



# Annual Stakeholder Report **2013/14**

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Stakeholder Engagement 

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# Welcome to our 2013/14 stakeholder report

Inside this report, we've shared our performance for the fourth year of our five-year investment plan.

**Our business is a simple one.** Our purpose is to make sure the electricity network of poles, pylons, cables, wires and substations safely delivers power to homes and businesses around the clock. We look after four distribution areas – West Midlands, East Midlands, South West England and South Wales – where over 7.8 million customers rely on us to keep the lights on every day.

Robert Symons, CEO  
Western Power Distribution



## OFGEM FAST-TRACKING OUR 2015-2023 BUSINESS PLAN

We were the only electricity distribution company to have our next business plan accepted first time, with Ofgem describing our plan as 'well justified' and providing good value for customers.

[Read more](#)



## AWARDED FOR CUSTOMER SERVICE

We were rated first out of all Distribution Network Operators (DNOs) for customer satisfaction, after 15,000 WPD customers were surveyed last year. WPD's four Distribution Areas received 1st, 2nd, 3rd and 4th place in Ofgem's 'Broad Measure of Customer Satisfaction'.

[Read more](#)

# This year's Highlights



## NO.1 IN ENGAGEMENT

We claimed first place in Ofgem's annual Stakeholder Engagement Incentive Scheme for the third consecutive year.

[Read more](#)



## GOING THE EXTRA MILE IN CHRISTMAS STORMS

Ofgem recognised the huge efforts made by our employees as we pulled out all the stops to get supplies restored in very difficult circumstances.

[Read more](#)



## A NEW VULNERABLE CUSTOMER STANDARD

We were the first UK company to be assessed by the British Standards Institute against their Standard, BS18477, for our work with vulnerable customers – and we achieved full compliance.

[Read more](#)



## SAVING MONEY

We have started to tackle fuel poverty by helping customers to save money. We've set up a dedicated team to proactively contact our most vulnerable customers to check their needs during a power cut, and then offer them expert advice on fuel poverty, energy efficiency and tariffs.

[Read more](#)



# Ofgem fast-tracking our 2015-2023 business plan

This year WPD was the only DNO in the UK to have its business plan fast-tracked and agreed early as part of Ofgem's RIIO-ED1 price review process. This means we are a year ahead of schedule with our overall planning. Our original plan was recognised as delivering great value for customers and delivering improvements in the areas prioritised by our stakeholders.

DNOs were tasked with providing evidence in their business plans about how they will continually improve service levels for customers, deal with operational challenges, and adapt to a low carbon agenda, whilst demonstrating that their plans had been shaped by extensive consultation with a wide range of stakeholders.



## What's in the plan?

Our plan includes over £6 billion of expenditure – the bulk on network investment associated with asset replacement, adding capacity to the network and further improving network performance. The plan also contains 76 delivery commitments, called outputs, that are split into six key areas: safety, reliability, environment, connections, customer service and social obligations. From 2015 we will be reporting against each of these outputs every year so that our customers know exactly how we are doing.

### The plan contains 76 delivery commitments, called outputs, in six key areas:

- ▶ Safety.
- ▶ Reliability.
- ▶ Environment.
- ▶ Connections.
- ▶ Customer service.
- ▶ Social obligations.

## Meeting targets

The plan includes details on how we're improving our performance to meet tougher targets. For example, WPD was the only DNO to set tougher network performance targets than Ofgem had proposed.

## Staying ahead

Customer service remains one of our top priorities. We're working hard to maintain our position as the industry leader for customer satisfaction and resolving complaints. We will soon be launching a set of new initiatives to help vulnerable customers and those in fuel poverty. And as we look to the future, innovation continues to be at the forefront of our thinking. We're constantly adapting and developing smarter ways to operate the existing network, including plans to accommodate increasing numbers of electric vehicles, solar panels and heat pumps in the future, as customers adopt more low-carbon technologies and distributed generation.

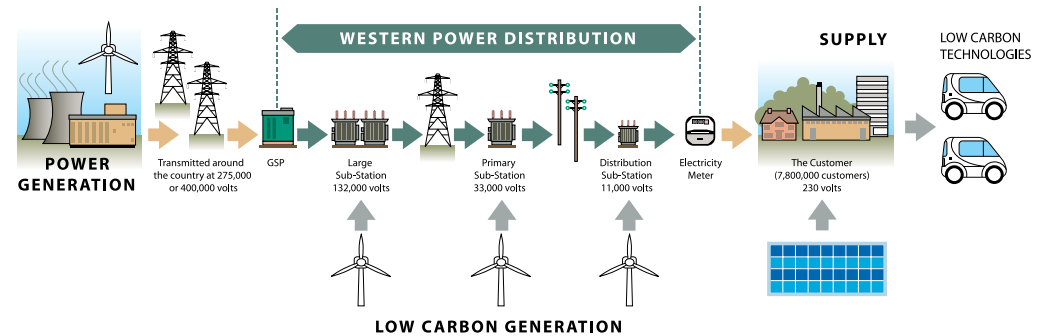
## Our business objectives are to:

- ▶ Minimise the **safety** risks associated with WPD's distribution network.
- ▶ Improve the **reliability** of electricity supplies and to make the distribution network more resilient.
- ▶ Reduce WPD's impact on the **environment** and to facilitate low carbon technology.
- ▶ Consistently deliver outstanding **customer service**.
- ▶ Meet the needs of vulnerable customers with our **social obligations**.
- ▶ **Engage** with **stakeholders** and act on their feedback.

**This report tells you how we performed during 2013/14 in these areas.**

# Who we are and what we do

WPD is an electricity Distribution Network Operator (DNO). That means we are responsible for the network of engineering assets, such as underground cables, overhead lines and substations, that distribute electricity to customers' homes and businesses every day.



## Our four key tasks

- 1 We operate our network assets effectively to 'keep the lights on'.
- 2 We maintain our assets so that they are in a condition to remain reliable.
- 3 We fix our assets if they get damaged or if they are faulty.
- 4 We upgrade the existing networks or build new ones to provide additional electricity supplies or capacity to our customers.

No matter which of these tasks we're carrying out, the safety of our customers and employees is always our top priority.

## The electricity network we operate includes:

- ▶ Transformers that convert electricity from one voltage to another.
- ▶ Underground cables and overhead lines that carry electricity across long distances.
- ▶ Switches to turn the electricity on or off, or to alter its route.
- ▶ Service connections to take the electricity into customers' premises.

Our network sits between what was traditionally known as the National Grid transmission network and the customer.

## Wayleave agreements

We pay some of our customers to have parts of our network, such as poles or towers, on their land. We would like to say thank you to those customers – for allowing this to continue and for granting our teams access for maintenance and when incidents occur.

## Western Power Distribution IN NUMBERS:

COVERING  
**55,000<sup>2</sup>**  
KILOMETRES

**7.8 million**  
CUSTOMERS

**220,000**  
KILOMETRES OF  
LINES AND CABLES

**185,000**  
SUBSTATIONS

OVER **6,000**  
STAFF

# Who we are and what we do

## Where you'll find us

Our network is the largest in the UK, covering densely populated residential areas and widely dispersed rural communities. We operate all the way from the Lincolnshire coast in the East Midlands, through to Gloucestershire in the West Midlands, Monmouthshire and Pembrokeshire in South Wales, and down into the South West to the counties of Somerset, Devon and Cornwall.

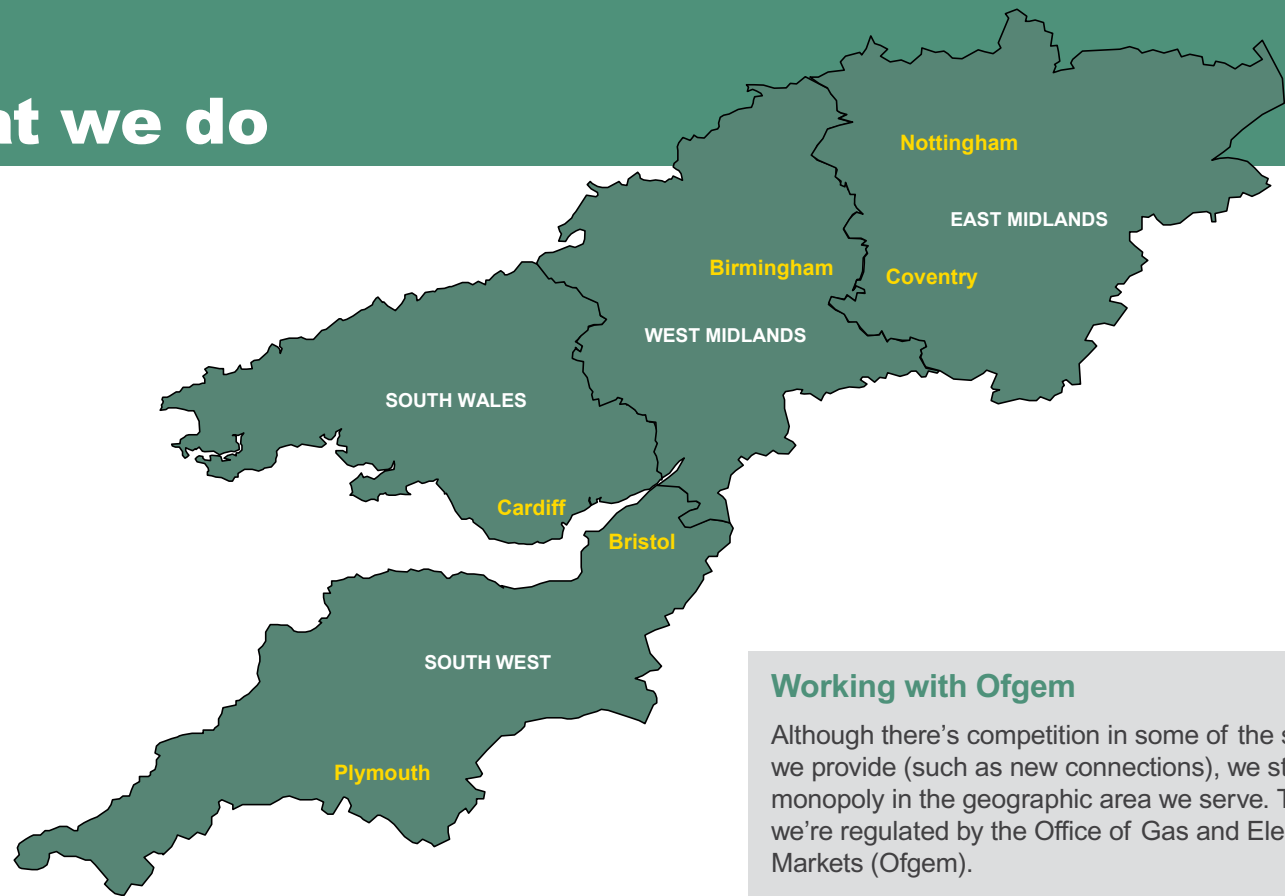
## Empowered employees

Our teams are based in local offices throughout our region. Every day they take responsibility for local issues and deliver local work programmes. This operating structure means that staff are always ready to respond quickly if there's a local power cut.

