To date we have issued 7,468 crisis packs over the RIIO-ED1 period.
<b>67</b>	Contact all customers who depend on a power supply for medical reasons every three hours during power cuts.**	During power cuts we prioritise contacting customers who depend on a power supply for medical reasons. We called 82% of these customers within one hour of a fault and 97.5% in under two hours.
<b>68</b>	Continue to provide practical support through the British Red Cross and other organisations as appropriate.	We provided British Red Cross support during eight prolonged power cuts, supporting 71 customers in total.
<b>69</b>	Ask for feedback from customers in vulnerable situations about our service.	We achieved customer satisfaction ratings of 9.5 out of 10 from customers on the PSR who had received a routine call to check their personal details.
<b>70</b>	Develop ways of sharing information with local resilience forums.	We worked with 19 forums across our four licence areas. For 2019/20 this included offering the support of our helicopter unit during severe weather.

\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

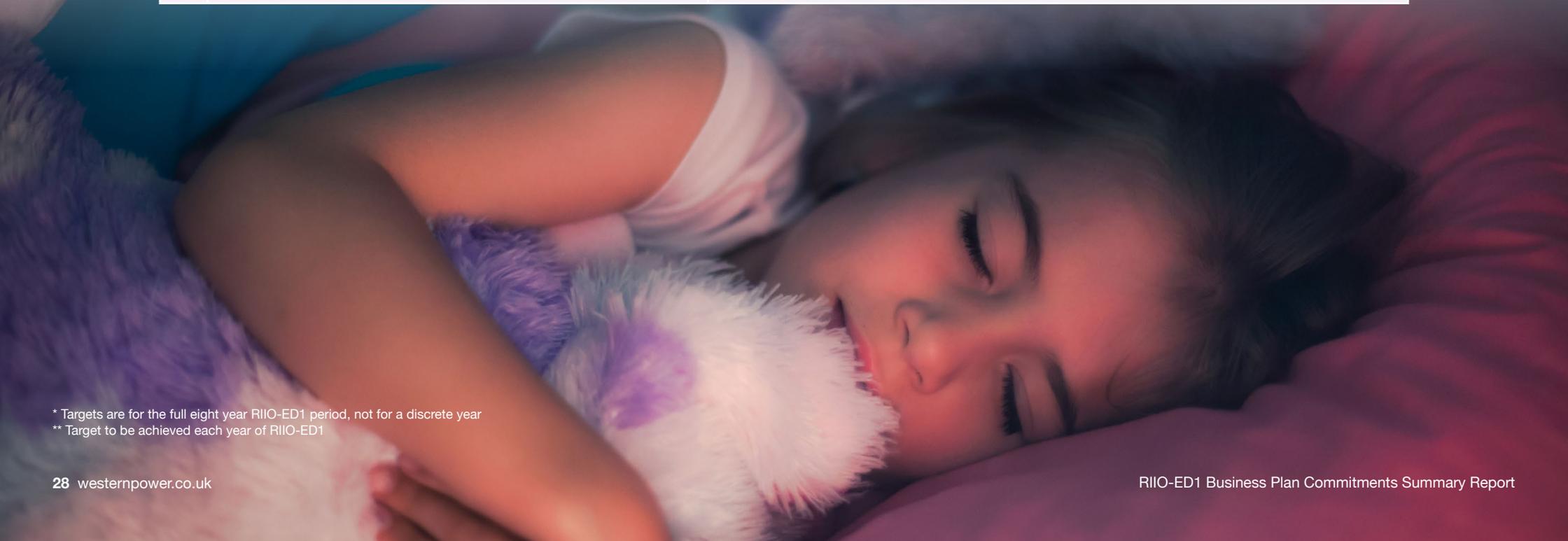
\*\* Target to be achieved each year of RIIO-ED1

# Social obligations Performance Summary 2019/20



## Reducing fuel poverty by supporting customers to access help

<b>71</b>	Build a database of regional agencies we can refer customers to for help.	There are fuel poverty projects in all our areas, working with a network of support agencies.
<b>72</b>	Work with partners to develop links to and from our website.	Details on our fuel poverty projects and links to partner organisations are available on our website.
<b>73</b>	Develop joint information and awareness campaigns, and co-ordinate with partners to provide customers with help.	We have six 'Power Up' fuel poverty schemes to support customers who are facing fuel poverty. We supported 8,672 customers to save over £2.6 million a year.
<b>74</b>	Provide fuel poverty training to our staff who have contact with members of the public.	We provide staff in our contact centre with customised training on fuel poverty and customers in vulnerable situations.
<b>75</b>	Use data analysis to help identify areas with a high concentration of vulnerable households.	We use data analysis to identify areas with a high concentration of vulnerable households. During 2019/20 we increased the number of data indicators and vulnerability factors we consider.
<b>76</b>	Develop local outreach services.	'Affordable Warmth' and other outreach services helped 7,975 customers to save over £7.1 million a year.



