



Serving the Midlands, South West and Wales

BUSINESS PLAN FOR 2015-2023

STAKEHOLDER PRESENTATION AND WORKSHOP

November 2012

OBJECTIVES

This morning

- Re-cap about WPD
- Stakeholder priorities identified so far
- Our business plan proposals
- WPD's social obligations

This afternoon

- Our Low Carbon investment plans



2015-2023

Business Plan
Consultation with stakeholders

Have your say

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



Serving the Midlands, South West and Wales

RE-CAP ABOUT WPD & STAKEHOLDER PRIORITIES SO FAR

Alex Wilkes
Stakeholder Engagement Officer

WPD AREA

WPD WEST MIDLANDS

Total area : 13,300 km²

Total Customers: 2,446,951

WPD SOUTH WALES

Total area : 11,800 km²

Total Customers: 1,094,220

WPD EAST MIDLANDS

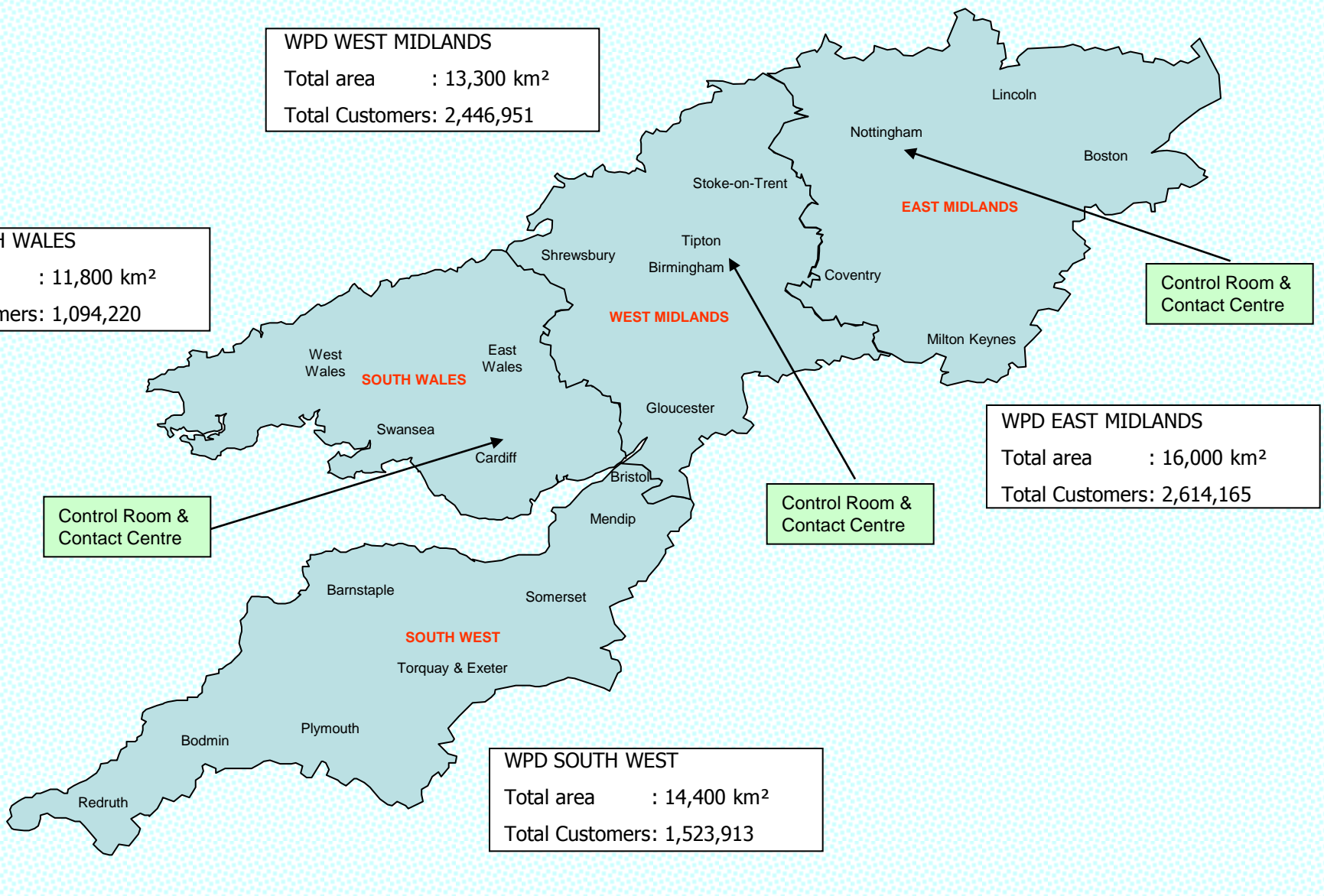
Total area : 16,000 km²

Total Customers: 2,614,165

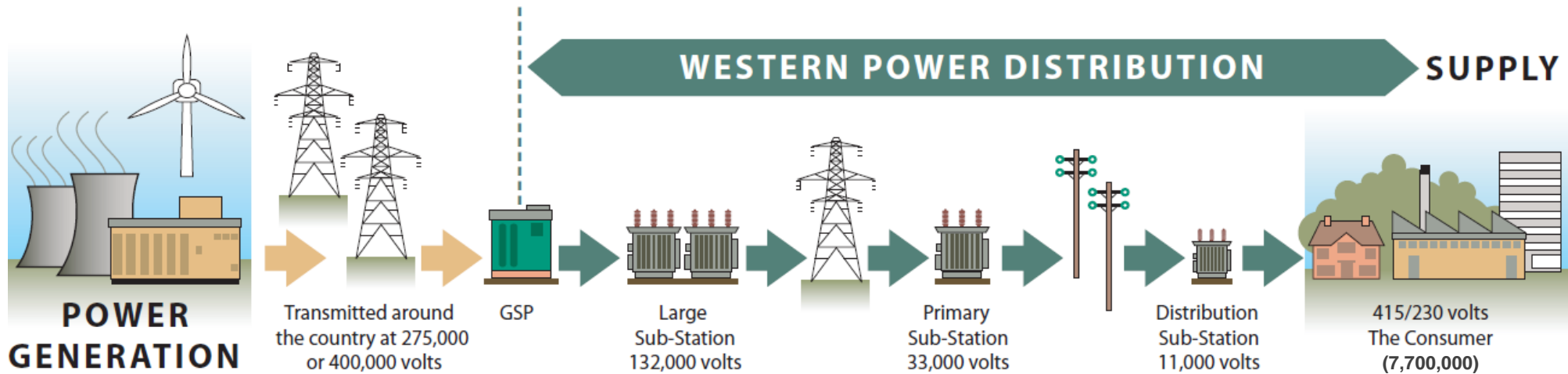
WPD SOUTH WEST

Total area : 14,400 km²

Total Customers: 1,523,913



THE ELECTRICITY NETWORK