**At WPD we try to get whatever we are doing right 'first time, every time'. For our employees, that means:**

- ▶ Taking personal responsibility.
- ▶ Following any problems through until the end.
- ▶ Working with others to find a solution.
- ▶ Keeping the customer informed.
- ▶ Following the Golden Rule;

**Treating customers the way you would like to be treated**



## Working with Ofgem

Although there's competition in some of the services we provide (such as new connections), we still have a monopoly in the geographic area we serve. That's why we're regulated by the Office of Gas and Electricity Markets (Ofgem).

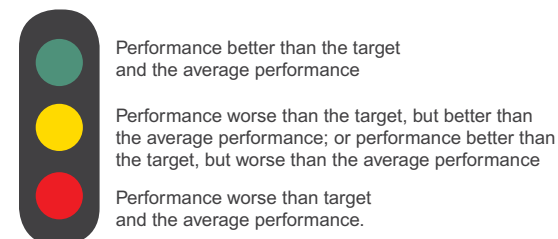
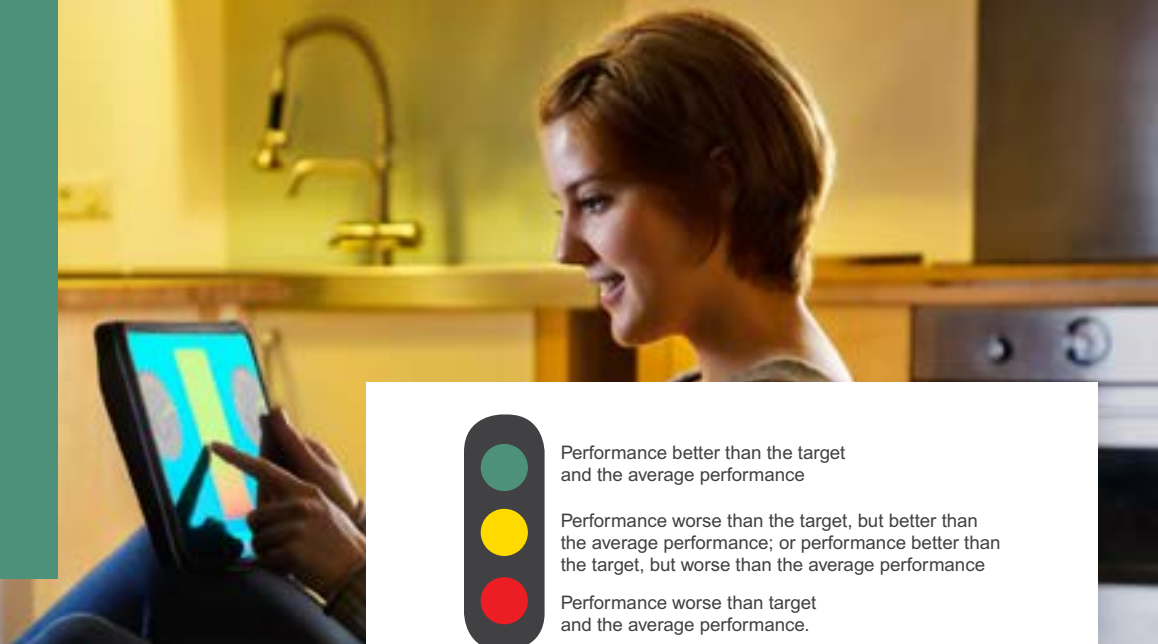
Ofgem issues licences to DNOs that set out our responsibilities and the revenues we're allowed to earn each year. At WPD, we have four licences covering the West Midlands, East Midlands, South West England and South Wales.

Periodically, Ofgem scrutinises each DNO's business plan using a process known as a Distribution Price Control Review. This determines how much we're allowed to charge in total per year for network investment, operating costs and allowed returns.

We do not buy and sell electricity, or directly bill customers. Our costs account for around 16% of an average householder's bill, which they pay to their chosen electricity supplier.

# Performance snapshot

WPD was again rated the top-performing company overall for customer satisfaction in Ofgem's national Broad Measure of Customer Satisfaction Incentive. See page 19.



In 2013/14 we met all Ofgem's national Guaranteed Standards of Performance and continued to lead the way in the UK for network reliability. The following traffic light table shows you how our network has been performing over the last year, using eight key performance indicators.

**NOTE:** Each traffic light indicator is a combined measure of our performance against individual targets set by Ofgem, and/or our performance compared to other UK electricity network companies.

	West Mids	East Mids	South Wales	South West
<b>Network Reliability</b> A combined measure of the average number of times a customer is without their electricity supply in a year (Customer Interruptions) and the average number of minutes that a customer has their supply interrupted (Customer Minutes Lost). <b>Targets exceeded.</b>	●	●	●	●
<b>Environment</b> A range of measures including reduction of waste, CO <sub>2</sub> emissions and electricity used in offices. <b>Targets met.</b>	●	●	●	●
<b>Connections</b> Our overall performance when providing customers with a new connection as measured against Ofgem's Connection and Distributed Generation Standards of Performance. <b>We achieved the highest success rate of all electricity network companies.</b>	●	●	●	●
<b>Stakeholder Engagement</b> Stakeholder Engagement Award Scheme. <b>We scored 8.05 out of ten, the highest score awarded.</b>	●	●	●	●
<b>Customer Satisfaction</b> Measure of customer satisfaction with our telephone response service and our complaint handling performance. <b>Rated top. No Ombudsman complaints against WPD.</b>	●	●	●	●
<b>Network Outputs Health Indices</b> Measure of whether we have delivered the network improvements agreed with the energy regulator Ofgem, in terms of our asset replacement delivery, by looking at the overall health of our assets. <b>Targets met.</b>	●	●	●	●

# Safety

.....  
The safety of our staff, customers and all members of the public is a top priority.



## Safety highlights



- ▶ Reducing number of lost time accidents
- ▶ Safety roadshows attended by all staff
- ▶ New procedure for recording safety information with respect to third parties near our equipment
- ▶ Safety management systems successfully audited against OHSAS 18001:2007
- ▶ New Occupational Health surveillance programme
- ▶ Review of Site Safety Visits (SSVs) and best practice sharing exercise



## Staff safety campaign

### Case study

We launched a major staff safety awareness campaign this year, making 130 presentations at depots and offices and reaching every member of staff – over 6,000 in total.

The campaign, called 'More Cheese – Less Pickle', was designed to illustrate visually how safety systems work and what happens when they fail – using the visual aid of avoiding all of the holes in different layers of cheese lining up at the same time!

The presentation, which reinforced our commitment to improving health and safety performance, focused predominantly on behavioural safety.

Praising the initiative, Robert Symons, Chief Executive said: **“Safety is our number one priority. It has never been more important for our people, especially those working on the network, to take heed of the necessary training processes and procedures that are in place to protect them. Our track record has been the direct result of everyone taking personal responsibility and adopting a no-compromise approach.”**

## SAFETY IN NUMBERS:

.....  
**SAFETY CAMPAIGN**  
REACHES  
**6,000**  
STAFF



**MORE CHEESE**  
*less pickle*



# Safety

## Lost Time Incidents

We constantly use our design standards, processes and ways of working to minimise the risk of injury to staff, contractors and the public. Our employees play an active role on many national committees and steering groups as they help to shape future safety and training policies right across our industry.

The number of Lost Time Incidents reported within the WPD group remains at a very low level. However, we are never complacent.



Lost Time Incidents		
Work related accidents resulting in a day or more away from work		
	2013/14	2012/13
West and East Midlands	0	9
South Wales and South West	2	1

Non Lost Time Incidents		
Work related accidents that do not result in any time away from work		
	2013/14	2012/13
West and East Midlands	55	92
South Wales and South West	25	30



“ Our employees play an active role on many national committees and steering groups as they help to shape future safety and training policies right across our industry ”

# Reliability

We work around the clock, all year round, to keep the lights on for our customers. Despite our best efforts, however, power cuts do happen from time to time. They can be caused by bad weather, wear and tear of our equipment, third party damage or even vandalism. When the power goes off, it's our job to restore power supplies quickly and safely.



## 2013 Christmas storms

**5 days / 25,000 calls / 2 second response rate**

- ▶ **139,000** customers were affected.
- ▶ **87%** had their power restored within 3 hours.
- ▶ **99.3%** within 12 hours.
- ▶ **99.9%** within 24 hours.
- ▶ Only **13** customers were off supply for more than 24 hours, and then by just 19 minutes.



## Christmas storms

As gale-force winds battered the UK over Christmas, WPD's early preparations meant that electricity supplies were swiftly restored. Cornwall, Devon and Somerset were the worst affected areas although disruption was widespread, with multiple poor weather fronts moving across WPD's region well into the New Year.

### Being prepared

Our investment in automation and our up-to-date maintenance programme paid huge dividends during the storms, limiting the effect on customers. Most of the faults were caused by falling trees and windborne debris as a direct result of 70mph gales and saturated ground.

On top of this, we took early measures well before the storms approached our regions: increasing staffing in the Control Room, the

## Case study

Contact Centre and Operational teams. Stores staff, tree cutting and overhead contractors and IT staff were put on standby and all planned work was re-scheduled.

### Taking action

Staff were transferred from the Midlands and Wales to support teams in the South West. They worked long into Christmas Eve knowing they would then have the long journey back to their families.

The many thank-you letters we received were testament to our people, many of whom cancelled leave to support colleagues. Unlike some industries, that close during the festive season, our work continues; keeping the lights on 365 days a year and providing customers with the highest levels of customer service.

## RELIABILITY IN NUMBERS:

**IN 2013/14**  
THE AVERAGE NUMBER OF MINUTES OF LOST SUPPLY PER CUSTOMER PER YEAR WAS\*:

**39** MINUTES IN WPD WEST MIDLANDS

**26** MINUTES IN WPD EAST MIDLANDS

**31** MINUTES IN WPD SOUTH WALES

**41** MINUTES IN WPD SOUTH WEST

\*excludes exceptional weather events

# Reliability

Overall our network continued to perform well in 2013/14. We measure its reliability in three important ways:

- ▶ Number of interruptions to supply (*security of supply*).
- ▶ Duration of interruptions to supply (*availability of supply*).
- ▶ Speed of restoration of supply.

We report the number and duration of supply interruptions to Ofgem every year, as part of their Quality of Service Incentive Scheme. Based on this performance, Ofgem can increase or decrease our revenues. Ofgem sets different targets for the West Midlands, East Midlands, South West England and South Wales, reflecting differences in the size and type of network.