\* Targets are for the full eight year RIIO-ED1 period, not for a discrete year

\*\* Target to be achieved each year of RIIO-ED1

# Social obligations



## Identifying and supporting customers in vulnerable situations

We review our consumer vulnerability strategy every year and we recognise that as we undertake DSO activities this may lead to new challenges for customers in vulnerable situations. As we focus on developing a smarter, more flexible energy system, we must make sure that we design our services in a way that makes it easy for all customers to take part in, and benefit from, the growth of flexible energy services.

During 2018/19 we introduced a new key aspect to our work for vulnerable customers: 'to leave no customer behind in a smart future'. We hosted workshops with 120 expert stakeholders and as a result of this we have introduced two new focus areas and added a large number of new outputs which have been implemented during 2019/20. The focus areas for this key aspect are:

- understand customer needs;
- help customers to lower their demand;
- deliver joined-up energy services with others;
- enable participation in flexible energy;
- innovate to ensure the energy transition is fair and accessible (NEW for 2019/20); and
- educate customers on smart networks and low carbon technologies (NEW for 2019/20).

The success of our stakeholder engagement and consumer vulnerability strategies is tested through Ofgem's Stakeholder Engagement and Consumer Vulnerability (SECV) incentive. The documents we have submitted to Ofgem for 2019/20 highlight some of the 328 outputs and positive outcomes that we delivered for our customers during the year and look at the actions we have taken to deliver our new priorities.



You can read these documents, and details of the outputs we have delivered on our website: [yourpowerfuture.westernpower.co.uk/ofgems-secv-incentive](https://yourpowerfuture.westernpower.co.uk/ofgems-secv-incentive)

# Social obligations

## Fuel poverty

We have an extensive programme of support schemes, working with expert agencies including Citizens Advice and the Energy Saving Trust, to provide practical support for customers living in fuel poverty, including help with switching energy tariffs and arranging funds for enduring energy efficiency measures.

Programme	No. of Customers	Savings
'Power Up'	8,672	£2.6m
'Affordable Warmth'	7,975	£7.1m
Energy Affordability Fund	1,402	£0.6m
Other projects	603	£0.3m
<b>Total</b>	<b>18,652</b>	<b>£10.7m</b>

## Our Priority Services Register (PSR)

We have a PSR which records the details of customers in vulnerable situations who may need extra support during a power cut.

We aim to make sure that every eligible customer is given the opportunity to register and we have been working for several years to improve the accuracy of our PSR. As part of this work, we have created a network of trusted organisations that work with customers in vulnerable situations every day. As part of their work, they ask customers for permission to add their names to the PSR.

In 2019/20 we have:



**Proactively contacted 950,000 PSR customers to provide support or update records**



**Set up 19 new PSR referral networks, taking the total to 106**



**WPD's data cleanse teams have contacted 746,943 customers resulting in the removal 22,373 out-of-date records.**



In the last year we helped **18,652** customers who were facing fuel poverty save £10.7m



We currently have **1.9 million** customers on the Priority Services Register

# Social obligations

## Supporting customers during power cuts



Supporting customers during power cuts, particularly those who may be more vulnerable without electricity, is a key focus for us. We continue to look for opportunities to improve the service we provide.

We introduce new initiatives each year. For instance, during 2019/20 we expanded the ways customers can report a power cut by using a voice activated 'report a power cut' function on smart devices using applications such as Siri.

## Using information to better support customers



We recognise the importance of collaborating with other service providers in order to support customers. During 2019/20 we launched an online 'PSR Hub' portal which, among other benefits, encourages innovative joint work to utilise WPD's open-sourced social indicator data.