- We deliver electricity to **7.7m customers**.
- Via 220,400km of overhead lines and underground cables – enough to go round the earth 5 ½ times.
- We are regulated by Ofgem who set our revenues.

OUR ACTIVITIES



Restore power quickly
when problems occur



Connect new
customers



Maintain & reinforce
the network

- WPD does not buy or sell electricity or gas.
- Our revenue comes from customers, but via charges we make to suppliers for use of the electricity network.

AVERAGE ELECTRICITY BILL

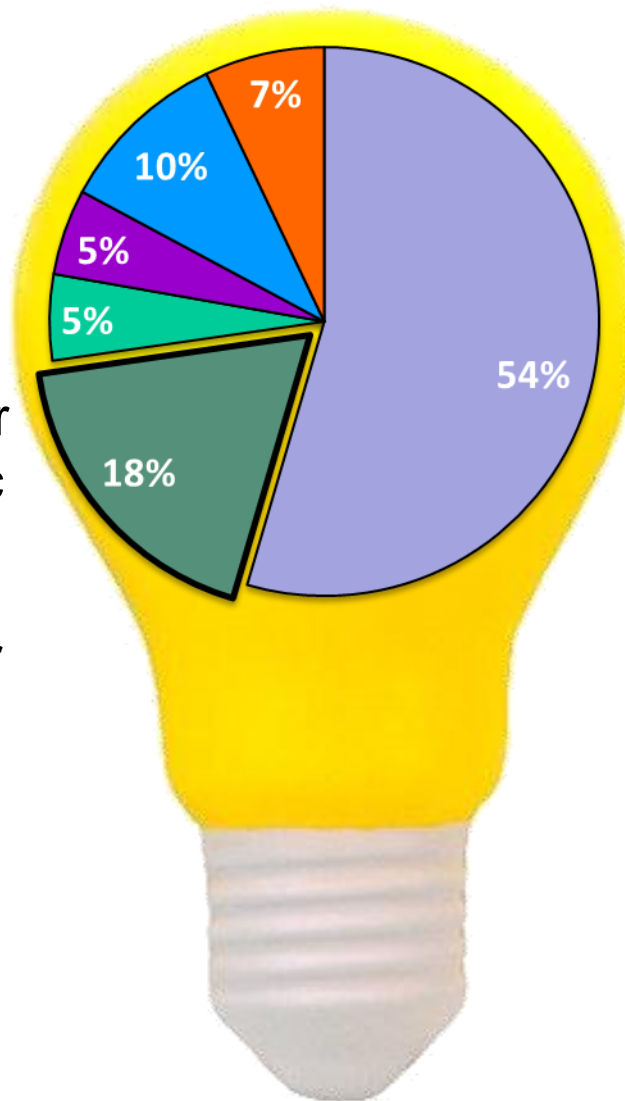
- A regulated industry – Ofgem
- Electricity distribution accounts for 17%-20% of an average domestic customer's bill.

Domestic customers – c.£100 per year

Small businesses – c.£270 per year

Medium businesses – c.£1,900 per year

Large businesses – more depending on their consumption



■ Wholesale energy, supply costs and profit margins

■ Distribution

■ VAT

■ Transmission

■ Environmental costs

■ Meter provision

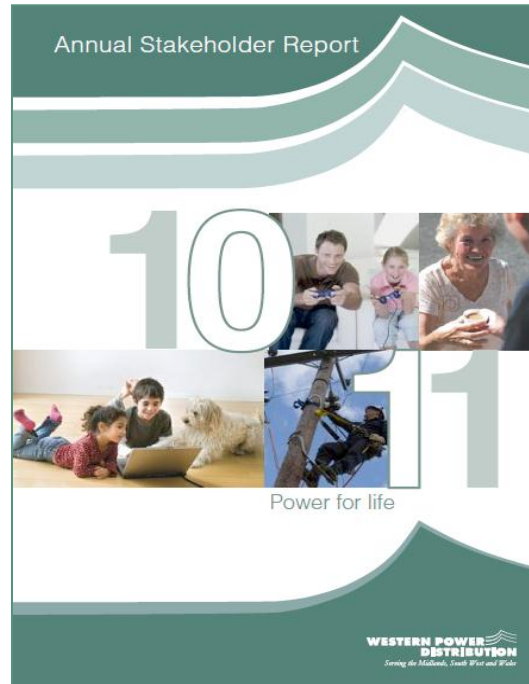
DISTRIBUTION PRICE CONTROLS

Current:

- DPCR5 (5th Distribution Price Control Review)
- 2010-2015

Future:

- RIIO-ED1 (Revenue = Incentives + Innovation + Outputs) (Electricity Distribution 1)
- 2015-2023
- Challenges: e.g. Aging networks, low carbon technologies, smarter networks.
- Greater network investment needed: but at an affordable cost
- We must be efficient, innovative, plan for the long term, deliver great customer service and clear outputs/benefits



OUR STAKEHOLDER ENGAGEMENT PROGRAMME

- To date we have engaged with 1,994 individual stakeholders

Preliminary
engagement

- Identified stakeholder's key investment priorities and interest areas

Focused
engagement

- Identified and ranked specific levels of service improvement under these priorities

Business
plan
consultation

- Used this insight as the basis of our first draft business plan, that we will now consult on specifically

Why you're here today!

STAKEHOLDER PRIORITIES

1	'Future proofed' equipment replacement programme	HIGHEST
2	Facilitate low carbon innovation	
3	Reduce frequency of power cuts	
4	Reduce duration of power cuts	
5	Severe weather/emergencies resilience	
6	Review the guaranteed standards for power cuts	HIGH
7	Flooding resilience	
8	Reducing oil and gas leaks from equipment	
9	Improve service for remote/'worst served' customers	
10	Undergrounding overhead lines in Areas of Outstanding Natural Beauty	
11	Innovating customer communication methods	MEDIUM
12	Improving new connections service	
13	Improving new connections communication methods	
14	Review definition of a 'worst served' customer	
15	Protecting habitats and species	
16	Preventing metal theft	

“WILLINGNESS TO PAY” RESEARCH

- 1600 surveys (domestic & business)
- Test specific service improvements

e.g: Reducing power cuts is important, but to what extent?

8 in 10 years on average

7 in 10 years

6 in 10 years

Even less?

- Which improvements matter most to customers?
- Increased investment will cost more
- Is there any willingness to see bills increase?
- Yes – but to deliver defined improvements



TODAY

Clear feedback received and addressed in our plan:

'Future proofed' equipment replacement programme
Guaranteed standards for power cuts
Habitats and species
Metal theft

WORKSHOP 1:

- Power cuts (duration & frequency)
- Severe weather/emergency resilience
- Protection against flooding
- Oil and gas leaks from equipment

WORKSHOP 2:

- Service to remote customers ('worst served')
- Undergrounding in National Parks and AONBs
- New Connections (process speed & communications)
- Innovative customer communications
- Low carbon scenarios – to be covered in Workshop 3 this afternoon

AGENDA

Registration	09:30 – 10:00
Welcome Overview of WPD & stakeholder priorities identified so far	10:00 – 10:15
Electronic voting	10:15 – 10:25
Headlines of our Plan - Investment priorities 1-4	10:25 – 10:50
Workshop 1 – Discussion Electronic voting	10:50 – 11:20 11:20 – 11:30
Coffee Break	11:30 – 11:50
Headlines of our Plan - Investment priorities 5-8	11:50 – 12:15
Workshop 2 – Discussion Electronic voting	12:15 – 12:45 12:45 – 13:00
Summary & Lunch	13:00 – 14:00
Workshop 3 - Low carbon investment	14:00 – 15:00
Close	