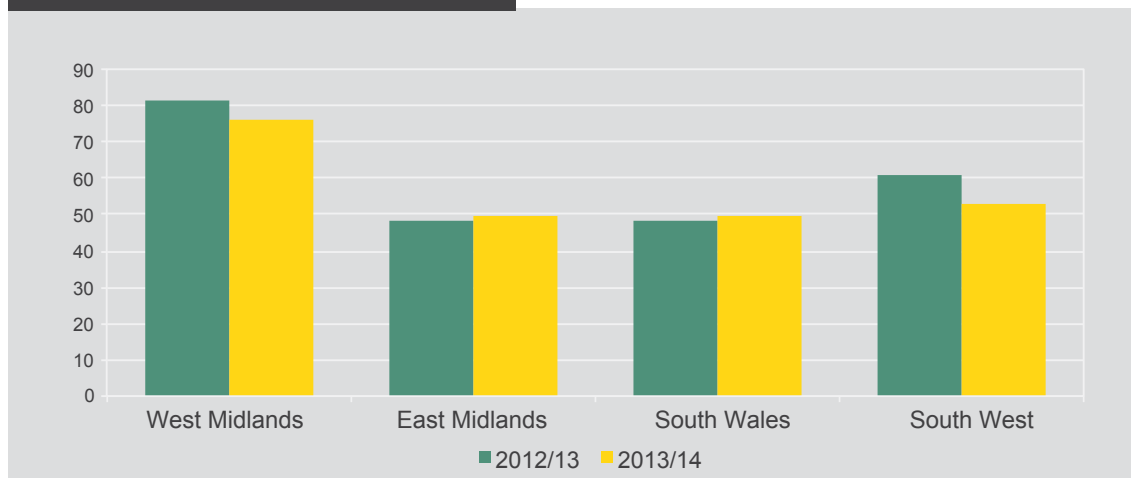
## Speed of restoration – ‘Target 60’

As well as the measures set by Ofgem, we have our own initiative called ‘Target 60’. Knowing just how difficult it can be without power, we aim to restore supplies to as many customers as possible within one hour of a fault on our high voltage network.

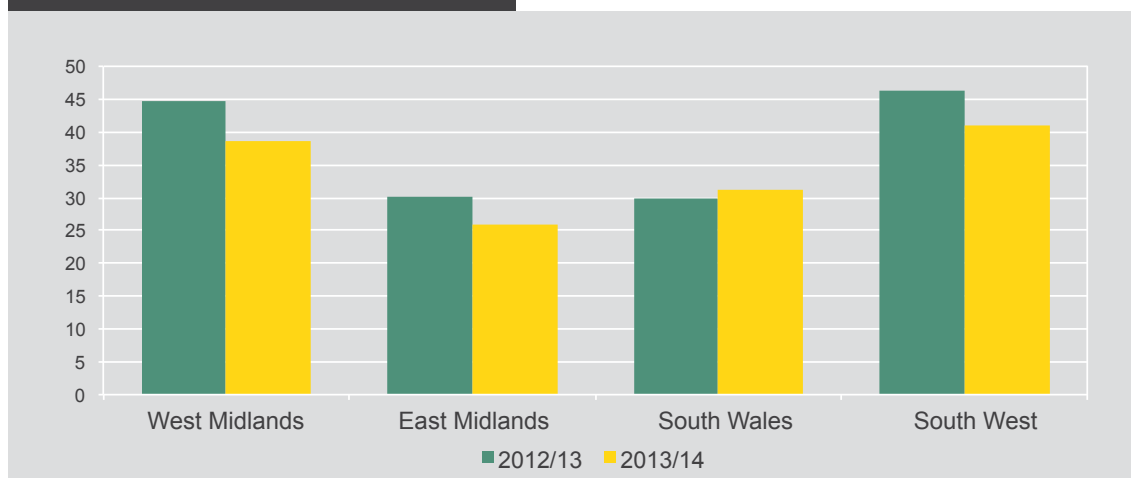
In 2013/14, our success rate against this standard was:

<b>West and East Midlands</b>	<b>90.7% of customers restored within 1 hour</b>
<b>South Wales and South West</b>	<b>83.6% of customers restored within 1 hour</b>

## Interruptions per 100 customers\*



## Minutes lost per customer\*



\*excludes exceptional weather events

# Reliability

**Read More:** Appendix 1  
Performance Trends

## Security of supply – 2013/14

This is the number of supply interruptions recorded per 100 connected customers in a year. We call this 'Customer Interruptions' (CI).

West Midlands	
IIS performance	75.8 CI*
Ofgem target	109.9 CI
<b>Our performance</b>	<b>31% better than target</b>

East Midlands	
IIS performance	49.8 CI*
Ofgem target	75.7 CI
<b>Our performance</b>	<b>34.2% better than target</b>

South Wales	
IIS performance	49.5 CI*
Ofgem target	79.5 CI
<b>Our performance</b>	<b>37.7% better than target</b>

South West	
IIS performance	52.8 CI*
Ofgem target	73.6 CI
<b>Our performance</b>	<b>28.3% better than target</b>

In simple terms this means that, on average, customers in South Wales, the South West and the East Midlands can expect to be without power once every two years and those in the West Midlands once every 18 months – with a portion of this time due to planned work.

## Availability of supply – 2013/14

This is the average number of minutes that a customer has their supply interrupted. We call this 'Customer Minutes Lost' (CML), per connected customer.

West Midlands	
IIS performance	38.6 CML*
Ofgem target	94.9 CML
<b>Our performance</b>	<b>59.3% better than target</b>

East Midlands	
IIS performance	26.0 CML*
Ofgem target	67.8 CML
<b>Our performance</b>	<b>61.7% better than target</b>

South Wales	
IIS performance	31.2 CML*
Ofgem target	44.6 CML
<b>Our performance</b>	<b>30% better than target</b>

South West	
IIS performance	40.9 CML*
Ofgem target	51.0 CML
<b>Our performance</b>	<b>19.8% better than target</b>

\* These figures are based on all power cuts lasting longer than three minutes, including those caused by bad weather, and 50% of the total figures caused by pre-arranged shutdowns for maintenance. Subject to agreement with Ofgem, we can exclude the impact of some exceptional events, such as those caused by very severe weather.



# Reliability

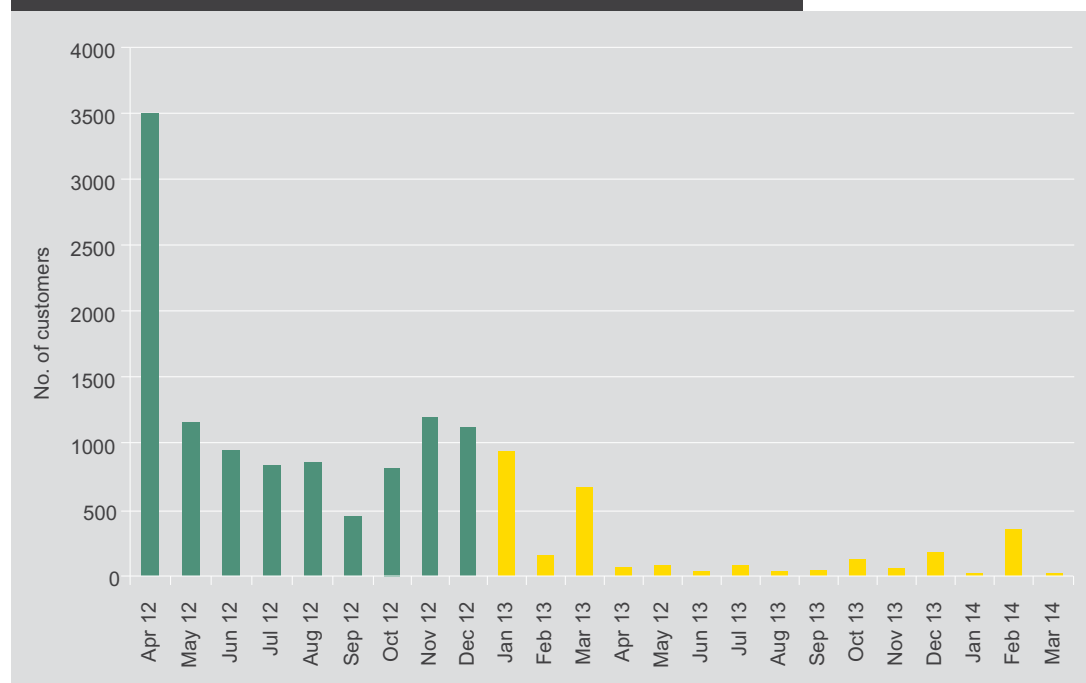
## Guaranteed standards

Ofgem set the minimum level of service that our customers can expect to receive from us and the compensation we pay if we fall short. But we believe in doing more than just the minimum.

That's why, after recommendations from stakeholders at our Customer Panel, we have voluntarily committed to reduce the 18-hour standard for restoration of supply. Now, our customers receive a payment if they are without power for 12 hours.

**On top of this, we now voluntarily pay double the payment set by Ofgem for all standards.**

### Customers experiencing a power cut of over 12 hours



### Standards relating to power cuts, and our increased payments

Weather conditions	Timescale for restoring supplies	Payment set by Ofgem	WPD's payments
Normal weather*	12 hours	No standard	£108 (domestic) £216 (business)
	18 hours	£54 (domestic) £108 (business)	£108 (domestic) £216 (business)
	24 hours (incidents affecting 5,000 customers or more)	£54 (domestic) £108 (business)	£108 (domestic) £216 (business)
Severe weather*	24 hours (medium events)	£27 (domestic & business)	£54 (domestic & business)
	48 hours (large events)	£27 (domestic & business)	£54 (domestic & business)

\*For any additional 12 hours a customer is without supply the Ofgem standard requires a further £27 payment and WPD double this to £54.

# Environment

We know we have a responsibility to minimise our impact on the environment. That's why we're constantly striving for high environmental compliance standards and greater operating efficiency. Over the last few years we have raised the profile of environmental responsibility and sustainability amongst employees at every level. We also work closely with partners who represent a range of environmental and heritage-interest organisations.



## Environment highlights



- ▶ **12 undergrounding schemes completed in 2013/14**  
16km of overhead line removed at an investment of £1.9m.

[Read More](#)



- ▶ **3.6% more recycling undertaken in 2013/14**

[Read More](#)

Caring for the environment isn't just about managing and reducing pollution. Whilst electricity is a vital part of everyday life, the equipment needed to deliver it can be unattractive and visually intrusive. Unfortunately, placing cables underground for long distances, particularly in rural locations, is up to five times more expensive than providing overhead cables.

Whilst underground cables can be less vulnerable to severe weather than overhead lines, when problems do occur, it can sometimes take longer to locate and repair the problem. This means that we constantly need to strike a balance.

Working with stakeholders, we have committed to underground cables in the most iconic sites in National Parks and AONBs (Area of Outstanding Natural Beauty). We've allocated around £8 million in our business plan for 2015-2023 to continue this initiative well beyond 2015.

“ We're constantly striving for high environmental compliance standards and greater operating efficiency ”

## ENVIRONMENT IN NUMBERS:

**£8m** IN BUSINESS PLAN TO INVEST

**IN UNDERGROUND  
CABLES**

**3.6%**  
MORE RECYCLING UNDERTAKEN

**£500,000**  
INVESTMENT

# Environment

## Our environmental commitments for 2010-2015 are:

- ▼ Reduce electricity consumption in depots and offices by **5%**.
- ▼ Reduce the volume of waste being sent to landfill by **5%**.
- ▲ Increase the use of recycled paper to **95%**.
- ▲ Increase the money obtained from the sale of scrap by **5%**.
- ▼ Reduce CO<sub>2</sub> emissions per vehicle by **5%**.
- ▼ Reduce the volume of SF<sub>6</sub> gas leakage from our equipment by **25%**.
- ▼ Reduce the loss of oil from fluid filled cable leaks by **5%**.
- ⊕ Establish oil retaining 'bund' walls around **100%** of our transformers to contain potential oil spillage.