Our robust support infrastructure enables WPD to adapt to emerging crises. In the early stages of the Covid 19 outbreak, we developed the 'In This Together' project to provide practical outreach assistance to organisations and community groups supporting vulnerable people. We also began to share PSR records with Severn Trent Water (STW) so that STW could provide bottled water to self-isolating and unwell customers classed as vulnerable and/or of pensionable age experiencing water supply issues. These are just two of many projects that have been deployed to support vulnerable customers during the Covid-19 crisis.



# Case study



When WPD's Priority Service Register team speak to customers they can identify vulnerable customers struggling to heat their homes. WPD works with partner agencies under WPD's Power-up scheme to provide help for those customers.

**Ms G has a disabled son and recently had an accident that left her with some disabilities.**

After being identified by one of our Priority Services Team as being vulnerable, Ms G was referred to the Power Up partner in her area. The representative from the fuel poverty partner talked to Ms G about what the Power Up service can offer and carried out a home energy check, asking about heating in the home and whether Ms G had any means tested benefits.

Ms G explained she is in receipt of Employment and Support Allowance (ESA) but the Power Up partner established her income was still below £10,000 a year.

Ms G was advised on a range of energy efficiency action she could take to save energy and was shown that by switching tariff she could save £216.01 on her energy bills, with a potential to save a further £140 under the Warm Home Discount.

As her son uses a lot of water due to his disability, she was provided information about her water supplier which showed she could make a saving of £417.93 if she switched tariff. Also, with the customer's permission her details were also passed to third party organisation to initiate a benefit entitlement check.

- Potential annual savings of £774
- Ms G said she would try to implement the energy efficiency behavioural changes, expressed her gratitude for the call and explained she was astonished by the savings she could make.



# Costs

## Tracking our costs

In the RIIO-ED1 Business Plan we proposed to spend £9.2 billion over the eight-year period.

£7.1 billion of this was related to costs under our control, referred to as Totex (which includes capital spending, network operating costs and business overhead costs).

The remaining £2.1 billion covers costs such as rates, licence fees and transmission charges which are not included as Totex because they relate to costs that DNOs do not have control over.

Our spending at the start of the price control period was higher than

expected, but we now see these costs levelling out. During 2019/20, our spending was lower than Totex allowances and we are 2% below Totex allowances for RIIO-ED1 to date.

We forecast that costs will remain slightly under the allowances set for the eight-year RIIO-ED1 period as a whole.

We continue to look for more efficient ways of working while delivering the work programmes and commitments set out in our business plan.

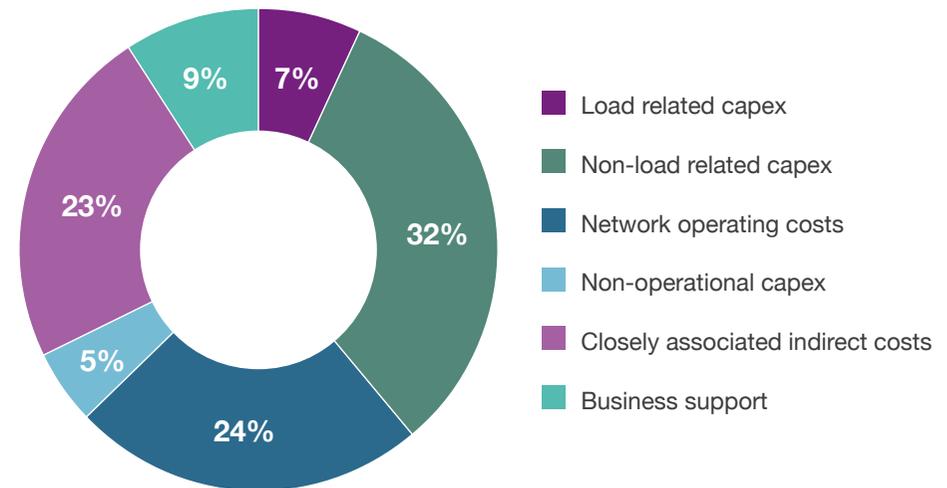
Total costs (Totex) for RIIO-ED1 to date ( based on 2012/13 prices) £million

Licence area	Totex actual costs ED1 to date (£million)	Totex allowance ED1 to date (£million)	% of allowance spent
West Midlands	1,293.3	1,297.9	99.6%
East Midlands	1,314.0	1,316.9	99.8%
South Wales	644.0	721.4	89.3%
South West	1,055.5	1,066.3	99.0%
<b>WPD Total</b>	<b>4,306.8</b>	<b>4,402.5</b>	<b>97.8%</b>

## Where we spend money

- **Load related capex** – costs related to providing extra capacity on the network.
- **Non-load related capex** – capital investment in the network, two-thirds of which relates to replacing and refurbishing assets which are in poor condition.
- **Network operating costs** – includes inspections, repair and maintenance, faults and tree cutting.
- **Non-operational capex** – includes buying new IT systems, property, vehicles and equipment.
- **Closely associated indirect costs** – the costs of staff and systems that allow us to carry out work on the network, such as network design activities.
- **Business support** – teams such as Human Resources and Finance.