WESTERN POWER DISTRIBUTION

Serving the Midlands, South West and Wales

ELECTRONIC VOTING - A QUICK INTRODUCTION





Serving the Midlands, South West and Wales

HEADLINES OF OUR BUSINESS PLAN

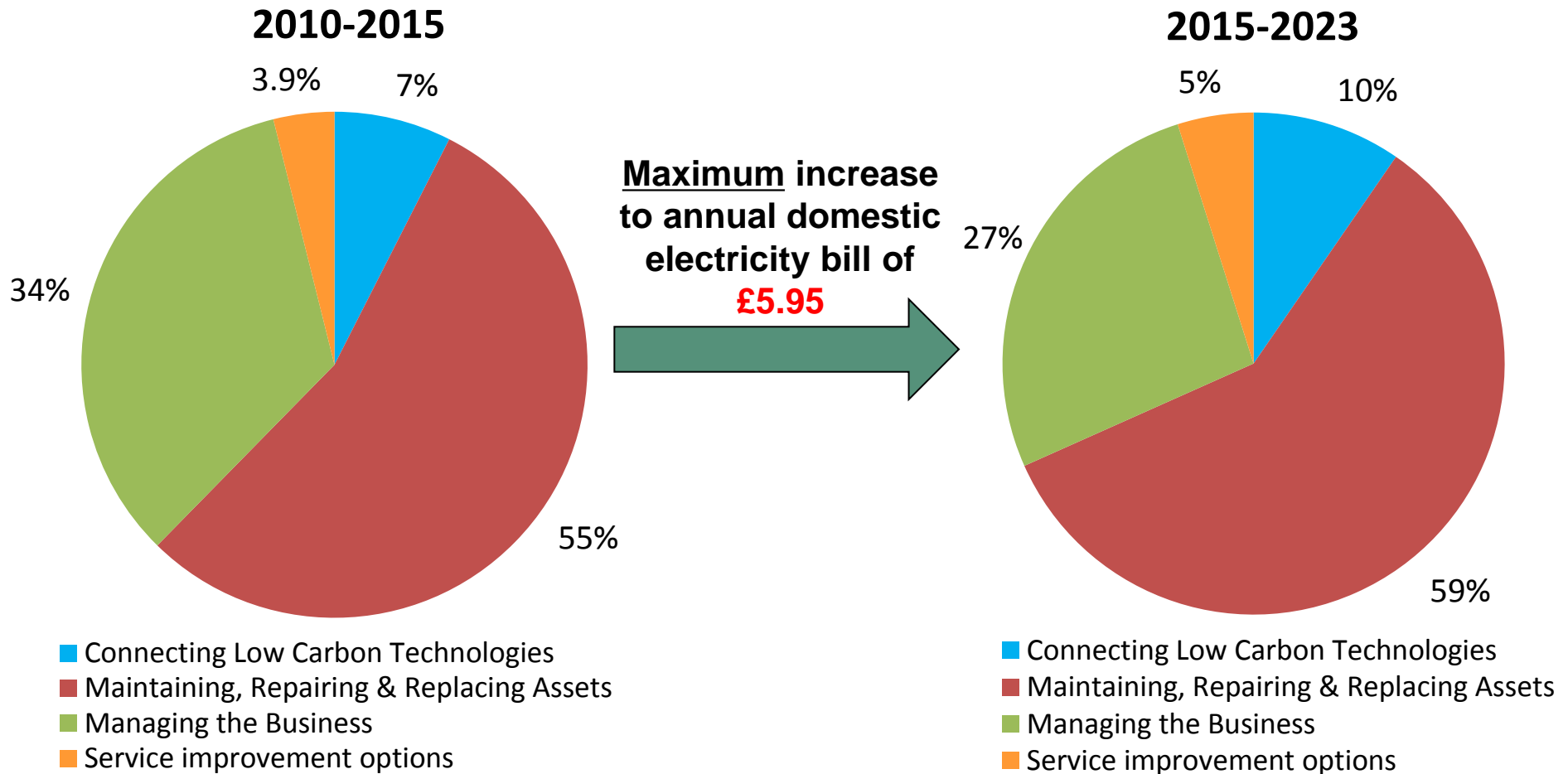
Bob Parker
Planning Regulation Manager

OUR INVESTMENT PLANS

- 2015-2023 we will invest c.£6.8bn on the network
- This is an increase on current expenditure
- Stakeholders have told us they won't accept any deterioration in service
- Our expenditure plans for 2015-2023 are designed to maintain service levels
- We are consulting on a range of optional extras
- We need to demonstrate there is clear stakeholder support for any such investment.