## Case study

### Undergrounding in National Parks and Areas of Outstanding Natural Beauty

One project this year meant working with a number of parish councils and Cannock Chase AONB on an undergrounding project in Brocton. Local residents were keen to share their opinions and get involved and meetings were productive – resulting in investment of around £500,000 and an immensely improved landscape in Brocton.

When the work went ahead we kept close links with both the Parish Council and Cannock Chase AONB.

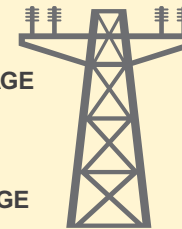
We replaced 21 high voltage poles, 24 low voltage poles and 2km of conductor with underground cable.

**This successful project boasted an investment of around £500,000 and resulted in an immensely improved landscape in Brocton.**

WE REPLACED

**21**  
HIGH VOLTAGE  
POLES AND

**24**  
LOW VOLTAGE  
POLES



BEFORE



AFTER

# Environment

## Our business's carbon footprint

Every year we measure and report on WPD's carbon footprint. We're constantly looking for new ways to cut our overall carbon emissions by reducing business miles and making our buildings and vehicles more efficient.

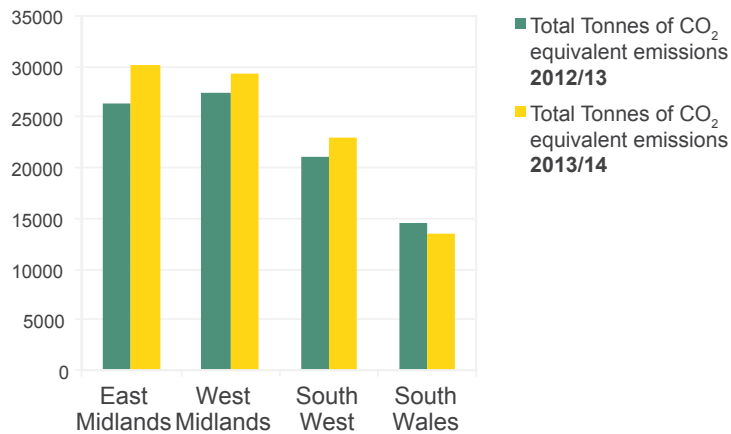
In 2012/13 we saved a significant amount of CO<sub>2</sub> when we restructured our network in the Midlands. Whilst our overall reported CO<sub>2</sub> use in 2013/14 increased slightly overall, we know this was due to improved reporting on fuel combustion and diesel use.

However, there were still notable reductions across all licence areas in the following reporting categories;

- ▶ **Buildings** (15% annual reduction over all four regions).
- ▶ **Business Transport.**

This year also saw the successful re-certification of our ISO14001 environmental management certificate. For the first time the scope of the certificate includes all depots in West Midlands, East Midlands and South Wales. Throughout 2014/15 we will be extending the scope even further to include all remaining depots in the South West.

### Total tonnes of CO<sub>2</sub> emissions



## Waste management

We are committed to reducing both the amount of waste we produce and the amount we send to landfill.

Over the last twelve months we've seen a significant reduction in the amount of waste we send to landfill. We have achieved this by increasing the amount we recycle, whilst also reducing the amount of waste we produce in the first place.

**Read More: Appendix 2 for Fluid Filled Cable Data**

By recycling our waste paper in 2013 we saved:

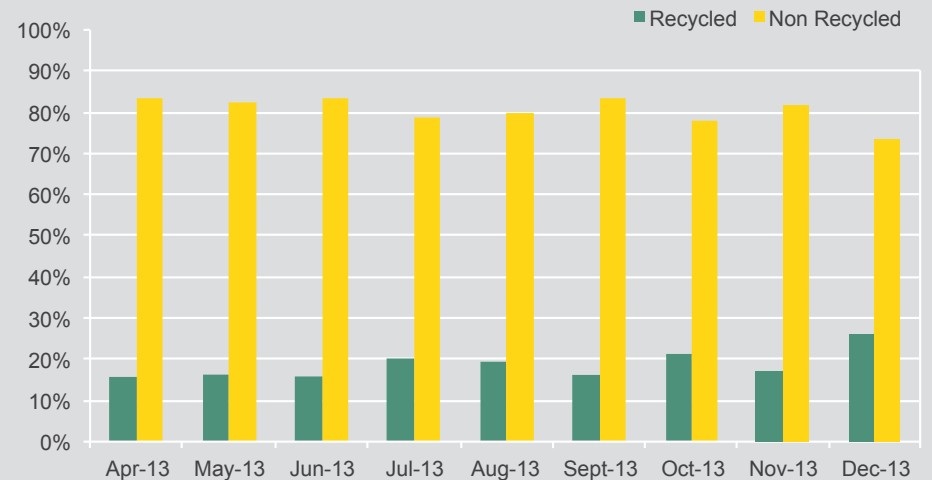
**1923 TREES** 

**2538 tCO<sub>2e</sub>** 

**283 m<sup>3</sup> OF LANDFILL SPACE** 

**154,141 LITRES OF WATER** 

### Total % recycled





# Customer Service

Providing excellent customer service is at the heart of everything we do. Our business structure is based on a flat, locally operated model. Our people take responsibility for local issues and when power cuts occur, they always respond quickly. Our business culture is to get things right first time, every time.



## Customer Service highlights



▶ WPD achieved the top four positions in industry customer satisfaction surveys

[Read More](#)



▶ Over 1 million calls to our contact centre

[Read More](#)



## 24 hour Twitter

### Case study

Since its launch in July 2013, the @wpduk Twitter service has gone from strength to strength. In fact, in the first nine months, we handled over 14,000 customer interactions.

Tweets are always handled by a named member of WPD's Contact Centre who takes ownership for resolving the query.

We now proactively tweet, around the clock, on all faults affecting more than 500 customers and respond to any variations of '#powercuts' in our area.

Key to its success is ensuring Twitter users get quick, accurate information in a conversational yet professional and consistent tone.

“ In the first nine months, we received over 14,000 customer interactions ”

## CUSTOMER SERVICE IN NUMBERS:

301,549

PROACTIVE CALLS



100,586

CALLS TO VULNERABLE CUSTOMERS



681,180

PROACTIVE TEXT MESSAGES

# Customer Service

## Taking care of complaints

We always aim to resolve complaints as quickly as possible, so that our customers don't need to take the matter to the independent Energy Ombudsman.

2013/14	
Total number of complaints	8403
Percentage resolved to the customer's satisfaction	100%
Number of complaints referred to the Energy Ombudsman	0
Number of complaints found against us by the Energy Ombudsman	0

“ We proactively call customers with the latest information – to make their lives easier. We try to call every affected vulnerable customer within three hours of a power cut to check they are ok ”

Customers contact us for a variety of reasons: to report a power cut; ask a question or apply for a new connection. So it's vital that we make it easy to get in touch and always have the information our customers need.

## Keeping customers up-to-date

Our fifth consecutive 'Power for Life' campaign saw us write to every single customer again this year – all 7.8 million of them. As well as raising WPD's profile and inviting participation in our consultations, the four-page newsletter promoted the Priority Service Register (and how to join) and the Guaranteed Standards. This was supported by a month of television, radio and newspaper advertising. A corresponding survey confirmed this increased awareness of WPD by 27%.

During power cuts we proactively contact customers with the latest information – to make their lives easier. We ring when the restoration time changes and when supplies have been restored. We try to call every affected vulnerable customer within three hours of a power cut to check they are ok.

Having listened to customer feedback, we've developed a bespoke system that sends a text message (to mobiles or landlines) to every customer affected by a power cut on our High Voltage (HV) network. The message apologises and gives the estimated restoration time. Once the power comes back on, it sends an updated message.



# Customer Service

## Measuring customer satisfaction

Every month Ofgem surveys customers who have been in touch with us to report loss of supply, make a general enquiry or ask for a new connection. Over 15,000 WPD customers were surveyed in 2013/14 as part of the industry Broad Measure of Customer Satisfaction.

In the league table of the 14 DNO areas in the UK, our four WPD DNOs were ranked:

Industry average score

**8.33**  
**10**

**1st place**

WPD East Midlands

**8.77**  
**10**

**2nd place**

WPD South Wales

**8.72**  
**10**

**3rd place**

WPD South West

**8.71**  
**10**

**4th place**

WPD West Midlands

**8.61**  
**10**

## Our telephone performance

### South Wales and South West – 2013/14

Total number of calls (all calls)		480,994	
Average speed of answer		2.19 seconds	
		<b>Target</b>	<b>WPD performance</b>
Power cuts	Percentage of calls answered within 20 seconds	80%	99.2%
	Rate of calls abandoned	4% or less	0.1%
General enquiries	Percentage of calls answered within 20 seconds	80%	99.4%
	Rate of calls abandoned	4% or less	0.02%

### West and East Midlands – 2013/14

Total number of calls (all calls)		540,317	
Average speed of answer		1.47 seconds	
		<b>Target</b>	<b>WPD performance</b>
Power cuts	Percentage of calls answered within 20 seconds	80%	99.3%
	Rate of calls abandoned	4% or less	0.2%
General enquiries	Percentage of calls answered within 20 seconds	80%	99.8%
	Rate of calls abandoned	4% or less	0.01%

# Customer Service

## Customer Service Excellence

Our commitment to excellent customer service has been recognised by the Customer Service Excellence Award (CSE). The award covers best practice in over 100 elements of customer service for both public sector and private sector companies.

An independent assessor looked at what we do and spoke to employees throughout WPD to find out more about:

- ▶ Our comprehensive and up-to-date stakeholder engagement strategy.
- ▶ The way we use different processes and mechanisms to engage with our customers.
- ▶ Senior manager buy-in.
- ▶ The way we use customer feedback to take action and deliver results.



## Setting the standard

In March 2014 we were re-accredited for the twenty-second consecutive year. Despite our long-standing achievement of the Standard, it continues to be a driver for continual improvement in the services we provide to customers. There are 57 standards in total that we are measured against, and we are assessed as part of a three year programme, where one third of the standards are reviewed each year.

In 2014 we were assessed as being fully compliant in all 18 categories that were assessed, and we were delighted that in seven of the standards we were upgraded from 'fully compliant' to '**compliance plus**' – the highest level of compliance possible, and recognised as best practice across a range of sectors. This brings our total 'compliance plus' awards to 21 out of the 57 standards.

“ In March 2014 we were re-accredited for the twenty-second consecutive year. Despite our long-standing achievement of the Standard, it continues to be a driver for continual improvement in the services we provide to customers ”



# Customer Service



## Our performance against Ofgem's Guaranteed Standards in 2013/14

### Appointments

If we visit a customer for any reason, they'll be offered an appointment during the morning or afternoon or within a two-hour time band. If we fail to make or keep that appointment we'll arrange for the customer to receive a **£22\*** payment.



**100% success**

### Company Fuse Failure

If a customer loses supply due to the operation of their main fuse, we'll visit within 3 hours on weekdays and 4 hours at weekends. If we fail to do so, we'll pay the customer **£22\***.