RIIO-ED1 to date costs - split by type



# Future challenges



## Electric Vehicles (EV)

**EVs are quickly becoming mainstream with many manufacturers developing new electric models or electric versions of existing models.**

Across a year, a typical electric car uses a similar amount of electricity as an average domestic home. Growth in electric vehicles therefore has potential to significantly alter daily load profiles and increase the amount of power used.

In anticipation of this large scale change in energy usage we have developed strategies which include details on forecast growth scenarios, planning and design considerations, capacity availability, and the provision of information for customers.



Our EV Strategy can be found on our website at the following link.  
[www.westernpower.co.uk/smarter-networks/electric-vehicles](http://www.westernpower.co.uk/smarter-networks/electric-vehicles)

During 2019/20 WPD has been working to meet the challenges in this area. This has included developing a novel packaged substation solution that can be used in car parks and petrol forecourts.

We have also worked with Moto Hospitality and Ecotricity, in tandem with the Office of Low Emission Vehicles and Department of Transport, to understand requirements at motorway service areas. As a result we have partnered with Brush Transformers to collaboratively create a compact solution for providing dedicated electric vehicle charging supplies to services areas, which will be further developed within 2020/21.



We predict up to  
**217,000**  
chargers will be connected to our network by 2023



Our 'high' prediction would see  
**3 million**  
vehicles in our area by 2030



Dedicated Electric Vehicle Strategy published  
**April 2020**



Charging hubs will be built in public car parks, supermarkets and taxi ranks

# Future challenges

## RIIO-ED2

Our planning for the next price control period (RIIO-ED2) is well underway.

We continue to incorporate stakeholder priorities into our planning. Through our RIIO-ED2 stakeholder workshops, we have been able to engage with individuals from a wide range of backgrounds, covering all customer groups. We used the sessions to explore stakeholder priorities to establish a clear picture of what our stakeholders want us to deliver during the RIIO-ED2 period.

Our stakeholder engagement has used a 'blank sheet' approach where we have listened to the requirements of stakeholders and worked with them to 'co-create' the objectives and commitments for the next price control.

Our plans for RIIO-ED2 must be consistent with the UK's commitment to be "Net Zero" for carbon emissions by 2050. This will pose many challenges to ensure we continue to deliver a reliable service to all of our customers. The analysis and planning work we have undertaken so far has provided confidence that we can take an active part in enabling the achievement of Net Zero.

We work closely with our dedicated Customer Engagement Group (CEG) to ensure that our plans meet stakeholder requirements. In addition we are proposing several stages of engagement on our RIIO-ED2 plans, which will take place during 2020 and 2021. We would encourage all stakeholders with an interest in the services that we provide to be engaged with the process to shape what we will deliver in RIIO-ED2.



More information on ways stakeholders are involved in our planning process can be found at the link below, where you can also register to receive our email newsletter and stakeholder updates on news and events:  
[www.westernpower.co.uk/introduction-and-our-riio-ed2-engagement-plan](http://www.westernpower.co.uk/introduction-and-our-riio-ed2-engagement-plan)

For more information about the CEG please visit:  
[customerengagementgroup.westernpower.co.uk](http://customerengagementgroup.westernpower.co.uk)



Co-creation has led to  
**over 800**  
potential RIIO-ED2  
business plan commitments

# How to contact us



## Working with us

If you have any questions about our work, or you would like to take part in future stakeholder events, please contact us.

Email: [rallcock@westernpower.co.uk](mailto:rallcock@westernpower.co.uk)

Write to: **Richard Allcock,**  
**Stakeholder Engagement Manager,**  
**Western Power Distribution,**  
**Pegasus Business Park,**  
**Herald Way, Castle Donington,**  
**DE74 2TU**

To find out more about our programme for involving stakeholders and how you can have your say, please visit:  
[yourpowerfuture.westernpower.co.uk](http://yourpowerfuture.westernpower.co.uk)

## Reporting a power cut

If you have a power cut, please call us on 105 (available on landlines and most mobile providers).

