



2015-2023

RIIO – ED1 BUSINESS PLAN

Stakeholder Executive Summary

July 2013

Foreword from Robert Symons, CEO, Western Power Distribution

Our business is a simple one. Our purpose is to make sure the electricity network of poles, pylons, cables, wires and substations in our four distribution areas safely delivers power to homes and businesses around the clock.

Outstanding customer service combined with technical excellence, innovation and a clear business structure have made WPD the best electricity distribution business in the UK.

The WPD South West and WPD South Wales businesses have been industry leaders in the UK for many years. In April 2011 we purchased the former 'Central Networks' distribution businesses based in the West and East Midlands. These two businesses were known to be significantly less efficient than WPD with both poor levels of customer service and work delivery (the businesses are now known as WPD West Midlands and WPD East Midlands).

As part of the acquisition of the Midlands businesses we promised Ofgem (the regulator for electricity distribution companies) that we would significantly improve customer service whilst lowering costs. By applying our simple operational philosophy, where continuous change and innovation is part of what we do every day, to the Midlands businesses, we have been able to effect dramatic improvements in the region within 12 months of the acquisition:

- 20% reduction in operating costs.
- 40% reduction in the average amount of time a customer is without electricity.
- 96% reduction in the number of customers who have a power cut in excess of 18 hours.
- 70% reduction in the number of customer complaints to the industry ombudsman.

Put simply - we deliver on our promises. We are proud of our record but we are not complacent.

The next regulatory period will be eight years from April 2015 to March 2023 - a time in which many new challenges are predicted. These include safeguarding network security and providing reliability at an affordable cost, and continuing to push forward the boundaries of customer service excellence. In addition it is becoming increasingly important to deliver on a range of environmental commitments, including the facilitation of new 'Low Carbon Technologies' – specifically heat pumps for domestic heating, solar photovoltaic for electricity generation and electric vehicle charging.

Our Business Plan sets out our view of this future and has been influenced by engagement with our stakeholders. It explains what we intend to deliver, the amount we propose to invest and how this will impact customers.

Our aim is to keep our business simple, to deliver on our promises and to continue to innovate. Our customers will receive the highest levels of customer service at an efficient cost and WPD will continue to be the industry leader in electricity distribution.



WPD Business Plan - Summary

- Our business plan covers the period 2015-2023 (RIIO-ED1) and has been developed with our stakeholders
- The plan sets out our best view of the future, the outputs we will deliver over this period and what this will cost our customers
- Our objectives are to keep the business simple, deliver our promises and ensure we continue to provide the highest levels of customer service

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WPD's Business Plan is well justified and achieves the core principles set out by Ofgem

<p>Focuses on output delivery and secondary deliverables</p>	<ul style="list-style-type: none"> ✓ We will deliver 75 outputs including voluntary outputs in every category ✓ Our stretching outputs commitments will maintain our position as the best performing electricity distribution company
<p>Contains an open minded consideration of available options</p>	<ul style="list-style-type: none"> ✓ The plan is flexible to respond to uncertainties surrounding uptake of low carbon technologies
<p>Presents a clear, well evidenced case for proposals, linking costs and outputs</p>	<ul style="list-style-type: none"> ✓ We have completed extensive benchmarking and 200 cost benefit analyses to ensure we have chosen the most efficient expenditure options
<p>Considers the longer term</p>	<ul style="list-style-type: none"> ✓ Our planning horizon extends beyond 2023 and out to RIIO-ED3 ✓ Our business model is flexible and scalable to respond to the demands of the future
<p>Provides value for money</p>	<ul style="list-style-type: none"> ✓ The plan delivers £119m p.a. savings as a result of acquiring the Midlands networks ✓ We will continue to be at the frontier of efficiency and deliver a further £260m saving over 8 years, by achieving an on-going efficiency saving of 1%
<p>Demonstrates effective engagement with a range of stakeholders</p>	<ul style="list-style-type: none"> ✓ We have undertaken our most extensive engagement programme ever, consulting over 4,200 stakeholders in 2 years ✓ Stakeholder engagement has influenced every area of our Business Plan

Chapter 1 – Who we are and what we do

Outstanding customer service combined with technical excellence, innovation and a clear business structure have made WPD the UK's best electricity distribution business

Chapter 1: Who we are and what we do

WPD is the Distribution Network Operator (DNO) for the Midlands, South Wales and the South West

Our purpose is to make sure the electricity network of poles, pylons, cables, wires and substations safely delivers power to 7.8 million homes and businesses around the clock

- Our network is the largest in the UK, covering densely populated residential areas and widely dispersed rural communities

WPD's network:

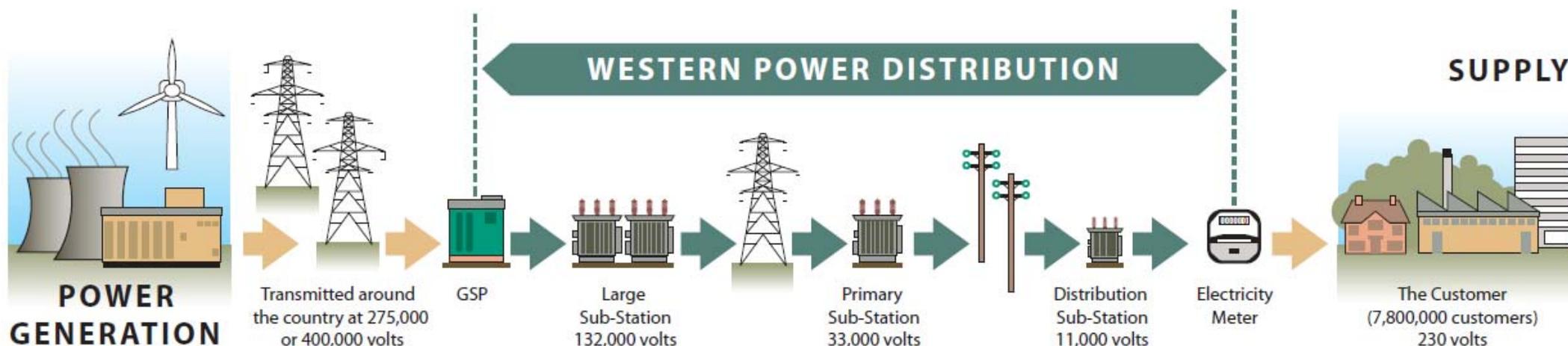
- Serves 7.8 million customers
- Covers 55,500 km²
- Consists of:
 - 92,000km overhead lines
 - 129,000km underground cables
 - 185,000 transformers



Chapter 1: Who we are and what we do

WPD's role is simple and comprises 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



Chapter 1: Who we are and what we do

WPD have clear business objectives

Our business objectives are to:

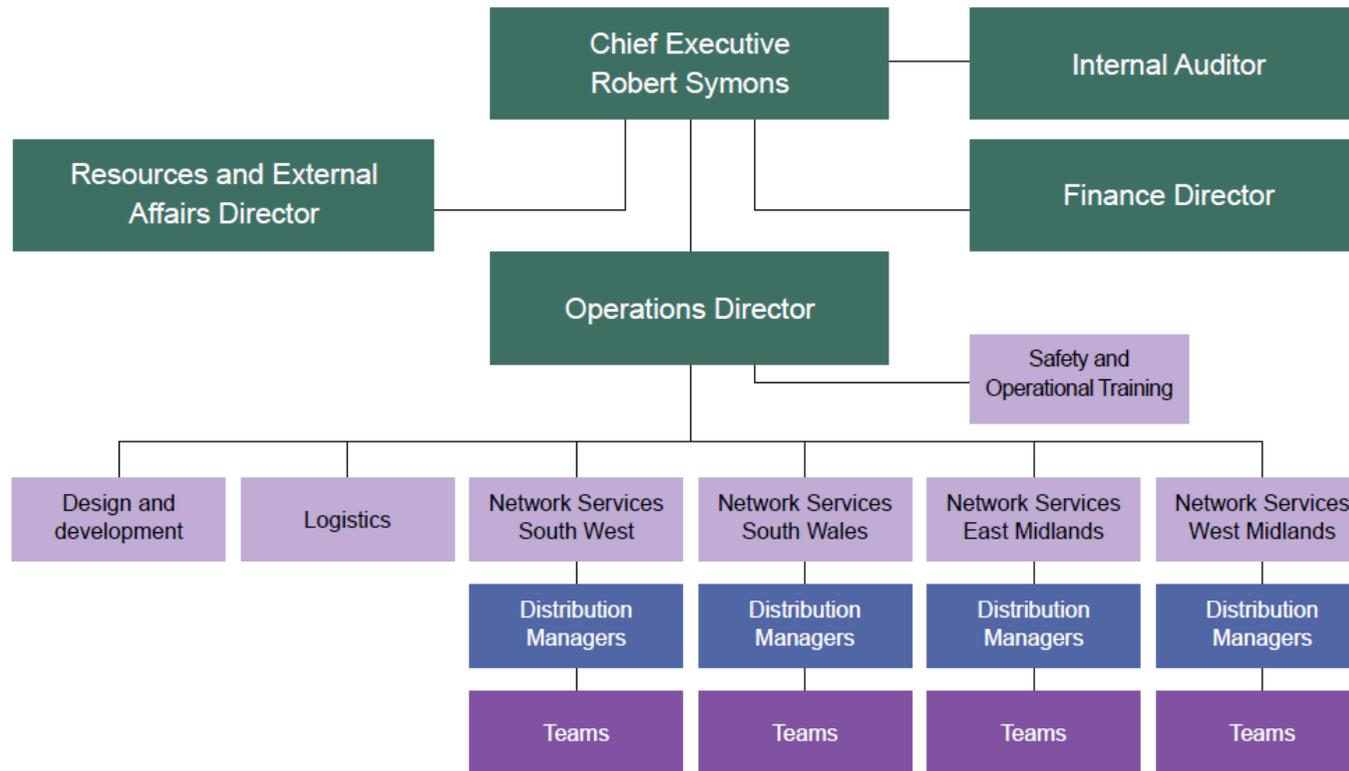
- Minimise the **safety** risks associated with WPD's distribution network
- Improve the **reliability** of electricity supplies and to make the distribution network more resilient
- Reduce WPD's impact on the **environment** and to facilitate low carbon technology
- Consistently deliver outstanding **customer service**
- Meet the needs of **vulnerable** customers
- Engage with our **stakeholders** and act on their feedback
- Be efficient, effective and **innovative** in everything we do

Chapter 1: Who we are and what we do

WPD operates a flat organisational structure with locally based, insourced teams

Our successful business model gives responsibility to front line staff to deliver work programmes, whilst the absence of multiple layers of management minimises costs

- This model is flexible and quickly scalable to respond to increased work volumes



Chapter 2 – Our track record

We deliver our promises.

Whilst our Business Plan sets out our forward thinking and the outputs we will deliver, it is important to recognise that this is a continuation of excellent performance within WPD.

Chapter 2: Our track record

WPD has a proven track record of efficient cost of delivery

Since acquiring the Midlands businesses on 1st April 2011 we have significantly reduced operating costs

- Within eight months we changed the organisation to the WPD team structure
- We exited from expensive contracts, reduced overall staff numbers by 800, and increased direct field staff by over 200

Annual cost savings following acquisition of the Midlands businesses	
Cost Activity	Savings Per Year
Engineering management	£42m
Corporate activities	£20m
Network operating costs	£7m
Network investment	£50m
Total cost saving	£119m

WPD's business model leads to work being delivered at low costs

- Benchmarking, using the best data available to us, shows WPD as the most efficient DNO group

DNO group	Rank
WPD (four DNOs)	1
SSE	2
NPG	3
ENW	4
SP	5
UKPN	6

Chapter 2: Our track record

WPD is the leading DNO in the UK because we have a proven track record of delivering our promises

Our history of setting out high quality, accurate plans delivering our commitments should create confidence in this Business Plan and our ability to deliver it

Network Performance

WPD has consistently delivered improved network reliability

Current % out-performance of Ofgem targets:

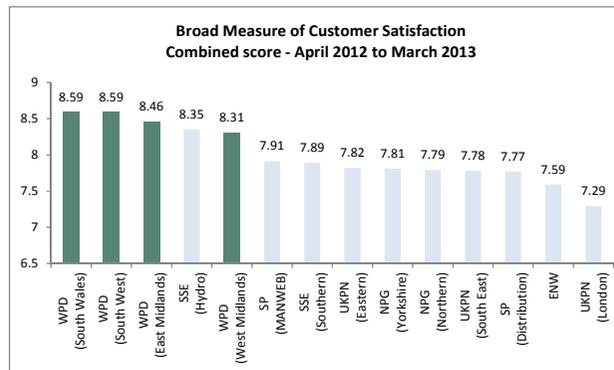
South West		South Wales		East Mids		West Mids	
CI	CML	CI	CML	CI	CML	CI	CML
18%	9%	39%	33%	36%	56%	26%	53%

Customers Interrupted (CI) = how many times customers are without electricity over 3 minutes per 100 customers

Customer Minutes Lost (CML) = the average number of minutes a customer is off supply

Customer Service

WPD's 4 businesses are consistently in the top 5 places of Ofgem's Broad Measure of Customer Satisfaction



Circa 16,000 WPD customers are surveyed annually

Innovation

Under Ofgem's Low Carbon Network Fund, WPD has secured the most innovation trials of any DNO

Tier 2 Large scale innovation projects	5 out of 16
Tier 1 Smaller demonstration projects	11 out of 31

Chapter 2: Our track record

In the first 12 months of WPD ownership in the Midlands, we delivered significant improvements

20% reduction

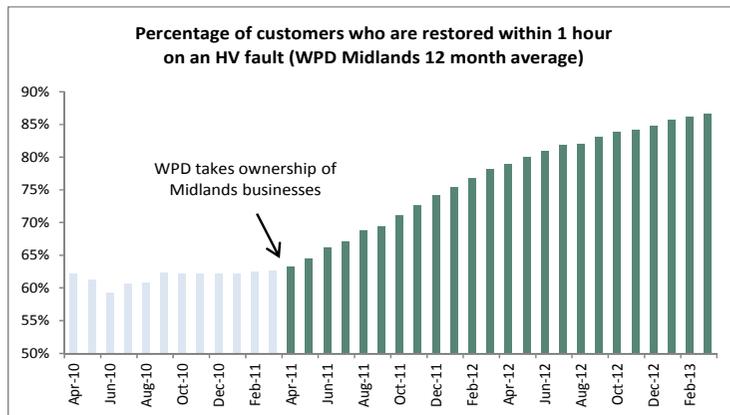
in operating costs

70% reduction

in the number of customer complaints to the industry ombudsman

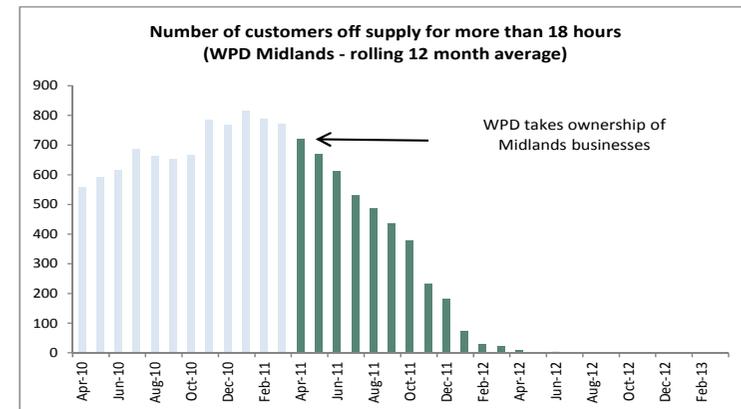
40% reduction

in the average amount of time a customer is without electricity



96% reduction

in the number of customers who have a power cut in excess of 18 hours



Chapter 3 – Developing the plan for our stakeholders

Stakeholders have influenced and shaped our Business Plan. Their feedback is the foundation of key decision making at WPD.