**100% success**

### Electricity Supply Failure

If our supply network fails we'll restore supplies within 18 hours of the fault being reported, during normal weather. (If 5,000+ properties are affected we'll restore it within 24 hours of becoming aware.) If we fail to do so, we'll pay the customer **£54\*** (£108 for non-domestic customers). We'll pay a further **£27\*** for every additional 12 hours that a customer is without electricity.



**100% success**

### Electricity Supply Failure – Severe Weather

If our supply network fails during severe weather we'll restore supplies within 24 or 48 hours of the fault being reported. If we fail to do so, we'll pay the customer **£27\***. We'll pay a further £27 for every additional 12 hours that a customer is without electricity, up to a maximum of £216.



**100% success**

### Notice of Planned Interruption to Supply

If we need to interrupt a supply for testing or maintenance, we'll give the affected customers at least 2 days' notice. If we fail to do this, customers can claim **£22\*** (£44 for non-domestic customers).



**99.99% success**

### Voltage Complaints

If a customer contacts us about a problem with their supply voltage, we guarantee to reply to the enquiry within 5 working days or make an appointment to visit and investigate within 7 working days. If we fail to do so, we'll pay **£22\***.



**100% success**

### Multiple Interruptions

If a problem on our system causes a customer to be without power for three hours or more, on four or more occasions in a year (from 1 April), they're entitled to a **£54\*** payment. Customers can claim within three months of the end of the year.



**100% success**

**\*We voluntarily double this amount that Ofgem say we should pay.**

# Connections

When homes and businesses need a new electricity supply, the first step is getting connected to our network.



## Connections highlights



- ▶ WPD rank top in Ofgem satisfaction survey for connections

[Read More](#)



- ▶ WPD build connections improvement work plan with stakeholders

[Read More](#)

## New connections, new customers

We are proud to provide all demand connections (to use electricity), generation connections (to connect things such as solar panels or wind turbines) and unmetered connections (typically street lighting).

The way we provide quotes and the way the connection is carried out is all covered by Guaranteed Standards of Performance. In 2013/14 WPD only failed to meet three new connections Standards, to complete works on an agreed date.



For further information on the Guaranteed Standards of performance and the Connections Standards of Performance see our [website](#)

## CONNECTIONS IN NUMBERS:

.....  
IN **2013/14** WE HAVE  
HANDLED **20%** MORE  
CONNECTIONS ENQUIRIES  
THAN IN 2012/13  
.....



.....  
**21 EXPERTS**  
CONNECTIONS CUSTOMER  
STEERING GROUP  
.....

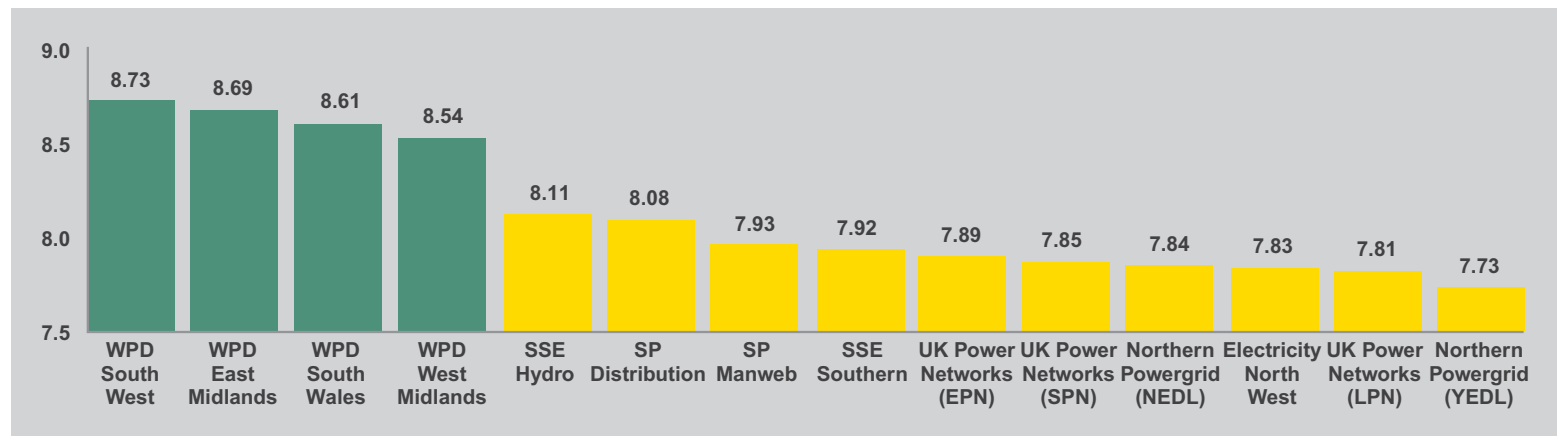
# Connections

## New connections

	West Midlands		East Midlands		South Wales		South West	
	2013/14	2012/13	2013/14	2012/13	2013/14	2012/13	2013/14	2012/13
Connection enquiries handled	16895	13894	17300	15042	8994	7691	19593	15920
Applications for demand connections	12763	10597	12252	10307	6272	5168	10862	10442
Applications for generation connections	1508	997	1932	1455	989	923	4735	2724
Enquiries resulting in an offer	5133	4634	4886	4703	2803	2244	4893	4810

“ Over 6,500 WPD connections customers are now surveyed every year ”

WPD have taken the top four spots in Ofgem’s Broad Measure of Customer Satisfaction in relation to connections. Over 6,500 WPD connections customers are now surveyed every year. Questions cover every aspect of our service, with customers asked to give WPD a score out of ten for how easy it was to contact us, the time it took for us to provide a quotation, the length of the overall process and the quality of our communication. Finally customers are asked to rate their overall satisfaction with the process as a whole.



# Connections

## Connections Improvement Workplan

The WPD 2014 workplan has been created using input from our CCSG and wider stakeholders. Based on discussions with stakeholders we proposed a range of initiatives to improve service and performance and developed these into a connections workplan. The workplan is continuously updated and can be found on our website. Here are some examples of recent initiatives.

Issue	WPD initiative	Target Date
Improve online application functionality	Implement a web-based tool for submitting and tracking applications.	Apr 2015
Improve awareness of website services	Implement user email alert for website updates and changes. Improve accessibility of website and services.	Jun 2014 Jun 2014
Improve availability of Network information	Review and improve network information currently available. Implement access to further network information for customers.	Mar 2014 Sep 2015
Improve assistance of customers applying for connections	Implement a programme of Connection Surgeries. Hold a workshop for community energy schemes.	Jun 2014 Jun 2014
Improve consistency of, and information in formal offers	Assess and improve the offer letter, in particular; cost breakdown, timescales and milestones.	Nov 2014
Consult on processes regarding interactivity, acceptance validity, payments and reservation of capacity	Consult with stakeholders on the approach. Implement a clear strategy and communicate to stakeholders.	Mar 2014 Mar 2014
Acceptance of e-signatures for agreements	Implement policy to allow acceptance of electronic signatures.	Nov 2014
Gaining legal agreements and consents	Identify and implement improvements to improve timescales, consistency and transparency.	Nov 2014
Extension of contestability - Point of Connections (POC) self-assessment	Trial and implement process to allow self-assessment of POC for Independent Connection Providers (ICPs).	Nov 2014
Extension of contestability - connection reinforcement	Develop trial and procedures to facilitate ICPs carrying out connections reinforcement.	Nov 2014
Expand service for IDNO emergency support	Roll out ability to support Independent Network Operators (IDNOs) for fault repair service.	Apr 2015
Improve Consistency of process	Implement training and briefings to improve consistency across teams.	Apr 2015

### Case study

## Connections Customer Steering Group (CCSG)

We created our CCSG so that we could keep developing and improving our connections services.

This group meets three times each year and is chaired by our Chief Executive, Robert Symons. It is made up of a broad range of connection stakeholders from a variety of sectors. The group comprises a panel of 21 experts from the connections arena including Public Lighting Authorities, Large Commercial, Distributed Generation Developers, Community Energy Schemes, Independent Connection Providers and Independent Distribution Network Operators.

Each panel member represents their own views and the views of their colleagues within their market segment(s). There is also a cycle of planning and 'update and review' workshops as the group helps to guide all our decision-making and co-deliver improvements.



# Social Obligations

WPD have put social obligations at the top of the agenda. We help customers to help themselves, support them during power cuts and enable them to tackle wider issues such as fuel poverty.



## Social Obligations highlights



- ▶ **First UK company to be assessed against inclusivity standard**

[Read More](#)



- ▶ **Vulnerable customers give us 8.9 out of ten for satisfaction**

[Read More](#)



## Power up: Partnerships lift people out of fuel poverty

Every day we call customers on our Priority Services Register to check their details and improve our data. Now, through a new partnership we're also helping customers in fuel poverty by giving them access to debt advice and energy efficiency measures.

### How it works


We call customers on our Priority Services Register during sociable hours and with no time limits or scripts. A direct referral process enables the Coventry Citizens Bureau to deliver advice by telephone, and offer a face-to-face casework service including a benefits check, advice on budgeting, debt and fuel tariffs, fuel usage and schemes that might support householders to receive a new boiler or installation.

### A customer's story

A customer, separated from his wife and children lives alone in a flat. Challenged with learning disabilities, he was referred to Citizen's Advice who were able to see his struggle maintaining bill payments resulting in a huge monthly deficit. Citizens Advice supported him to apply for a severe disability premium, increasing his income by £257.83 per month addressing the shortfall. A reduction in his fuel bill of £16.89 per month helped and regular token payments to non-priority creditors were established.

## SOCIAL OBLIGATIONS IN NUMBERS:

DEC '13 – MAR '14 WE CONTACTED OVER  
 **20,000**  
 CUSTOMERS

UPDATED  
**57%**  
 OF RECORDS IN FIRST 3 MONTHS  


WE ASSISTED CLIENTS IN MANAGING DEBT  
 TOTTALING  
**£121,644**  
 IN FIRST 3 MONTHS

# Social Obligations

## Vulnerable customers give us 8.9 out of ten for satisfaction

In order to really take care of our vulnerable customers we need to constantly ask their opinions about our services. We want to know how we can raise awareness of what we do and identify improvements we can make, especially the quality of the data on our Priority Services Register (PSR). That's why we surveyed 400 of the

customers who were contacted in the last 12 months by WPD to update their details.

We wanted to measure how satisfied they had been with the quality of the call and the information provided as well as to obtain their views on our services and possible improvements to the support we provide.



### We found out:

- ▲ Proactive calls had a significant positive impact on perceptions: satisfaction amongst vulnerable customers contacted was **up by 16% on 2013 results**.
- ▲ The number of customers stating high satisfaction has **increased from 53% to 69%**.
- ▲ Calling customers to update records is a valuable exercise: before WPD made contact **24%** of customers knew about the register. Among those who did know, **31%** were not aware they were already listed on it.
- ⊕ Awareness of the register was lowest among those with physical or mental disabilities and foreign-language speakers.
- ⊕ Vulnerable customers value the PSR: **almost 9 out of 10 customers** stayed registered once aware they were on it.
- ⊕ There has been a significant increase in awareness of the services offered: even the least recalled services were attributed a high importance rating of **over 7 out of 10**.