AVERAGE ANNUAL EXPENDITURE



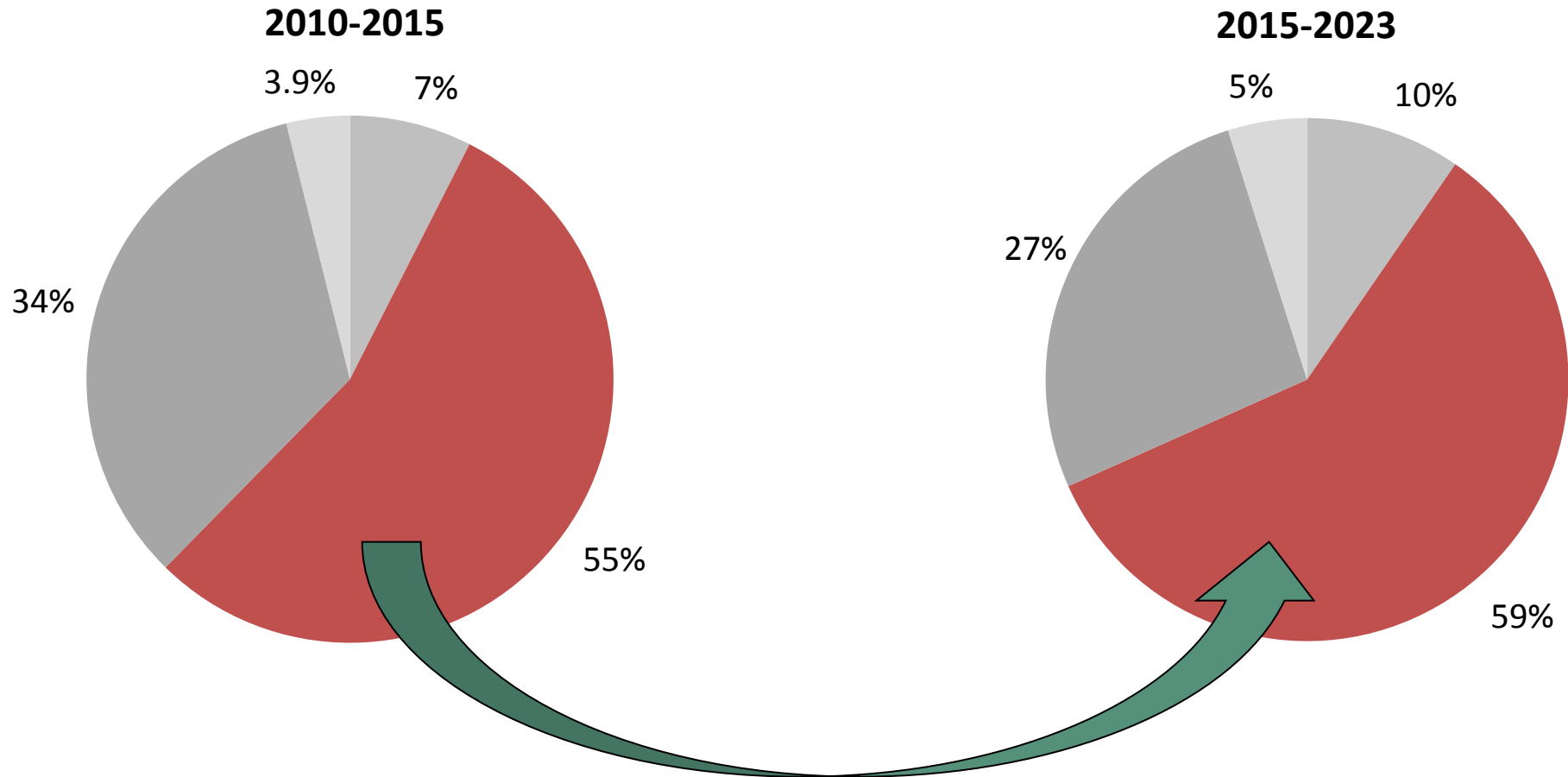
Total per year: **£800.2m**

Total in 5 year period: **£4bn**

Total per year: **£846.4m**

Total in 8 year period: **£6.8bn**

MAINTAINING SERVICE LEVELS



Maximum increase to
annual domestic
electricity bill of **£3.85**

MAINTAINING SERVICE LEVELS

The key drivers of our expenditure forecast are:

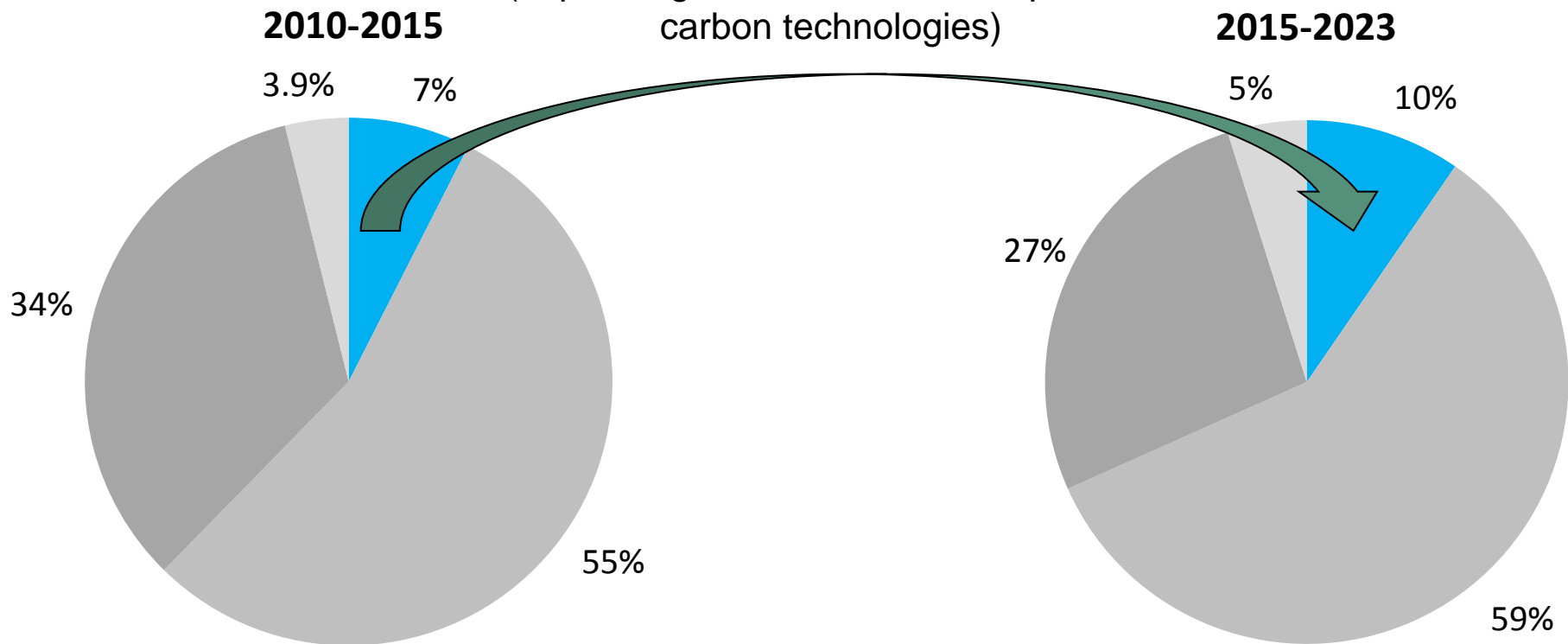
- Connecting new commercial and domestic customers
- Inspecting and maintaining existing assets
- Repairing them when they go wrong
- Replacing equipment due to age and condition
- Meeting our legal and licence obligations
- Meeting future challenges we may face



REINFORCING THE NETWORK

(To help connect low carbon technologies)

Maximum increase to annual domestic electricity bill of **£1.20 - £2.00**
(depending on the rate of take up of low carbon technologies)