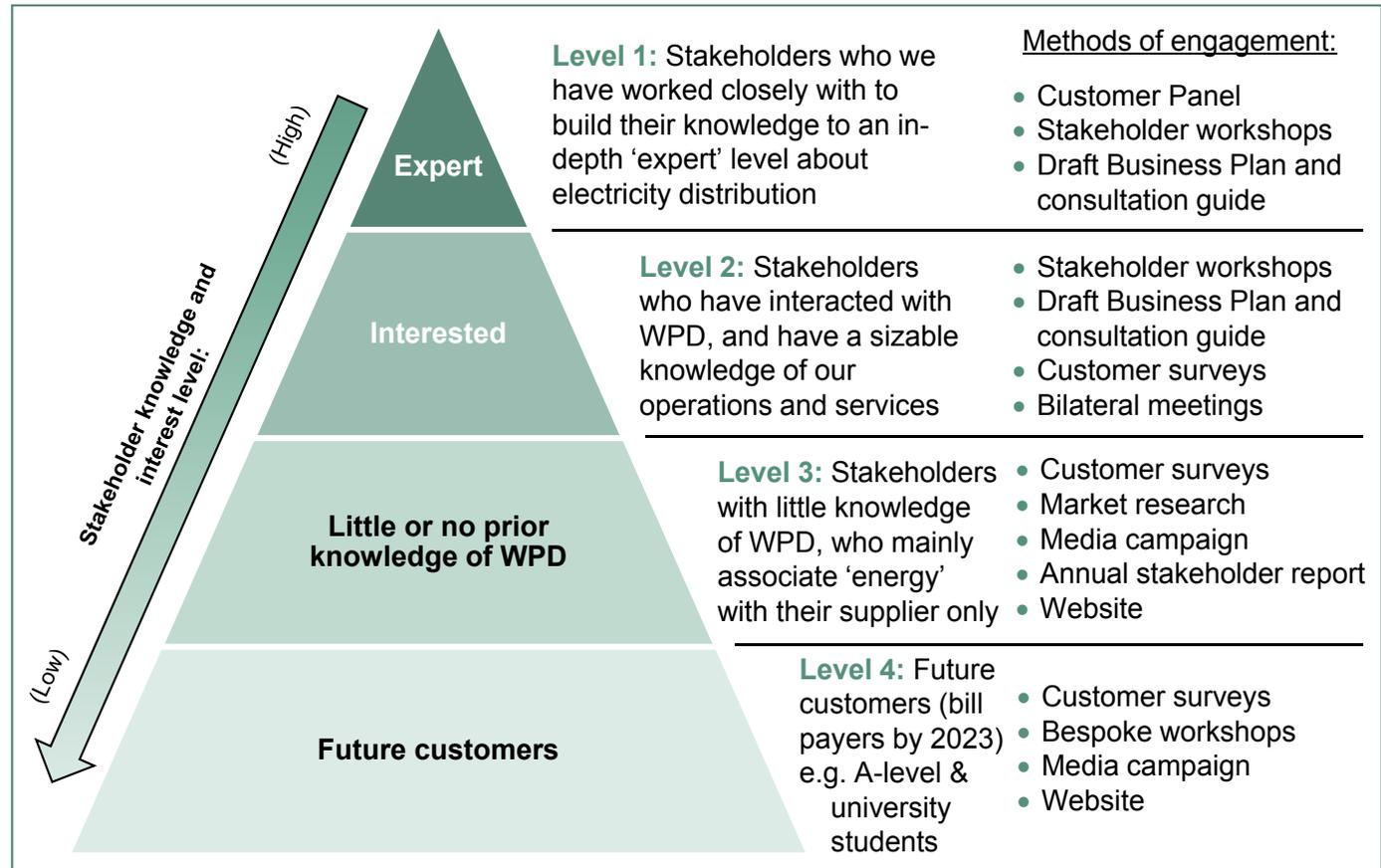
Chapter 3: Developing the plan for our stakeholders

WPD have carried out comprehensive and inclusive engagement with a wide range of stakeholders

We tailor our approach to use the most appropriate method of engagement to suit the knowledge and interest level of our stakeholders

We have consulted with:

- Domestic & business customers
- Major energy users
- Local authorities
- Parish councils
- Other DNOs, utilities & suppliers
- Environmental groups
- Regulatory bodies
- Vulnerable customer representatives
- Emergency planners
- Educational institutions
- Connections customers
- Distributed generation customers & developers
- Future customers
- All WPD staff



WPD have given stakeholders the opportunity to review and shape our plans from the outset

“Western Power Distribution (WPD) was the first DNO to adopt open and enduring stakeholder engagement, long before RIIO-ED1. They have led the way by giving stakeholders a clear say and involvement in strategic decisions for the future of the business.

WPD’s Customer Panel was the first of its kind and currently enables us to regularly meet the senior company managers, see the company at work and learn more about what WPD is doing, where and when. The transparent and open approach affords us the opportunity to comment on policy and feedback concerns and suggestions to management and key decision makers directly.

Collectively the professional experience and knowledge of the invited members have enabled consideration of the outputs proposed by WPD for RIIO-ED1 in order to submit a plan that would be most beneficial for stakeholders and customers. WPD respect both positive and negative responses and address issues accordingly.

WPD’s approach to engagement is transparent, genuine and well thought out, using a wide range of methods. Meetings are a worthwhile use of our time as we see our suggestions implemented to ensure customers continue to receive the best possible overall customer service.”

**Joint statement from WPD’s Customer Panel
- 2013**

Chapter 3: Developing the plan for our stakeholders

WPD have engaged with over 4,200 external stakeholders on our RIIO-ED1 Business Plan alone

We have achieved this via:

- 20 stakeholder workshop
- 2 'future customers' workshops
- 2 'social obligations' workshops
- 7 customer panel meetings
- 8 focus groups
- 1,208 'willingness to pay stated preference' interviews (domestic)
- 434 'willingness to pay stated preference' interviews (business)
- 6 connections and distributed generation surgeries
- 774 distributed generation customer interviews
- 408 vulnerable customer surveys
- 2 energy supplier forums
- 50 staff road shows

Our RIIO-ED1 engagement programme has 5 phases:

✓	1 - Preliminary engagement	Jan 2010 – Dec 2011	To identify: <ul style="list-style-type: none"> ▪ All stakeholders ▪ Their preferred method of communication ▪ The issues that most concern them
✓	2 - Willingness to pay research	Jan 2012 – Aug 2012	<ul style="list-style-type: none"> ▪ To group stakeholders' priorities into common areas ▪ To identify specific levels of service improvement achievable under each priority ▪ To understand customers' 'willingness to pay' for improved performance
✓	3 - Business Plan consultation	Sep 2012 – July 2013	<ul style="list-style-type: none"> ▪ To communicate the key aspects of our draft Business Plan and the impact on customers ▪ To present stakeholders with: <ul style="list-style-type: none"> - Options for network investment - Service improvements each would deliver - The overall costs and impact on bills
Next steps	4 - Business Plan outcomes	July 2013 – Feb 2014	<ul style="list-style-type: none"> ▪ To communicate how we have incorporated stakeholder feedback into our Business Plan ▪ To highlight any significant changes from our draft proposals ▪ To identify the key performance measures stakeholders would like us to use to monitor our delivery
	5 – Review of our delivery	Feb 2014 – Mar 2023	<ul style="list-style-type: none"> ▪ To provide an update on our investment delivery and performance against key output measures ▪ To identify areas of emerging stakeholder interest

Chapter 3: Developing the plan for our stakeholders

Stakeholders have given clear feedback about what they would like WPD to deliver

- **Reliability – No.1 priority for customers**
 - Continue to reduce the number and duration of power cuts
 - Improve service for remote, worst served customers
 - Improve network resilience to severe weather events
- **Customers**
 - A quicker connections service
 - Multiple communication channels
 - Enhanced services to vulnerable customers
- **Sustainability and Environment**
 - Continue undergrounding schemes in AONB
 - Future proof the network by taking sensible incremental steps



All of the above must be delivered efficiently and demonstrate value for money

Chapter 3: Developing the plan for our stakeholders

Stakeholder engagement has influenced every area of WPD's Business Plan

Stakeholders have helped us to:

- Introduce additional voluntary outputs and secondary deliverables
- Shape and refine our best view scenario for low carbon technology uptake
- Develop our innovation strategy
- Develop our social obligations strategy
- Shape our investment plans to reduce the average frequency and duration of power cuts
- Shape our investment plans to improve service for worst served customers
- Publish detailed revenue forecasts up to 2023, for suppliers
- Voluntarily double payments for any failures of against the Guaranteed Standards of Performance
- Adopt and begin managing the business to a 12 hour power cut restoration standard
- Accelerate our resilience tree trimming programme
- Increase the number of major substations that will be protected from flooding
- Increase the amount of undergrounding in Areas of Outstanding Natural Beauty & National Parks
- Increase the time it will take to connect low carbon technologies and reducing costs
- Significantly reduce the amount of residual office waste sent to landfill
- Improve the time it will take for all new connections
- Introduce online connections processing and progress tracking
- Increase the number of complaints resolved within one day to 70%

Chapter 4 – Innovation

WPD's innovation strategy is already delivering new ways of working and improved efficiency.