You can also call us on **0800 6783 105**.

Or, download our free power cut reporter app from the App Store and Google Play onto a smart device.

You can then register for severe-weather updates.



## Making a complaint

We're committed to providing you with excellent customer service. We want to know if something goes wrong so that we can sort out any problems as quickly as possible. You can make a complaint in the following ways.

Please call us free on: **0800 0556 833**

Visit our website at: [www.westernpower.co.uk/contact-us/complaints](http://www.westernpower.co.uk/contact-us/complaints)

Email us at: [complaints@westernpower.co.uk](mailto:complaints@westernpower.co.uk)

Write to us at: **Complaints Department,**  
**Information Centre,**  
**Western Power Distribution,**  
**Avonbank, Feeder Road,**  
**Bristol BS2 0TB**

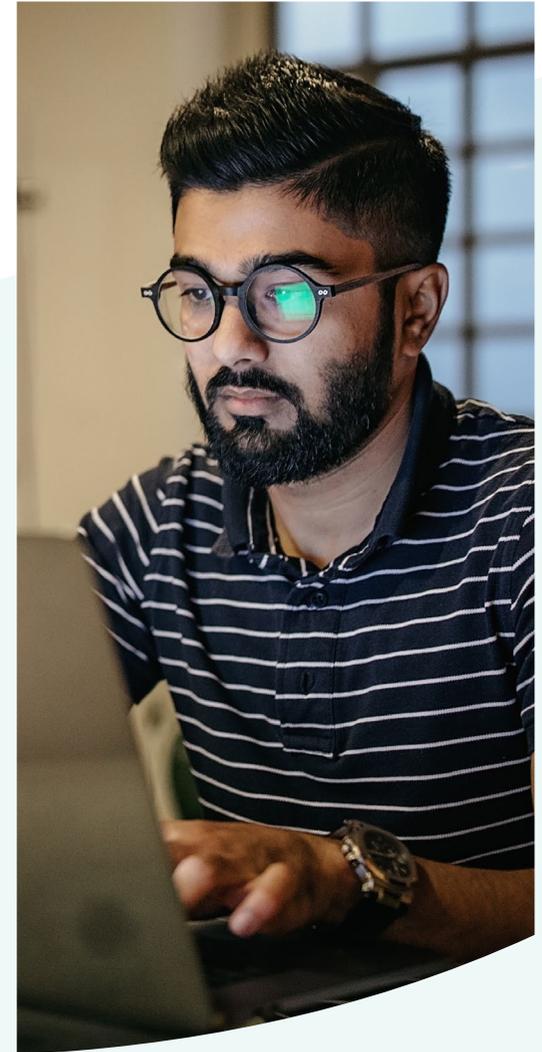
Please tell us your address and postcode and provide a phone number.

## Find out more

There is more information on our performance against each of our 76 commitments in our detailed Business Plan Commitments Report, which is available at:

[yourpowerfuture.westernpower.co.uk/  
business-plan-commitments-report-2020](http://yourpowerfuture.westernpower.co.uk/business-plan-commitments-report-2020)

Copies of previous reports are available at:  
[yourpowerfuture.westernpower.co.uk/  
performance-reporting-riio-ed1/previous-performance-reports](http://yourpowerfuture.westernpower.co.uk/performance-reporting-riio-ed1/previous-performance-reports)