We will cover this in more detail this afternoon

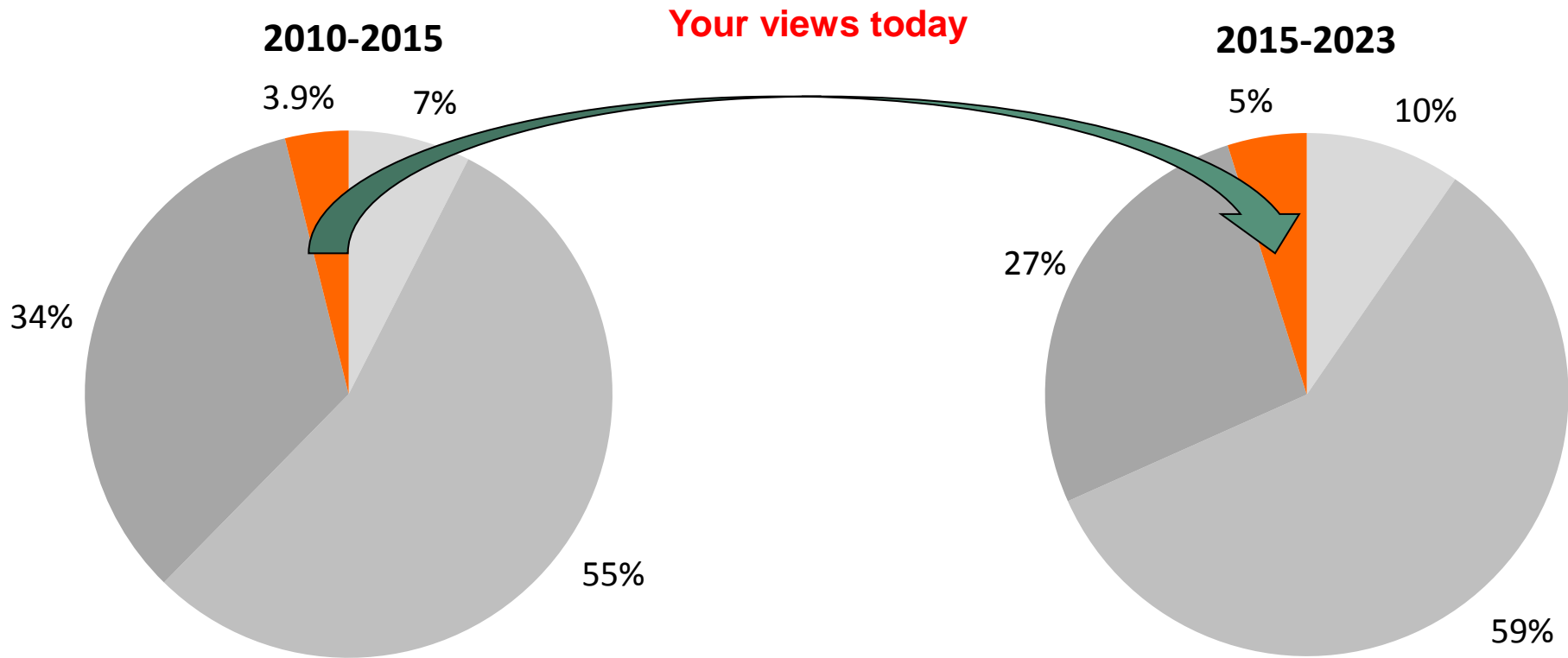
REINFORCING THE NETWORK

(To help connect low carbon technologies)

- Investment to support changes in electricity demand and generation
 - Expansion of distributed energy
 - Expansion of low carbon technologies



SPECIFIC SERVICE IMPROVEMENT OPTIONS



SPECIFIC SERVICE IMPROVEMENT OPTIONS

WORKSHOP 1:

- Power cuts (duration & frequency)
- Severe weather/emergency resilience
- Protection against flooding
- Oil and gas leaks from equipment