2015-2023 will bring many new challenges including the facilitation of new low carbon technologies. WPD's Business Plan sets out our view of this future.

Chapter 4: Innovation

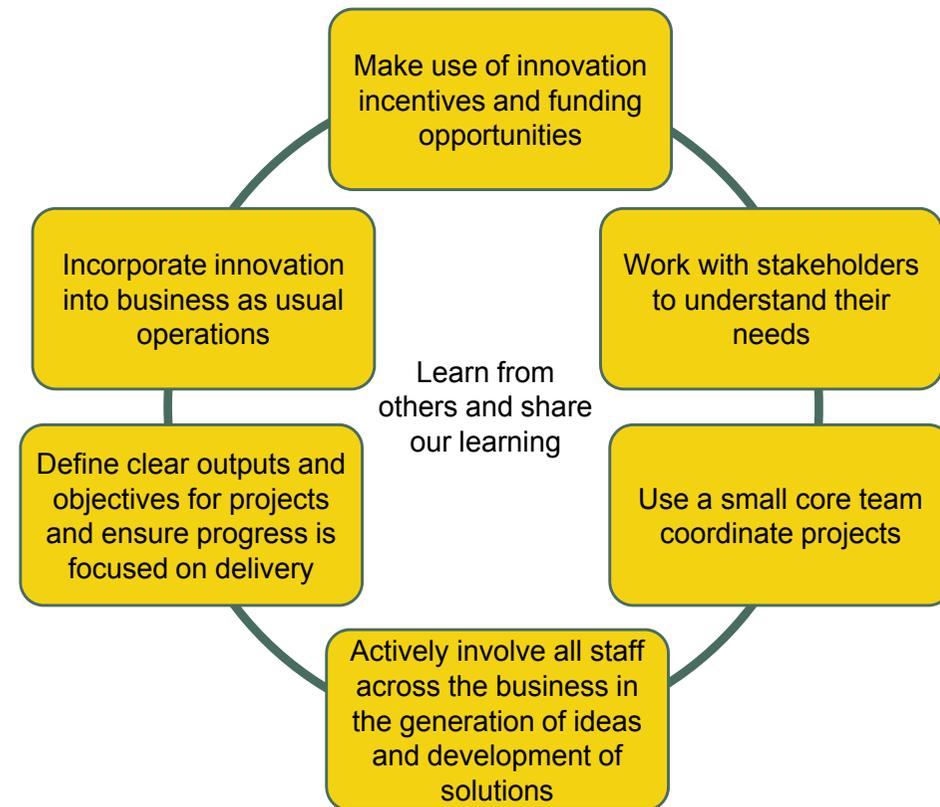
WPD are using their innovation expertise to ready the network to help achieve the Government's Carbon Plan

If large volumes of Low Carbon Technologies (LCT) connect to the network - specifically heat pumps, solar photovoltaic panels and electric vehicle charging - it will increase electricity demand and change the way networks are operated

- Our five current Tier 2 Low Carbon Network Fund projects cover a broad area of research:

Area of Interest	Project 1: LV Templates	Project 2: Low Carbon Hub	Project 3: FALCON	Project 4: BRISTOL	Project 5: FlexDGrid
Voltage Constraint		✓	✓	✓	✓
Thermal Constraint		✓	✓		
Fault Level Constraint					✓
Design Tools	✓				✓
Demand Side Response			✓	✓	✓
LV Monitoring				✓	
HV Monitoring			✓		
Automation			✓		✓
LV Estimation	✓				
Weather and Climate Effects	✓				
Generation	✓	✓	✓	✓	✓
Storage				✓	

Our approach

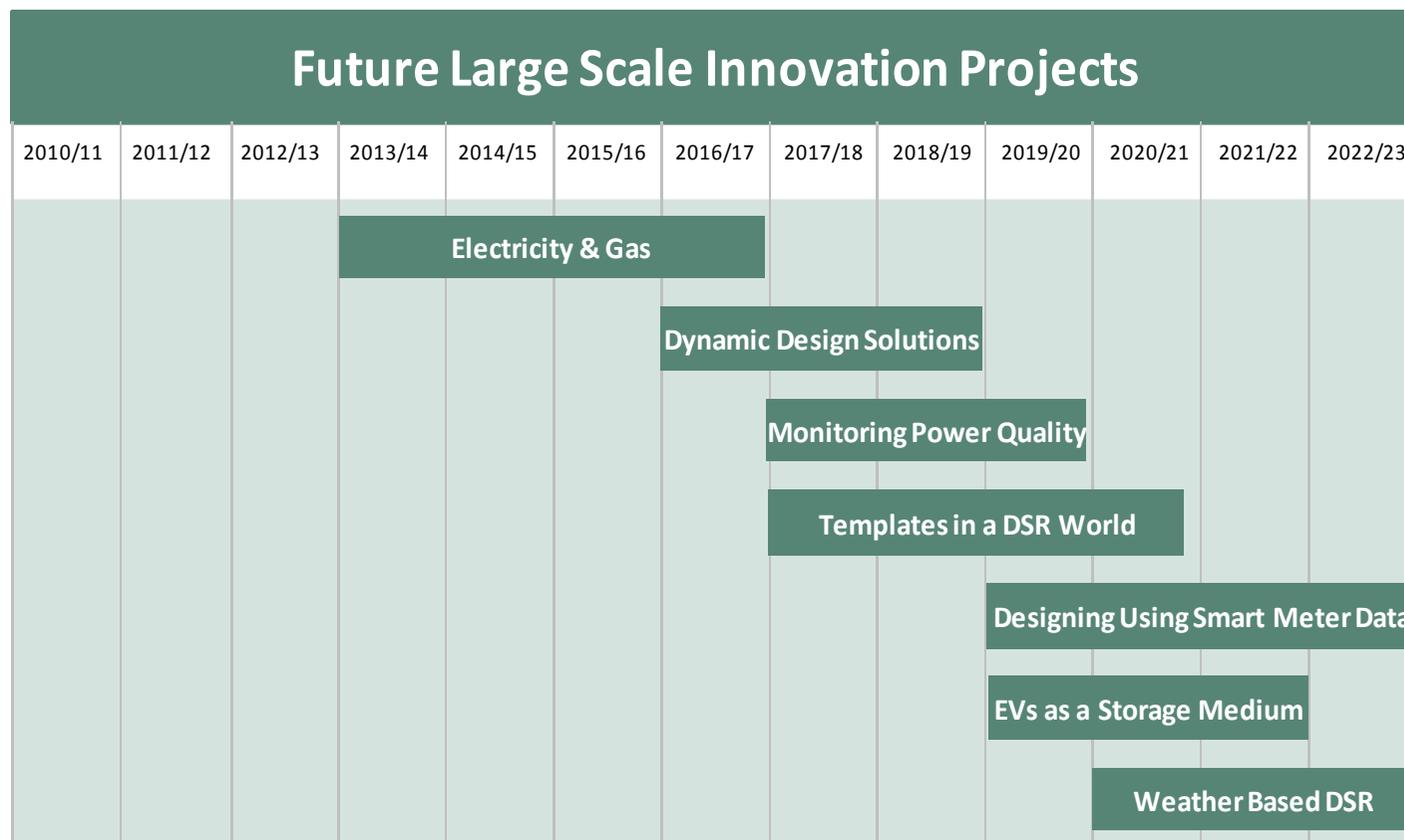


Chapter 4: Innovation

WPD's innovation approach in RIIO-ED1 will deliver considerable savings for customers

We forecast that smart interventions have reduced our spending needs on unnecessary reinforcement by £130m across RIIO-ED1

- We will request a Network Innovation Allowance of 0.5% of total regulated revenue
- This represents £53m through the period
- We will submit proposals for the Network Innovation Competition, leading to a total investment in excess of £100m
- Innovation in smart solutions will help us accommodate LCTs without the need for high levels of conventional reinforcement



WPD have developed a ‘best view’ of the future to plan for the impact of LCTs

- The Department of Energy & Climate Change (DECC) has produced four illustrative, national scenarios of the uptake of LCTs (for heat pumps, electric vehicles and solar photovoltaic panels) necessary to meet the Carbon Plan
- An industry model (called Transform) developed by EA Technology has regionalised these scenarios to determine the volumes in each distribution licence area
- To help us develop our best view scenario, we commissioned the Centre for Sustainable Energy (CSE) in Bristol to create a database of customers and the substation they are connected to, together with information about the age of the property, tenure, property type, number of bedrooms, proximity to gas mains and socio-economic group
- This work has derived the likely volume of LCTs and provided a more detailed view of the way LCTs will group together (‘cluster’) on the network and the impact this will have on investment
- We will use information from more advanced monitoring of the network and data from smart meters to identify where LCT hotspots are emerging so that reinforcement work can be targeted at the parts of the network where it is required

Chapter 4: Innovation

WPD's 'best view' low carbon scenario

WPD's expenditure forecasts are based on assumptions informed by data provided by the Centre for Sustainable Energy (CSE).