# Glossary



<b>Affordable Warmth</b>	WPD outreach scheme which offers fuel poverty support through a network of partner organisations.	<b>Customers in vulnerable situations</b>	Customers who are vulnerable for various reasons, including those who depend on electricity for medical reasons, have special communication needs or who struggle to afford to pay for energy.
<b>AONBs</b>	Areas of Outstanding Natural Beauty.	<b>Distributed generation</b>	Electricity generation connected to the distribution network. It includes wind turbines, domestic solar panels, large-scale photo-voltaic farms, hydro-electric power and biomass generators.
<b>Automation</b>	Remotely controlled devices which allow electricity supplies to be quickly rerouted without the need to send a person to the site.	<b>Distribution Network Operator (DNO)</b>	A DNO is a holder of an electricity distribution licence. There are 14 DNOs which are owned by six different ownership groups.
<b>Behavioural safety</b>	An approach to safety which goes beyond setting rules and making sure people keep to them. It focuses on changing attitudes so that staff take responsibility for their own safety and that of others.	<b>Distribution System Operator (DSO)</b>	A development from the role of DNO, the DSO will be responsible for forecasting energy production and use, along with balancing demand and generation on the distribution network.
<b>Broad Measure of Customer Satisfaction (BMCS)</b>	An incentive scheme made up of a customer satisfaction survey, an assessment of how complaints are dealt with and a review of stakeholder engagement.	<b>ENA</b>	The Energy Networks Association – the industry body for Distribution Network Operators.
<b>Bund</b>	A containment wall built around items of plant which contain large amounts of oil, to prevent oil leaking into the environment.	<b>Engagement</b>	The process by which an organisation involves people who may be affected by the decisions it makes, or can influence the way in which actions are delivered.
<b>Business Carbon Footprint (BCF)</b>	A calculation which represents the effect our work has on the environment. We measure and report BCF using equivalent tonnes of carbon dioxide to express the effect of energy use in offices, emissions from vehicles and the release of greenhouse gases.	<b>ESQCR</b>	Electricity, Safety, Quality and Continuity Regulations 2002. The ESQCR specify safety standards, which aim to protect the general public and customers from danger.
<b>Capacity</b>	The amount of power that can be distributed through an asset or the network.	<b>Flexibility Services</b>	Techniques used to provide more capacity in the network or reduce demand. These are provided by third parties through contractual arrangements. They can offset the need for reinforcement work.
<b>Contestable work</b>	Other organisations can carry out connections work in competition with the DNO. Work that can be carried out by a competitor is referred to as contestable.	<b>Fuel poverty</b>	Circumstances where customers struggle to afford electricity.

# Glossary



<b>Guaranteed Standards of Performance (GSOPs)</b>	Minimum service levels which DNOs must meet across a range of activities covering supply interruptions, appointments and connections.
<b>Health and Safety Executive (HSE)</b>	The Government organisation responsible for enforcing health and safety legislation.
<b>Incentive on Connections Engagement (ICE)</b>	An incentive mechanism which drives DNOs to improve communication and interaction with major customers. Penalties can be imposed where DNOs fail to demonstrate sufficient engagement with major customers.
<b>Low carbon technology (LCT)</b>	Devices that reduce the amount of carbon being used for heating, transport and generating power. LCT includes electric vehicles, heat pumps and solar generation.
<b>Power Up</b>	Our referral service which arranges for a partner organisation to provide help for customers who are struggling to pay for energy.
<b>Powering Improvement</b>	An industry strategy which aims to achieve continuous improvement in safety and occupational health in the energy generation and network sectors.
<b>Price control</b>	We are a regional monopoly – our customers are our customers because of where they live and work. We are regulated by Ofgem to make sure that we provide a high level of service for the money we are allowed to charge. The money we can earn is set for a specific period of time, referred to as a 'price control'. The current price control period (RIIO-ED1) runs from 1 April 2015 to 31 March 2023.
<b>Priority Services Register (PSR)</b>	A database that records details about customers in vulnerable situations so that we can provide extra support if needed.

<b>Protection batteries</b>	Most circuit breakers on the network rely on batteries to provide the power to monitor the network and initiate tripping and reclosing actions. These batteries are separate to SCADA batteries that provide the power for communication systems between sites and central control centres.
<b>Reinforcement</b>	Providing more network capacity by installing extra assets or installing higher rated assets.
<b>Resilience</b>	The ability of the network to withstand extreme events such as storms and flooding and have the ability to recover quickly from widespread power black outs.
<b>RIIO-ED1</b>	The price control period that runs from 01 April 2015 to 31 March 2023.
<b>RIIO-ED2</b>	The price control period that runs from 01 April 2023 to 31 March 2028.
<b>SCADA batteries</b>	Batteries which provide the power for system communication between sites and central control centres.
<b>SF<sub>6</sub></b>	Sulphur hexafluoride – a greenhouse gas which is used as insulation in some types of switchgear.
<b>Switches/switchgear</b>	Devices on the network can be turned on or off and are used to alter the routing of electricity. Some can be operated remotely by central control engineers. Others need to be operated manually on site by authorised staff.
<b>Transformer</b>	Converts electricity from one voltage to another.
<b>Worst served customers</b>	Customers who experience 12 or more higher voltage power cuts over a three-year period, with at least three in any one year.

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