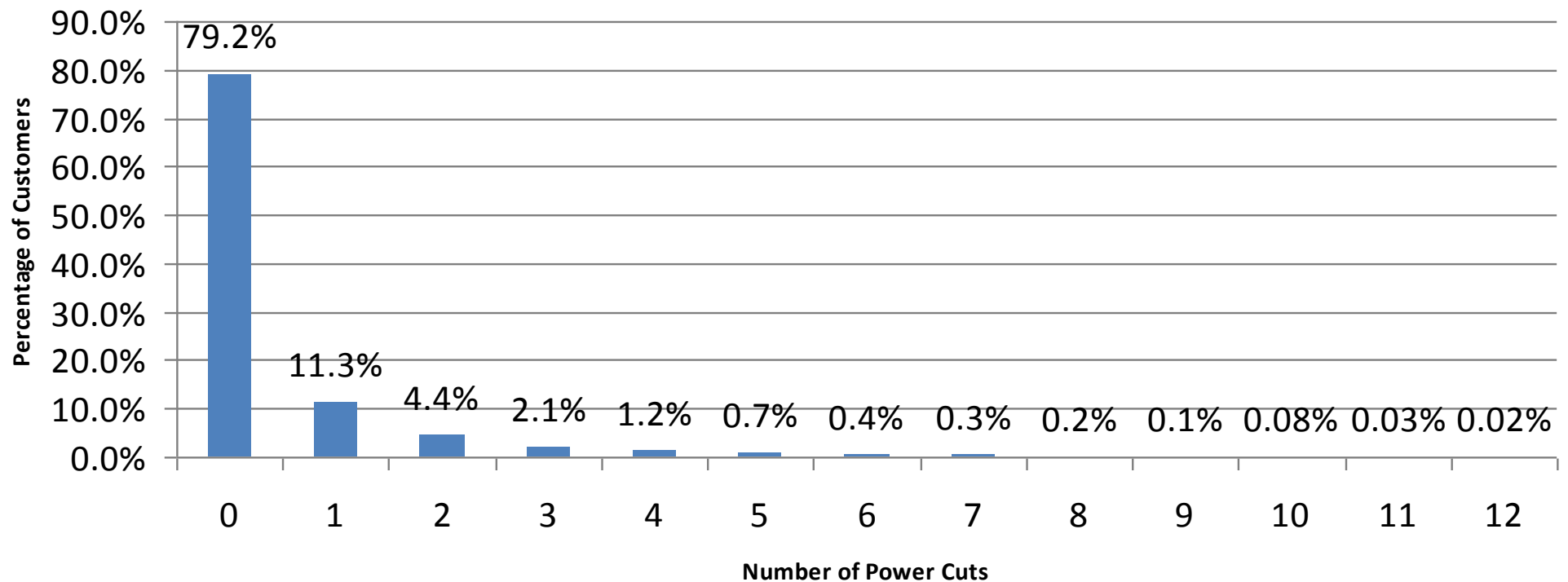
POWER CUTS

**YOU TOLD
US:**

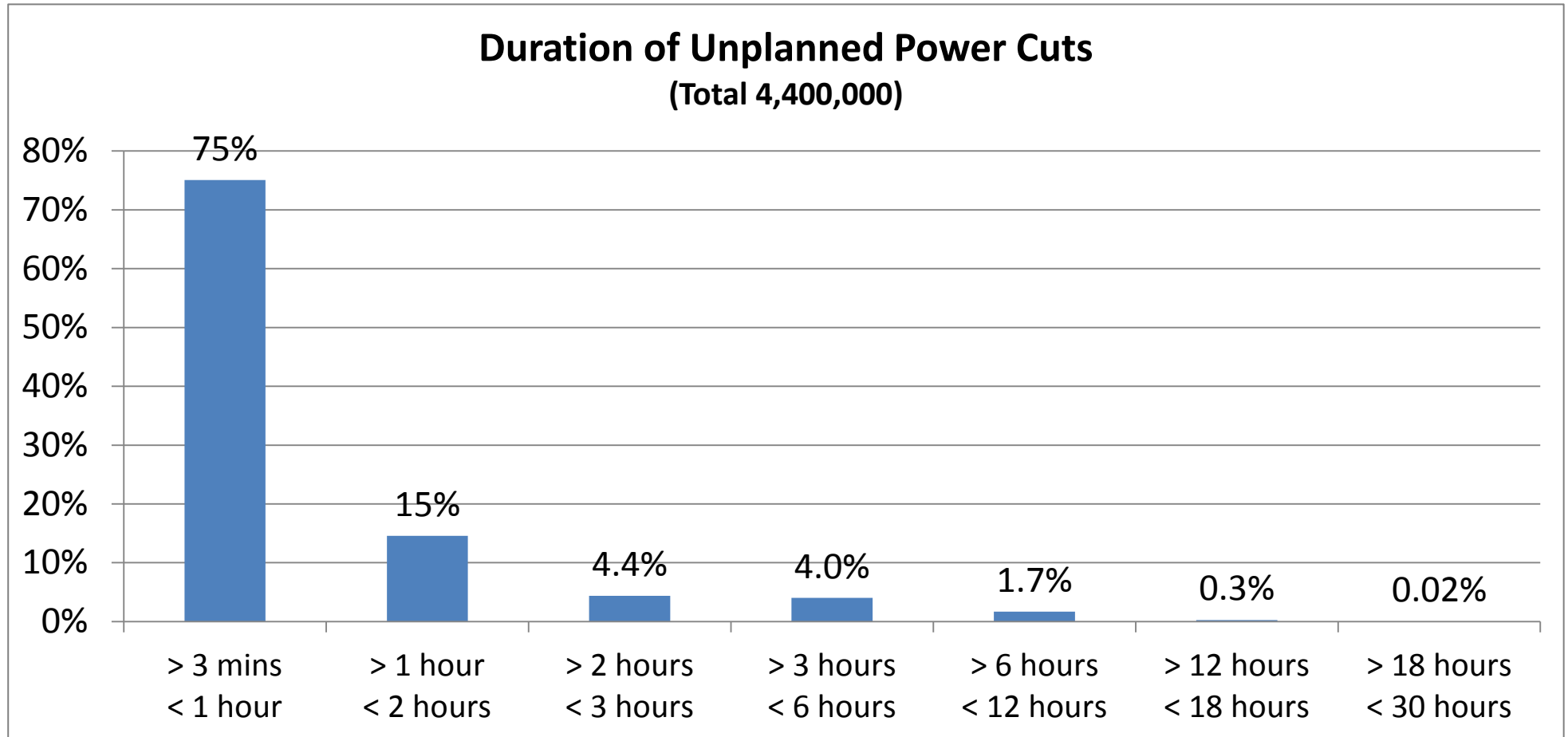
- Our top priority should be to “keep the lights on”.
- Current performance is good – improvements expected, but not dramatic.
- Customers would most like to see are:
 - Average frequency: Reduce from 8/10 years, to 7/10 years
 - Average duration reduced from 60mins to 55mins.
- Little support/expectation to go significantly beyond this.
- Customer research revealed willing to see an increase in bills of max. £3.80 (by 2023) to see this happen.