- The industry's 'Transform' model has been used to assess the impact of both our 'Best View' and the four DECC Carbon Plan scenarios

LCT related network reinforcement expenditure 2015/16 to 2022/23 (£m at 2012/13 prices):

Comparison of WPD 'Best View' using smart incremental techniques and the range of costs for DECC's scenarios using smart incremental techniques					
	WPD 'Best View' forecast	DECC Scenario 1 – high emissions abatement in heat provision	DECC Scenario 2 – high emissions abatement in transport	DECC Scenario 3 – high electrification of heat and transport provision	DECC Scenario 4 – international Carbon Credit purchases needed to meet targets
West Midlands	55.1	68.7	63.1	75.1	4.7
East Midlands	87.7	186.2	113.3	140.3	5.8
South Wales	11.3	91.2	92.5	90.0	13.5
South West	44.9	34.0	40.3	44.4	2.0
Total	£199.0m	£380.0m	£309.1m	£349.8m	£26.0m

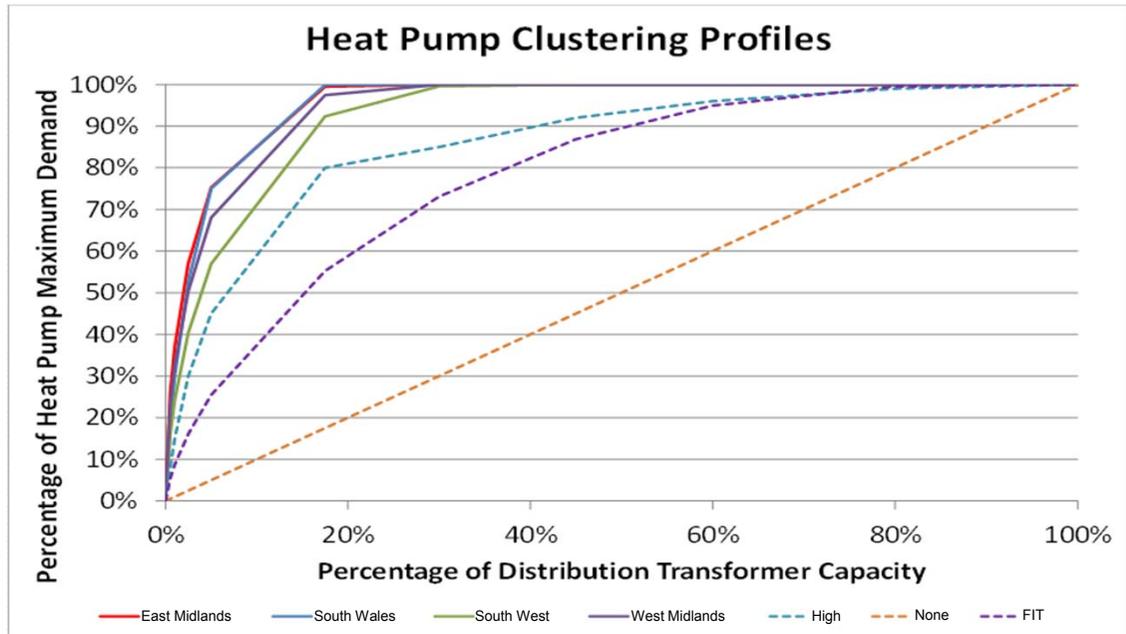
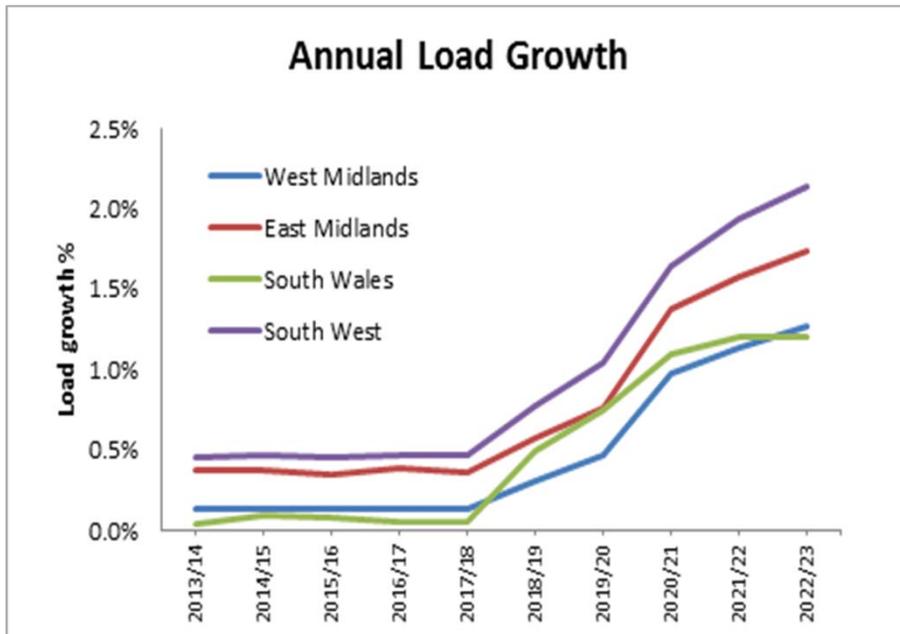
Comparison of WPD 'Best View' using smart incremental techniques and the range of costs for DECC's scenarios using conventional techniques					
	WPD 'Best View' forecast	DECC Scenario 1 – high emissions abatement in heat provision	DECC Scenario 2 – high emissions abatement in transport	DECC Scenario 3 – high electrification of heat and transport provision	DECC Scenario 4 – international Carbon Credit purchases needed to meet targets
West Midlands	55.1	105.4	125.4	124.1	9.8
East Midlands	87.7	240.2	185.6	241.8	9.2
South Wales	11.3	132.2	151.1	165.9	26.6
South West	44.9	49.9	83.0	92.7	6.3
Total	£199.0m	£527.7m	£545.1m	£624.5m	£52.0m

Chapter 4: Innovation

WPD are forecasting increases in electricity load growth over the period 2015-2023

This load growth incorporates LCTs in new properties, the retro-fitting of LCTs and energy efficiency measures

To identify the potential reinforcement required, WPD have undertaken work with CSE to better understand the potential clustering of LCTs based on property type and size



The industry's 'Transform' model has two standard clustering assumptions built into it, a FIT clustering and a high clustering case.

WPD's plan is designed to be flexible and deal with uncertainty

- In order to address the uncertainty in the 8 year RIIO–ED1 period Ofgem has included uncertainty mechanisms
- WPD are not proposing any additional mechanisms
- The bulk of the work that we do in RIIO-ED1 will be ‘business as usual’
- The key uncertainty is the connection of low carbon technologies
- In addition to our ‘Best View’ low carbon scenario the plan includes:
 - An innovation strategy to identify cost effective alternatives to conventional reinforcement
 - The impact on our business of all of the four DECC scenarios
 - A manpower and skills plan to support any scenario
 - Identified trigger points in order to allow movement between scenarios

Chapter 5 – Outputs

WPD's Business Plan commits to provide frontier performance in 75 key output measures

Chapter 5: Outputs

In the six RIIO-ED1 categories WPD have identified 75 outputs, including several voluntary measures

Category	Safety	Reliability	Environment	Connections	Customer Satisfaction	Social Obligations
Measures	10	8	14	10	16	17
Stakeholder View	▶	▲	▲	▲	▶	▲
WPD's focus in RIIO-ED1	Reduce staff accident frequency rate by 10%	Reduce the duration of power cuts by 20% Implement flood defences at 75 substations	Reduce the amount of waste sent to landfill by 20% by 2017 (5% p.a. thereafter) Underground 55km of line in AONB	Target zero Guaranteed Standard failures Better engagement with large customers	Maintain top position for customer satisfaction and complaints	Improve data on vulnerable customers Provide practical support during power failures
Voluntary	Educate 400,000 children on electrical safety	Reduce number of power cuts lasting more than 12 hours by 20%		Improve overall time to deliver a connection by 20%	Double Guaranteed Standard Payments	Contact vulnerable customers every two years