## Louder than Words

We know that giving great customer service means making sure all our customers can contact us with confidence. In 2014 we were proud to once again receive the Action On Hearing Loss (AOHL) 'Louder Than Words' deaf awareness Charter Mark for the sixth consecutive year.

An enduring partnership with AOHL, who are members of our Customer Panel, has led to practical changes to services and processes. AOHL have also directly influenced our Business Plan and social obligations proposals.



“ In 2014 we were proud to once again receive the 'Louder Than Words' deaf awareness Charter Mark for the sixth consecutive year ”

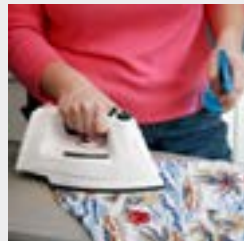
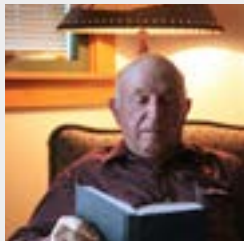
# Social Obligations

## Improving our services for vulnerable customers

This year we've continued to work closely with organisations including the RVS (Royal Voluntary Service), the British Red Cross, Age UK, National Energy Action (NEA), and Action on Hearing Loss to promote awareness of WPD, and to let vulnerable customers know what help and advice they can get from us.

We recently introduced a new Social Obligations Strategy, which includes commitments to:

- ▶ Cleanse the 950,000 records on our Priority Service Register by proactively contacting customers to update their details.
- ▶ Provide help to vulnerable customers during power cuts.
- ▶ Send vulnerable customers 'crisis packs' containing useful items such as flasks, torches, hats and gloves.
- ▶ Work with local resilience forums to support vulnerable customers when extreme events, such as widespread flooding, occur.
- ▶ Continue projects with partners like Citizens Advice and EST (Energy Saving Trust) to provide help addressing fuel poverty.
- ▶ Train frontline staff to help them identify key warning signs of fuel poverty and refer customers to the Citizen's Advice for individual help.



## Real recognition

This year, WPD became the first company in the UK to be assessed as compliant by the British Standards Institution (BSI) for the way we look after our vulnerable customers.

Endorsed by Ofgem, the BSI standard (BS18477:2010) covers all areas of our business, from having responsible practices, to ensuring staff are trained to identify signs of vulnerability, to communicating information in accessible formats.

We were proud to successfully pass all 36 elements of their framework, following a three-day audit when BSI looked at our:

- ▶ Contact Centre activities.
- ▶ Customer-facing leaflets and web pages.
- ▶ Stakeholder engagement.
- ▶ Vulnerable customer research.

### The assessor said:

**"A culture of ownership and continual improvement is promoted at all levels of the company. This is a forward looking organisation which is constantly striving to improve the consumer experience through regular consultation with stakeholders and responding quickly to any opportunity."**



# Social Obligations

## Community support

During 2013/14 we continued to base our community support activity on three key themes: education, safety and the environment. During this time we assisted over 300 separate charitable and non-charitable organisations.

We've also responded to feedback from our stakeholder engagement and customer research. In particular, we've established various customer outreach initiatives – including our Community Chest partnership with the Centre for Sustainable Energy (CSE) – which helps fuel-poor customers reduce their energy consumption.

During the year, working with CSE and Age UK, we distributed over 500 wireless energy monitors. The monitors help customers identify the electrical items in their homes that are really pushing up their fuel costs.

### Other highlights included:

- ▶ Our links with various Wildlife Trusts enabled over 4,000 children to benefit from an environmentally-linked experience funded by WPD.
- ▶ We were one of the founding sponsors of the Gromit Unleashed public art exhibition across Bristol during the summer. The overall campaign helped secure £2.3 million for the Grand Appeal Bristol children's hospital charity.
- ▶ We took part in almost 200 safety/education events, reaching over 50,000 school children.



We planted over 7,000 trees and shrubs thanks to our tree-planting partnerships with The Conservation Volunteers (TCV), the Silvanus Trust and Groundworks.

SAFETY / EDUCATION  
EVENTS REACHED  
**50,000**  
SCHOOL CHILDREN

7,000  
TREES  
PLANTED



*Steve Gerrish, WPD's Team Manager for Bristol, helping students and Project Officer Claire Dinsdale from TCV to plant new trees.*



Over 200 community groups and schools benefited from our Cash for the Community campaigns. These were communicated using newspaper groups in Gloucester, Devon, Swansea, Llanelli and Carmarthen areas.

*A WPD donation helps Ticknall Parish Council to purchase a defibrillator for the Village Hall and arrange training for local residents in conjunction with The Community Heartbeat Trust.*



# Stakeholder Engagement

The quality of WPD's engagement with stakeholders is assessed annually as part of Ofgem's Stakeholder Engagement Incentive Scheme. An Ofgem-appointed panel of independent experts assess all UK DNOs to see how well we are listening to customers and using feedback to drive improvements and shape future plans.



## Stakeholder Engagement highlights



▶ **WPD assessed as the top performers in the industry**

[Read More](#)



▶ **Panels and workshops lead the way for engagement**

[Read More](#)

## Our customer panel

Chaired by our Chief Executive, our quarterly Customer Panel meetings give a diverse mix of customers representatives the chance to shape our thinking and future priorities.

We have 25 permanent members who represent a variety of stakeholder groups including the British Red Cross, Energy Saving Trust, B&Q, The Co-operative, The Police, various Parish Councils, Sainsbury's, National Grid and Severn Trent Water. We ask them to review and influence our strategy and key decisions, as well as keep us up to date with the concerns and priorities of the customers they represent.

### During 2013/14, the panel has

- **Led** us to voluntarily double the value of all Guaranteed Standard payments and lower the threshold for the loss of supply standard from 18 hours to 12 hours.
- **Reviewed and approved** our new social media and social obligations strategies.
- **Designed** the new crisis packs we send to vulnerable customers to help them cope during a power cut.
- **Helped** us to set up a new, dedicated team to contact customers on our Priority Service Register.

STAKEHOLDER  
ENGAGEMENT  
**IN NUMBERS:**

**8.05**  
out of 10  
FOR STAKEHOLDER  
ENGAGEMENT

**200**  
PARISH COUNCILLORS,  
BUSINESSES, LOCAL  
AUTHORITIES AND  
CUSTOMERS ATTEND  
STAKEHOLDER EVENTS

**4,500**  
PEOPLE ENGAGED  
WITH BUSINESS PLAN  
DEVELOPMENT



# Stakeholder Engagement

## High scores with Ofgem

WPD topped the charts for the third consecutive year in Ofgem’s 2013/14 incentive scheme. Ofgem runs an annual scheme to review the quality of every DNO’s engagement with stakeholders and to check how customer feedback is being used to improve services and performance. Each DNO submits two written submissions.

The first outlines our strategy and evidence of our external accreditation schemes, and is reviewed by Ofgem to check each company is meeting minimum requirements. Then an independent panel conducts a review of WPD’s ‘part two’ submission which details the year’s major initiatives and the benefits delivered for customers.

A face to face interview with a panel of experts followed. The judging panel was, once again, impressed with our stakeholder engagement, awarding us the highest score – **8.05 out of 10** – out of all the competing DNOs. WPD were praised for the way that stakeholder engagement is embedded in our business, for the various initiatives we have in place to support vulnerable customers and to tackle fuel poverty. We were also commended for having clear evidence of Board-level commitment to our engagement programme.



Ofgem’s judging panel awarded us a top score of 8.05 out of ten for our stakeholder engagement award entry.

**DNO Stakeholder Incentive scores out of ten**

DNO	Rating
WPD	8.05
Northern Power Grid	7.65
Scottish Power	6.65
UK Power Networks	6.55
Electricity North West	6.45
SSE	5.50

[Click here to look at the WPD submissions](#)

# Stakeholder Engagement

## Stakeholder workshops

Over 200 parish councillors, businesses, local authorities, connections and domestic customers joined a cross-section of stakeholders at our stakeholder events in both 2013 and 2014. More than 4,500 people were engaged to help us build our business plan over three years – the vast majority face-to-face.

Engagement with stakeholders led to several substantial changes to our business plan. For example, it led us to include more stretching targets and accelerated delivery timescales in areas including resilience tree trimming (to reduce the risk of power cuts due to severe weather), the number of major substations protected from flooding and reducing the number of 'worst served' customers (those who have significantly above average numbers of power cuts).

“ More than 4,500 people were engaged to help us build our business plan over three years ”

Now that the plan has been agreed, we're developing these relationships further by shifting the focus to the delivery of our plans.

Using a combination of discussions and quantitative electronic voting, the workshops were designed to:

1. Explain the key aspects of WPD's final Business Plan.
2. Identify which outputs, if any, stakeholders would like WPD to deliver early.
3. Seek views on WPD's performance during severe weather and our proposed improvement actions.
4. Seek feedback on WPD's connections work plan, innovation plan and social obligations programme.

Despite WPD's plan already being agreed with Ofgem, stakeholders were still able to significantly influence our activities. As a result of their feedback in 2014, we have identified 31 actions, including accelerating the delivery of several of our Business Plan commitments so that they are achieved earlier than originally specified. For example, we will:

- ▶ Deliver **13%** fewer power cuts, with **20%** quicker restoration by 2019 (4 years earlier than planned).
- ▶ Proactively contact all vulnerable customers every 2 years by 2019 (4 years earlier than planned).

For further information on our 2015-23 Business Plan, please visit the Stakeholder section of our website [www.westernpower.co.uk](http://www.westernpower.co.uk)





# Stakeholder Engagement

## Case study

### Junior Panels

In 2013 we were the first DNO to host events with future customers via sessions at universities. Building on this, in 2014, we engaged harder-to-reach young people and asked them to influence the decisions we make today that will affect them in ten years' time.

Teaming up with the Funky Dragons – a junior (14-18 year olds) shadow Welsh Assembly Government – and Positive About Young People – a West Midlands organisation for teenagers excluded from education, we hosted sessions with 20 people, who reviewed our key decisions.

We discussed their expectations in a power cut, our crisis packs, social media use and ways to raise WPD's profile. We also ran a 'manage your own network' session where members were asked to invest £5m on a choice of eight improvement actions each costing £1m. This worked particularly well, with clear priorities emerging around power cut reduction and low carbon investment.



#### Feedback from the Junior Panel led us to:

- ▶ Introduce 24/7 Twitter hours and a clearer 'profile'.
- ▶ Make the fridge magnets, that will be sent to all 7.8 million WPD customers, luminous.
- ▶ Include a foil blanket in every crisis pack.
- ▶ Include 'helping vulnerable customers' in education sessions.

“ We engaged harder-to-reach young people and asked them to influence the decisions we make today ”



# Innovation

We rely on innovation to maintain our position as a frontier performer in network performance and customer service. We use this focus on innovation to help us develop in all areas: safety, cost efficiency, customer service, reliability and environment.



## Innovation highlights



- ▶ **A new Generation of Connections**  
We are the first UK DNO to offer alternative connection offers to distributed generation customers.