▲ = Improve current performance; ▶ = Maintain current performance; ▼ = Do less than current performance

Chapter 5: Outputs

The main outputs we will deliver in RIIO-ED1 are:

Safety	Reliability	Environment	Connections	Customer Satisfaction	Social Obligations
<ul style="list-style-type: none"> • Reduce the staff accident frequency rate by 10%. • Enhance security measures at higher risk electricity distribution sites. • Distribute 500,000 safety advice documents. • Educate 400,000 children about electrical safety through classroom discussions. • Ensure compliance with legislation with a target of zero improvement or enforcement notices being served by the Health and Safety Executive (HSE). • Work in partnership with the HSE. 	<ul style="list-style-type: none"> • Reduce the average number of times our customers lose their power supply by 13%. • Reduce the length of time our customers are without power by 20%. • Ensure that a minimum of 85% of customers are restored within an hour on HV faults. • Reduce by 20% the number of customers who suffer a power cut lasting more than 12 hours. • Reduce the number of customers who are classified as worst served by 20%. • Increase our resilience tree cutting programme by 40% to reduce storm related power loss. • Protect 75 electricity substation sites from the risks of flood damage. 	<ul style="list-style-type: none"> • Facilitate the connection of increased volumes of LCTs. • Reduce the carbon footprint of the business by 5%. • Reduce leaks from electricity equipment - 75% less oil leaks and 17% less SF6 gas leaks. • Improve visual amenity in National Parks and Areas of Outstanding Natural Beauty (AONBs) by replacing 55 km of overhead lines with underground cable. 	<ul style="list-style-type: none"> • Reduce the overall 'average time to connect' by 20%. • Provide improved communication with customers including internet based quotations and job tracking facilities. • Deliver zero failures against the connections 'Guaranteed Standards of Performance'. • Facilitate a competitive market. 	<ul style="list-style-type: none"> • Continue to be the best DNO group in the Ofgem Broad Measure of Customer Satisfaction. • Maintain stakeholder engagement to refine business objectives and demonstrate progress against outputs throughout RIIO-ED1 and beyond. • Enhance communication with customers by use of call backs, text messages or other social media formats to suit the needs of our customers. • Have the fastest answering response time to inbound customer telephone calls in the industry. • Have the fastest customer complaints resolution service in the industry. 	<ul style="list-style-type: none"> • Ensure we have accurate data on the Priority Services Register by contacting our vulnerable customers every two years. • Enhance services provided to vulnerable customers who lose their power supply. • Maintain our work with charities and support organisations to understand and react to current social issues with respect to power supply. • Help to address fuel poverty by making it easier for customers to access key information.

Chapter 6 – Expenditure

WPD's Business Plan will deliver the most all-round efficient package and achieve multiple measurable outputs, whilst lowering customer bills.

Chapter 6: Expenditure

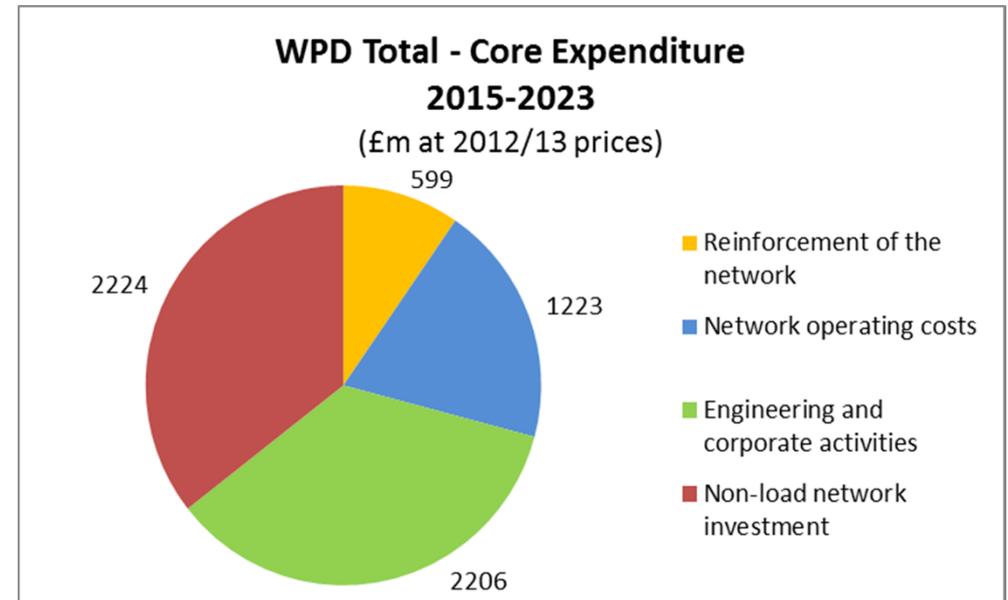
WPD's total planned expenditure can be divided into core network costs and other regulated costs

Core network costs (£m at 2012/13 prices)					
	West Mids	East Mids	South Wales	South West	WPD Total
Reinforcement of the network	198	267	49	85	599
Non-load network investment	664	587	397	575	2,224
Network operating costs	354	370	194	304	1,223
Engineering and corporate activities	661	655	351	539	2,206
Total	1,877	1,879	990	1,503	6,250

Other regulated costs (£m at 2012/13 prices)					
	West Mids	East Mids	South Wales	South West	WPD Total
Real price effects (RPEs)	143	142	72	112	469
Smart metering	21	22	10	15	67
Rates and licence fees	286	373	149	153	960
Transmission exit charges	108	93	69	72	341
Pension costs	265	261	267	430	1,223
Total	822	890	566	781	3,060

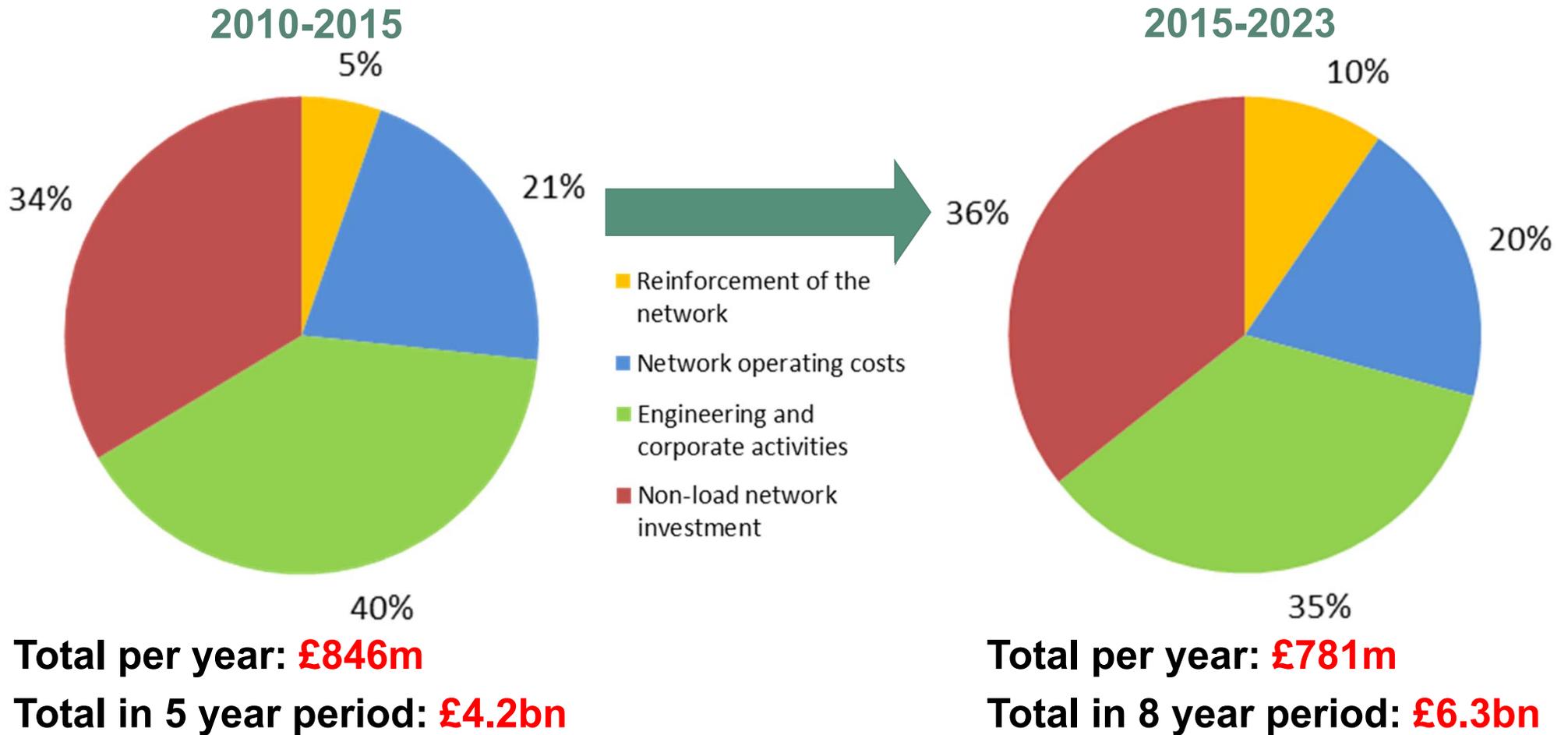
WPD will invest £6.3 billion in core distribution business activities