[Read More](#)



- ▶ **LV Templates Launched into Business-as-Usual**  
Planning tools for a Low Carbon future.

[Read More](#)



- ▶ **Demand Side Response Trial Success for project FALCON**  
Working with businesses in Milton Keynes to free up network capacity.

[Read More](#)

## Low Carbon Networks Fund (LCNF)

In 2010, Ofgem announced the creation of a £500m funding mechanism called the LCNF. It allows DNOs to test innovative ways of getting the local electricity network ready for mass adoption of low carbon technologies by customers, such as solar panels, heat pumps and electric vehicles. The majority of the money is available for projects selected through an annual £64 million competition.

Innovation must always provide a value-for-money solution for our customers. That's why we're making maximum use of this funding mechanism to trial innovations and establish the benefits of different solutions.

We plan to share our results with other companies and make our solutions easily transferable across the UK's entire electricity infrastructure.

### INNOVATION

#### KEY FACTS:

OFGEM ANNOUNCED  
THE CREATION OF A  
**£500m**  
FUNDING MECHANISM  
CALLED LCNF

 **LV TEMPLATES  
LAUNCHED**

**1ST DNO TO OFFER  
ALTERNATIVE  
CONNECTION OFFERS**

 **INNOVATION  
PROVIDING  
VALUE FOR MONEY  
SOLUTIONS**

# Innovation

## The objectives of WPD's innovation are to:

- ▶ Develop new, smart techniques that will accommodate increased load and generation at lower costs than conventional reinforcement.
- ▶ Improve performance against one or more of our core goals of safety, customer service, reliability, the environment or cost effectiveness.
- ▶ Ensure solutions are compatible with the existing network.
- ▶ Deliver solutions that will become business as usual.
- ▶ Provide value for money.



“ Based on feedback, we've created three new connection options for customers looking to connect distributed generation to the network ”

## A New Generation of Connections

Based on feedback, we've created three new connection options for customers looking to connect distributed generation to the network:

- ▶ **Timed Connection** – Generation customers will have the amount of energy they can contribute to the network restricted within specific times, depending on certain seasonal and time-of-day factors.
- ▶ **Soft Intertrip** – Our control systems will manage the generation that our customers output, limiting the amount of energy they can output during a fault on the network or during planned maintenance.
- ▶ **Active Network Management (ANM)** – Allows the amount of energy generation customers can output to be controlled in real time, depending on dynamic network conditions such as the temperature and wind speeds affecting overhead power lines. This requires new Active Network Management control and monitoring systems that allow the system to automatically adjust the output of multiple generation customers at the same time.

These plans have been met with wide support from generation customers and we'll be rolling out the new tools, systems and training this year.

# Innovation

## LV Templates Launched into Business-as-Usual

We used our LV Templates project to evaluate how low voltage (LV) electricity networks can best accommodate clusters and high volumes of low carbon technologies.

In 2011, we fitted data monitors and communication equipment in 951 substations in South Wales. The idea was to monitor energy usage, so we used statistical clustering techniques to identify more accurate patterns in electricity consumption.

### What we learned

- ▶ This knowledge changed the way we carried out our network planning, because now we can better predict the effect of low voltage generation and load. Ultimately, this will enable us to allow more of these to connect to our existing network.
- ▶ And it's not just our network planning that has improved. We also learned that low voltage solar generation normally generates onto the network at around 80% of its rating and that voltage rise effects from solar generation are less than expected. We've been able to use this to change the way we design the network, increasing the volume of solar generation that can be accepted. Now, we're using these results to influence national design policies and solar generation acceptance criteria.

Although the project formally closed in 2013, we are still collecting data. This will allow us to keep monitoring changes as more of our customers adopt Low Carbon Technologies (LCTs), and keep working with information that is up-to-date.



“ We’re using these results to influence national design policies and solar generation acceptance criteria ”

## Demand Side Response Trial Success for project FALCON

Taking place in Milton Keynes and the surrounding area, Project FALCON is testing a variety of alternative techniques to manage network restrictions so that we can develop tools for future network design. One of the techniques we're testing involves working with businesses that are able to reduce their electricity use at certain times of the day and in return receive a payment from WPD. This is known as the Demand Side Response (DSR).

Initial results were successful, with around 10MWh of energy turndown recorded by monitoring equipment installed at substations across the city. Local generators owned by customers that are normally only used for emergency backup, were dispatched by WPD, reducing the electricity drawn from the local grid. The trial also called on the operators of Milton Keynes' District heating network to run up their spare gas fired generator to support local supplies.

The exact programme will be determined by WPD engineers who prepare daily predictions of future peak usage based on data such as consumption trends and local weather forecasts.

# Network Investment

In 2013/14, we invested £502 million to improve the electricity network in the West Midlands, East Midlands, South West and Wales. This included the replacement of ageing and poor condition network equipment, as well as the introduction of new technology to improve network performance.



## Investment Highlights



### ▶ Reported expenditure

[Read More](#)



### ▶ Network Investment

[Read More](#)

In the four-year period since allowances were set (April 2010 to March 2014) we have invested £1,519 million on the electricity network.

In the final year of the current price control period (up to March 2015), we will be spending a further £413 million, taking our total network investment during the current five year planning period to over £1,930 million. We need to do this to maintain and upgrade the network so that we can keep meeting the demand for electricity, allow local generation to export power, protect against the impact of climate change and ensure that the network remains reliable.



## NETWORK INVESTMENT IN NUMBERS:

⚡ **£502m** ⚡  
INVESTED IN  
ELECTRICITY NETWORK

WE'LL BE SPENDING  
A FURTHER  
**£413m**  
ON THE NETWORK

**£3m**  
IRONBRIDGE  
REINFORCEMENT  
PROJECT ✓



# Network Investment

## Case study

### £3m reinforcement project

Ironbridge in Shropshire, home to the world's first iron structure, became home to a £3m WPD reinforcement project recently, as we lay cables in an area with a railway line, a major cycle track, numerous listed bridges, a UNESCO World heritage site and the River Severn.

After some 18 months of planning and negotiation with over 30 different land owners and authorities, preparation began to lay the cables under the riverbed.

A specialist directional drill was used to lay 11km of cable under the river a process that alone took 14 weeks to complete.

Together with the refurbishment of an existing 33kV circuit breaker and the installation of a new one, this important reinforcement work will safeguard supplies to around 21,500 customers in the area.



## 2013/14 Investment



- 59% Asset Replacement
- 22% General Reinforcement
- 4% Quality of supply & worst served customer
- 3% Flooding & Environmental
- 4% Network diversions
- 8% Other

# Network Investment

## Reported expenditure in 2013/14 against DPCR5\* allowances (£m in 2012/13 prices)

	Capital investment spend	Maximum Capital investment allowance	Percentage of allowance spent
West Midlands	£178.1m	£151.3m	118%
East Midlands	£183.4m	£152.8m	120%
South Wales	£58.3m	£56.2m	104%
South West	£82.2m	£87.0m	94%
<b>Total</b>	<b>£502m</b>	<b>£447.3m</b>	<b>112%</b>

\* DPCR5 allowances is the maximum amount that the energy regulator Ofgem has agreed that we need to spend on our network.

## How the money has been invested in the network 2013/14

Expenditure (£m in 2012/13 prices)	West Midlands	East Midlands	South Wales	South West	WPD
Asset Replacement	94.7	105.3	39.2	57.6	296.8
General Reinforcement	52.6	48.9	6.3	2.6	110.4
Quality of Supply & Worst Served Customers	5.7	3.8	2.3	6.9	18.7
Flooding & Environmental	3.9	7.9	1.4	2.2	15.4
Network Diversions	6.5	5.6	2.7	4.7	19.5
Other	14.7	11.9	6.4	8.2	41.2
<b>Total</b>	<b>178.1</b>	<b>183.4</b>	<b>58.3</b>	<b>82.2</b>	<b>502</b>


- ▶ **£296.8m** on the replacement of assets that have reached the end of their operational life.
- ▶ **£110.4m** on the installation of additional capacity to the distribution network so that we can accommodate general increase in electricity demand.
- ▶ **£18.7m** for reducing the quantity and duration of interruptions experienced by our customers and carrying out improvements for worst served customers.
- ▶ **£15.4m** on boosting our flood defences at major substations and other environmental initiatives.
- ▶ **£19.5m** for rerouting or repositioning of distribution assets driven by external factors.
- ▶ **£41.2m** on other activities such as meeting legal obligations, enhancing security, operational IT systems and visual amenity.

# How to contact us




## Stakeholder consultation

If you have any questions, or you would like to take part in future stakeholder consultations;

 Call us: free on **0845 7240 240**

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

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

 You will also find more information on our website at [www.westernpower.co.uk](http://www.westernpower.co.uk) under 'Our Stakeholders'. You can also register to attend WPD's stakeholder events

## Reporting a power cut


If you experience a power cut, please call us on **0800 6783 105**



## Making a complaint


We're committed to providing you with excellent customer service, first time every time. However, sometimes things can go wrong. We want to know when this happens so we can sort out any problems as quickly as possible.

To make a complaint:

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

 On our website at <http://www.westernpower.co.uk/Contact-us/Complaints>

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

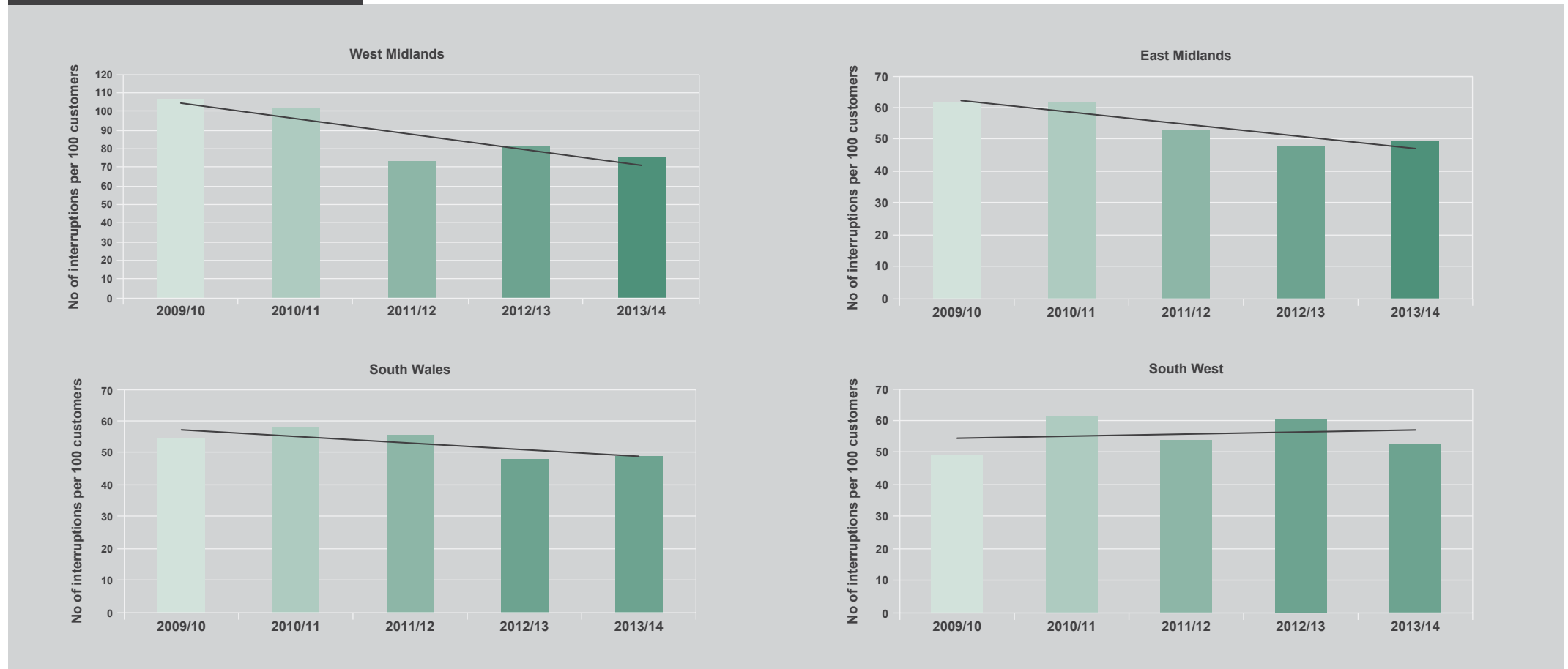
 Write to us:  
**Tony Taylor, Information Centre Manager,**  
**Western Power Distribution, Avonbank,**  
**Feeder Road, Bristol BS2 0TB**

Please tell us your address and postcode and a contact telephone number.