- **£2.2bn will be for non-load network investment**
 - through replacing and refurbishing our assets
 - includes £130m on improving the network and reducing our environmental impact
- **£0.6bn will be for reinforcement of the network**
 - to accommodate load growth and the impact of low carbon technology on the network
- **£1.2bn will be for network operating costs**
 - for maintenance and repair of our assets
- **£2.2bn will be for engineering and corporate activities**
 - for our contact centres, stores, purchasing, finance, human resources, maintaining IT systems, engineering management, and the costs for recruiting and training our workforce



WPD will deliver significant service improvements whilst reducing annual expenditure

Average annual expenditure (£m at 2012/13 prices)



Chapter 7 – Financing the Business Plan

WPD's plan delivers the most efficient financial package consistent with RIIO-ED1 financial principles

- Our expenditure proposals will require WPD to raise around £1.8bn of new debt
- Our shareholder will reinvest £0.9bn
- In addition £0.9bn of long term debt matures and will need to be re-financed

- To calculate our allowed revenues and cash flows we have assumed:

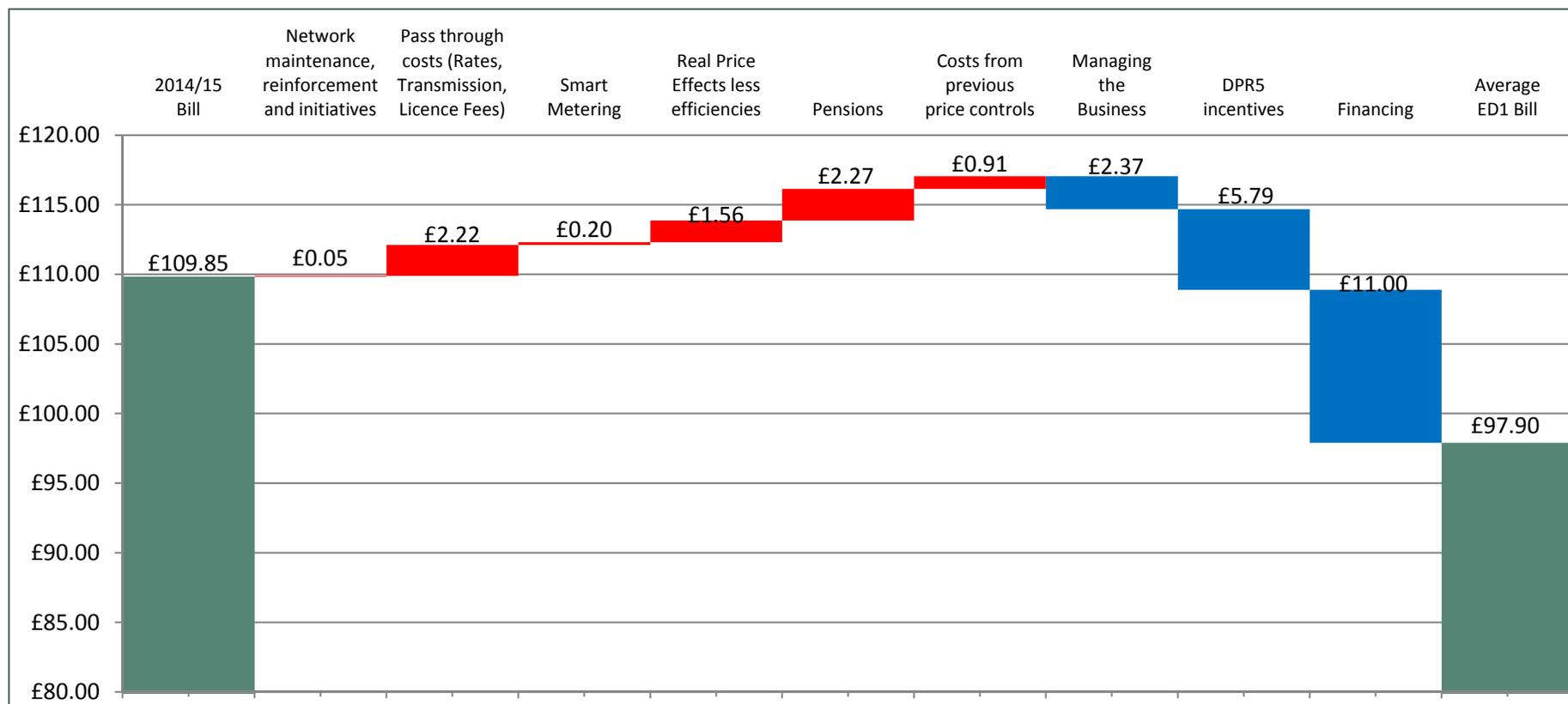
Parameter	Value	Details
Cost of Equity	6.7%	The same as DPCR5 and GD1
Cost of Debt	2.92%	Based on iBoxx bond index at 31 st October 2012
Gearing	65%	The same as DPCR5
Vanilla WACC	4.24%	Derived from cost of debt and cost of equity
Capitalisation	80%	The same as DPCR5 after taking into account changes in definition
RAV Depreciation	35 years	For RIIO-ED1 we transition from the DPCR5 20 year life to a 45 year life

Chapter 8 – Impact on customer bills

Over RIIO-ED1 WPD's charges will reduce by an average of 10.9% (before inflation)

- The total cost forecast and the financial assumptions determine the impact on customer bills

WPD group – Impact on domestic bills



Note : 2012/3 prices

Summary

The Business Plan builds upon WPD's 'best in class' record for customer service and efficiency. It delivers:

- A network that meets our customers' and stakeholders' requirements
- Efficient expenditure plans which include significant investment in the network
- Numerous measurable outputs that build on our track record of excellent customer service delivery
- Charges that reduce in the first year of RIIO-ED1 and remain broadly flat thereafter

Chapter 9 – One-page Business Plan summaries for each of WPD’s licence areas

What we plan to do

During RII0-ED1 (2015 - 2023) WPD will continue to provide the best customer service, deliver further improvements to network performance and facilitate the move to a low carbon future.

We will invest £2.0bn during the period including expenditure to maintain, extend and reinforce our network. We have benchmarked our costs to ensure this expenditure is efficient and we have embedded further savings into the plan to ensure we continue to deliver efficiently.

Our proposals will reduce customer bills on average by 9.5% in real terms.

Our plan delivers over 75 measurable outputs for customers which include:-

- reducing the average time customers are off supply by 45% vs.DPCR5 targets
- connection of Low Carbon Technologies at the most efficient cost
- improving the overall time to deliver a new connection by 20%
- continuing to be the most innovative company
- answering all customer calls in less than 2 seconds on average
- ensuring we continue to have no Ombudsman complaints
- reducing our carbon footprint by a further 5%

For further information please see our website www.westernpower.co.uk or contact Alison Sleightholm, Regulatory & Government Affairs Manager (Email: asleightholm@westernpower.co.uk).

Footnotes:

*As set out in the Ofgem factsheet -

<http://www.ofgem.gov.uk/Media/FactSheets/Documents1/household-bills.pdf>

** Figures from last year of previous price control (DPCR5)

Key facts about our network

Ownership : Western Power Distribution

Number of customers : 2,470,000

Length of underground cables (km) : 40,000

Length of overhead cables (km) : 24,000

Total units distributed annually (GWh) : 24,409

Number of employees (FTEs) : 1,784

Area covered (km²) : 13,300

Geographical location : West Midlands, including Birmingham, Worcester, Gloucester, Hereford, Telford and Stoke-on-Trent.

For our area map, see www.westernpower.co.uk/About-us/Our-Business/Supply-area

Peak demand (MW) : 4,792

Footnote:

*** Expenditure on the day to day operation of a network. This should include all operating costs both controllable and non-controllable.

How much we propose to spend and how it will be financed

Cost of Equity	6.7%	Notional Gearing	65%
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<i>All amounts in 12/13 prices</i>	Total spend £m over the course of the price control	Annual average Percentage change from DPCR5
Network Investment	£890.00	-3.8%
Operating Costs***	£1,809.00	-8.3%

How this will impact domestic customer bills

Distribution charges make up 16% of the average overall domestic bill*

<i>All amounts in 12/13 prices</i>	2014/15*	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Percentage change in distribution costs	n/a	-7.2%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Annual change in £s	n/a	-£6.12	£0.78	£0.80	£0.80	£0.81	£0.82	£0.83	£0.83
Total distribution charge	£84.76	£78.64	£79.42	£80.22	£81.02	£81.83	£82.65	£83.48	£84.31

What we plan to do

During RII0-ED1 (2015 - 2023) WPD will continue to provide the best customer service, deliver further improvements to network performance and facilitate the move to a low carbon future.

We will invest £2.0bn during the period including expenditure to maintain, extend and reinforce our network. We have benchmarked our costs to ensure this expenditure is efficient and we have embedded further savings into the plan to ensure we continue to deliver efficiently.

Our proposals will reduce customer bills on average by 6.2% in real terms.

Our plan delivers over 75 measurable outputs for customers which include:-

- reducing the average time customers are off supply by 40% vs.DPCR5 targets
- connection of Low Carbon Technologies at the most efficient cost
- improving the overall time to deliver a new connection by 20%
- continuing to be the most innovative company
- answering all customer calls in less than 2 seconds on average
- ensuring we continue to have no Ombudsman complaints
- reducing our carbon footprint by a further 5%

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Footnotes:

- *As set out in the Ofgem factsheet- <http://www.ofgem.gov.uk/Media/FactSheets/Documents1/household-bills.pdf>
- ** Figures from last year of previous price control (DPCR5)

Key facts about our network

Ownership : Western Power Distribution

Number of customers : 2,619,000

Length of underground cables (km) : 50,000

Length of overhead cables (km) : 22,000

Total units distributed annually (GWh) : 26,913

Number of employees (FTEs) : 1,647

Area covered (km²) : 16,000

Geographical location : East Midlands, including Derby, Nottingham, Leicester, Coventry, Milton Keynes, Lincoln, Boston, Grantham and Chesterfield.

For our area map, see www.westernpower.co.uk/About-us/Our-Business/Supply-area
Peak demand (MW) : 5,292

Footnote:
*** Expenditure on the day to day operation of a network. This should include all operating costs both controllable and non controllable.

How much we propose to spend and how it will be financed

Cost of Equity	6.7%	Notional Gearing	65%
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<i>All amounts in 12/13 prices</i>	Total spend £m over the course of the price control	Annual average Percentage change from DPCR5
Network Investment	£879.00	3.4%
Operating Costs***	£1,891.00	-2.4%

How this will impact domestic customer bills

Distribution charges make up 16% of the average overall domestic bill*

<i>All amounts in 12/13 prices</i>	2014/15*	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Percentage change in distribution costs	n/a	-6.7%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Annual change in £s	n/a	-£5.47	£0.76	£0.77	£0.78	£0.79	£0.79	£0.80	£0.81
Total distribution charge	£81.69	£76.22	£76.98	£77.75	£78.53	£79.32	£80.11	£80.91	£81.72

What we plan to do

During RII0-ED1 (2015 - 2023) WPD will continue to provide the best customer service, deliver further improvements to network performance and facilitate the move to a low carbon future.

We will invest £1.1bn during the period including expenditure to maintain, extend and reinforce our network. We have benchmarked our costs to ensure this expenditure is efficient and we have embedded further savings into the plan to ensure we continue to deliver efficiently.

Our proposals reduce customer bills on average by 19.0% in real terms.

Our plan delivers over 75 measurable outputs for customers which include:-

- reducing the average time customers are off supply by 29% vs.DPCR5 targets
- connection of Low Carbon Technologies at the most efficient cost
- improving the overall time to deliver a new connection by 20%
- continuing to be the most innovative company
- answering all customer calls in less than 2 seconds on average
- ensuring we continue to have no Ombudsman complaints
- reducing our carbon footprint by a further 5%

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Footnotes:

*As set out in the Ofgem factsheet -

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** Figures from last year of previous price control (DPCR5)

Key facts about our network

Ownership : Western Power Distribution

Number of customers : 1,108,000

Length of underground cables (km) : 17,000

Length of overhead cables (km) : 18,000

Total units distributed annually (GWh) : 11,833

Number of employees (FTEs) : 946

Area covered (km²) : 11,800

Geographical location : South and West Wales, including Cardiff, Newport, Swansea, Llanelli and Haverfordwest.

For our area map, see www.westernpower.co.uk/About-us/Our-Business/Supply-area

Peak demand (MW) : 2,118

Footnote:

*** Expenditure on the day to day operation of a network. This should include all operating costs both controllable and non-controllable.

How much we propose to spend and how it will be financed

Cost of Equity	6.7%	Notional Gearing	65%
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All amounts in 12/13 prices	Total spend £m over the course of the price control	Annual average Percentage change from DPCR5
Network Investment	£462.00	18.3%
Operating Costs***	£1,095.00	21.3%

How this will impact domestic customer bills

Distribution charges make up 16% of the average overall domestic bill*

All amounts in 12/13 prices	2014/15* *	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Percentage change in distribution costs	n/a	-21.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Annual change in £s	n/a	-£25.93	£0.95	£0.95	£0.97	£0.98	£0.99	£0.99	£1.01
Total distribution charge	£120.76	£94.83	£95.78	£96.73	£97.70	£98.68	£99.67	£100.66	£101.67

What we plan to do

During RII0-ED1 (2015 - 2023) WPD will continue to provide the best customer service, deliver further improvements to network performance and facilitate the move to a low carbon future.

We will invest £1.6bn during the period including expenditure to maintain, extend and reinforce our network. We have benchmarked our costs to ensure this expenditure is efficient and we have embedded further savings into the plan to ensure we continue to deliver efficiently.

Our proposals reduce customer bills on average by 12.6% in real terms.

Our plan delivers over 75 measurable outputs for customers which include:-

- reducing the average time customers are off supply by 18% vs.DPCR5 targets
- connection of Low Carbon Technologies at the most efficient cost
- improving the overall time to deliver a new connection by 20%
- continuing to be the most innovative company
- answering all customer calls in less than 2 seconds on average
- ensuring we continue to have no Ombudsman complaints
- reducing our carbon footprint by a further 5%

For further information please see our website www.westernpower.co.uk or contact Alison Sleightholm, Regulatory & Government Affairs Manager (Email: asleightholm@westernpower.co.uk).

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** Figures from last year of previous price control (DPCR5)

Key facts about our network

Ownership : Western Power Distribution

Number of customers : 1,561,000

Length of underground cables (km) : 22,000

Length of overhead cables (km) : 28,000

Total units distributed annually (GWh) : 14,019

Number of employees (FTEs) : 1,523

Area covered (km²) : 14,400

Geographical location : South West England, including Bristol, Bath, Taunton, Barnstaple, Exeter, Torquay, Plymouth, Bodmin and Redruth.

For our area map, see www.westernpower.co.uk/About-us/Our-Business/Supply-area
Peak demand (MW) : 2,855

Footnote:

*** Expenditure on the day to day operation of a network. This should include all operating costs both controllable and non-controllable.

How much we propose to spend and how it will be financed

Cost of Equity	6.7%	Notional Gearing	65%
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All amounts in 12/13 prices	Total spend £m over the course of the price control	Annual average Percentage change from DPCR5
Network Investment	£687.00	24.0%
Operating Costs***	£1,598.00	20.8%

How this will impact domestic customer bills

Distribution charges make up 16% of the average overall domestic bill*

All amounts in 12/13 prices	2014/15*	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Percentage change in distribution costs	n/a	-15.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Annual change in £s	n/a	-£18.84	£1.07	£1.08	£1.09	£1.09	£1.12	£1.12	£1.13
Total distribution charge	£125.54	£106.70	£107.77	£108.85	£109.94	£111.03	£112.15	£113.27	£114.40