# Network Performance Trends

Over the last five years our overall performance has improved. We are proud that Ofgem continues to acknowledge us as a leading performer, and are always looking for new opportunities and initiatives to improve the quality of supply in the future.

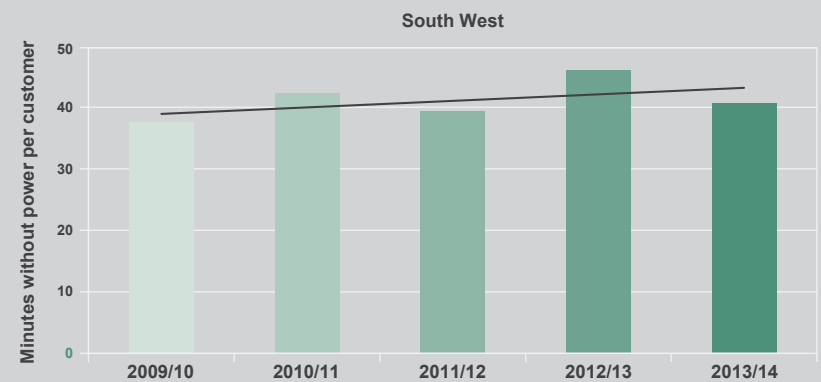
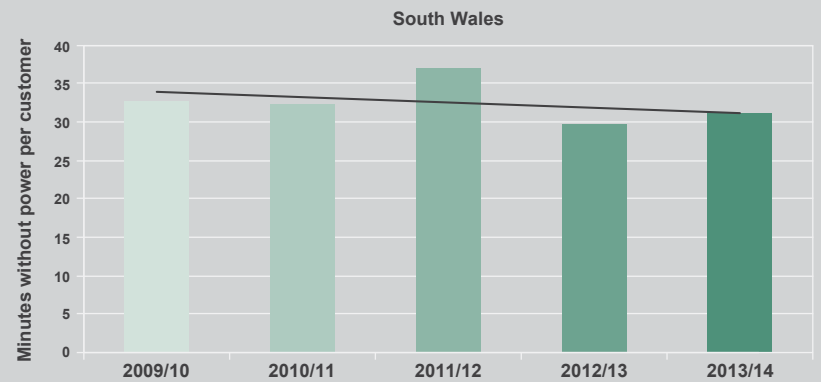
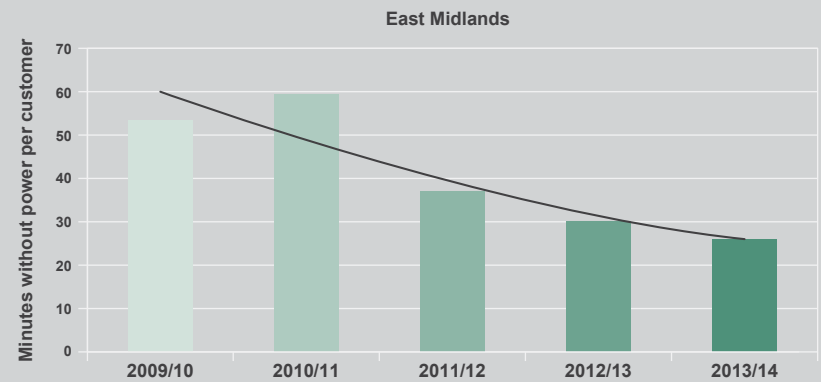
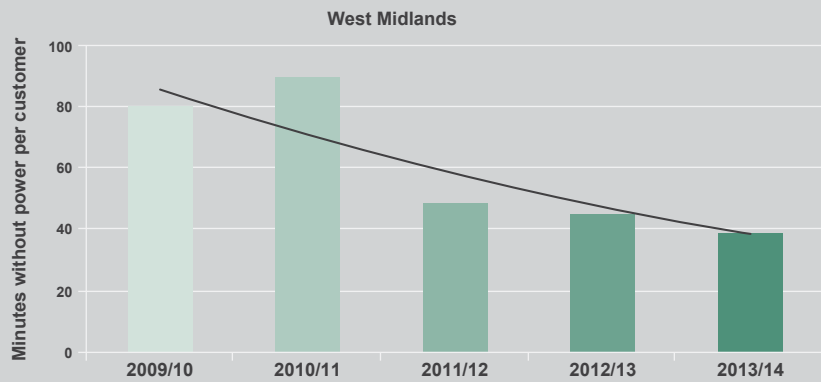
## Customer Interruptions





# Network Performance Trends

## Customer Minutes Lost



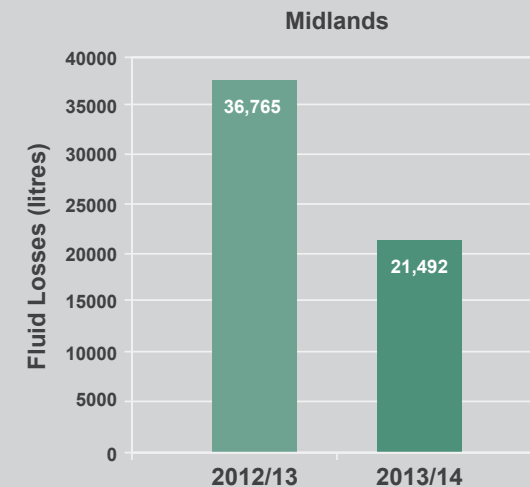
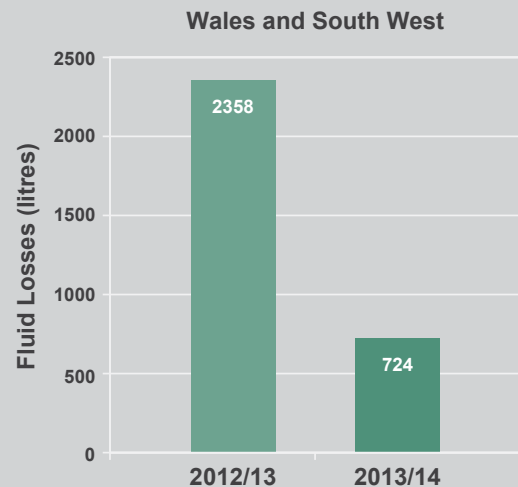
# Fluid Losses

The design of very high voltage underground cables has evolved over the years and our new cables all use a solid plastic-like insulation. Old designs of 33kV and higher voltage cables used an insulating oil inside the cable. While these cables are normally very reliable, sometimes due to a fault, or more commonly when there is damage by third parties digging in the street, this oil may leak out.

Recent years have seen a gradual and overall decline in Fluid Filled Cable (FFC) losses through more accurate data recording and improved detection of leaks. This improved detection of leaks is mainly down to PFT (Perfluorocarbon Tracer), a non-toxic and chemically inert liquid that is added to cable fluid in small doses to allow quick leak location.

While the overall picture is one of reduced losses, there have been occasional years where losses have been higher or lower than average (2011/12 was a year with lower than average losses). We experience the highest leak rates in early and late summer: when the ground dries out during the warm months then softens again in autumn and the cables are affected. As the spring of 2014 was predominantly wet, it appears that the wet ground has again helped reduce losses to an abnormally low level.

## Fluid Losses



# Network Outputs

## How the money has been invested in the Network 2013/14. Our asset replacement and general reinforcement programmes.

A high proportion of our network dates back to the 1950s and 1960s, meaning that some equipment is approaching the end of its serviceable life. To maintain our network's reliability, we replace equipment that is in the poorest condition. When this occurs we reinforce the network.

Whenever we inspect and maintain our equipment, we record details of the condition of critical components. This data means we can prioritise which assets need to be replaced. As more data is collected, we refine our investment programmes.

Overall our asset replacement activity is ahead of schedule. The table below shows how much of the planned replacement programme has been completed over the last four years.

### Asset replacement activity

	Percentage asset replacement activity (of the total activity forecast to take place in the 5 year period to 2015)				
	2010/11	2011/12	2012/13	2013/14	Total
Low Voltage (LV) Overhead Line - Poles	10%	21%	24%	18%	74%
High Voltage (HV) Ground Mounted Switchgear	16%	12%	29%	21%	78%
HV Ground Mounted Transformers	20%	19%	30%	29%	98%
HV Overhead Line - Poles	14%	26%	22%	23%	85%
Extra High Voltage (EHV) - Ground Mounted Switchgear	28%	38%	46%	24%	137%
EHV Ground Mounted Transformers	23%	39%	34%	30%	127%
EHV Overhead Lines - Poles	8%	14%	14%	19%	55%
132kV Circuit Breakers	38%	19%	14%	20%	90%
132kV Transformers	24%	41%	37%	30%	133%

# Network Outputs

## General Reinforcement

The amount of electricity supplied by our substations is determined by the number of customers connected and the amount of electricity they use. This is known as 'demand'. The amount of electricity supplied varies throughout the year, with 'maximum demand' usually occurring in early evenings during winter weekdays.

We design our network to cater for the maximum demand, but as customers use more electricity, the demand can exceed capacity. When this occurs we reinforce the network.

Our objective is to make sure that the quantity of substations that are classified as being close to or above their capacities is maintained at low levels.

There are five classifications, ranging from 'LI1'\* for substations where there is significant spare capacity, to 'LI5' where the substations are fully utilised.

The following table compares the 2013/14 position against the agreed targets. There are significantly fewer substations that are fully utilised (LI4 and LI5) compared to the target. This is due to both the programme of investment we have carried out and lower than forecast demand growth.

LI (Load Indices)

## Substation utilisation

	Significant spare capacity	Adequate spare capacity	Highly utilised	Fully utilised, consider mitigation	Fully utilised, mitigation required
	LI1	LI2	LI3	LI4	LI5
2013/14	626	383	171	14	2
Target	474	300	242	64	99





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