POWER CUTS

Quantity of Power Cuts Per Year



POWER CUTS



POWER CUTS

- Investment costs increase dramatically, the greater the improvement (e.g. 8 times from £39m to £310m)
- WPD's current view would deliver slight improvements on current performance, at an affordable cost.

THE OPTIONS WE'VE PROPOSED:

	Average frequency	Average duration	Total cost over 8 years	Maximum extra on domestic bill every year
NOW	8 in 10 years	60mins	-	-
Option 1: WPD's current view	7.75 in 10 years	52mins	£39m	40p
Option 2	7.5 in 10 years	51mins	£59m	55p
Option 3	7 in 10 years	48mins	£130m	£1.00
Option 4	6 in 10 years	41mins	£310m	£2.20

SEVERE WEATHER/EMERGENCY RESILIENCE

- During severe weather, overhead lines can be damaged by falling trees and other wind-borne debris.
- Since 2008/9 WPD have had a **resilience tree cutting programme** - ensure if trees fall they do not come into contact with strategically important overhead lines.

YOU TOLD US:

- Preparing for major emergencies has increased in priority.
- WPD have a good track record of restoring supplies during storms.
- The current 25 year programme is working.
- If we should accelerate the plan, we should do dramatically from 25 years to 15.
- Customers would pay up to £1.30 for this to happen.

SEVERE WEATHER/EMERGENCY RESILIENCE

THE OPTIONS WE'VE PROPOSED:

	Duration of resilience tree trimming programme	Total additional cost over 8 years	Maximum extra on domestic bill every year
Option 1: WPD's current view	25 year	Nil	Nil
Option 2	Accelerate to 20 years	£14.7m	14p
Option 3	Accelerate to 15 years	£45.7m	45p

PROTECTION AGAINST FLOODING

- A flooded substation could interrupt electricity supplies to large areas of population, including those not flooded themselves.
- WPD can protect substations via flood defences and elevating substations.



YOU TOLD US:

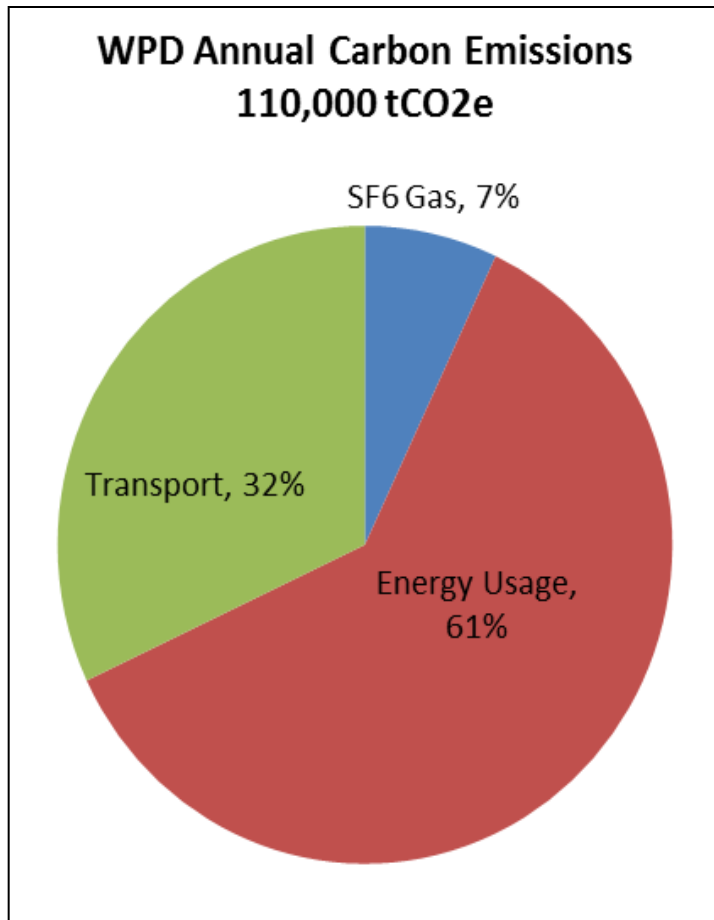
- For all customers this is a medium priority. But a high priority for those who have experienced severe flooding.
- WPD's activities should focus only on the most at risk substations
- Very low willingness to see bills increase in order to protect more substations than currently planned by WPD.

PROTECTION AGAINST FLOODING

**THE
OPTIONS
WE'VE
PROPOSED:**

	Number of major substations protected	Number of customers (no longer at risk power cut due to flooding)	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1: WPD's current view	100	1,000,000	£34.0m	Nil
Option 2	150	1,300,000	£50.0m	20p
Option 3	200	1,500,000	£67.0m	50p

OIL & GAS LEAKS FROM EQUIPMENT



- Some equipment uses insulating greenhouse gas (SF₆).
- WPD has approximately 50,000 kg of SF₆ in service – **annual leakage is 0.6%** (300 kg).
- Some older cable types contain an insulating oil.
- WPD has 1.3m litres of fluid in service – **annual leakage is 4%** (50,000 litres).
- Full replacement isn't the only option – new techniques for pinpointing oil leaks has already had a big impact. (cheaper than full cable replacement).

OIL & GAS LEAKS FROM EQUIPMENT

THE
OPTIONS
WE'VE
PROPOSED:

	Percentage of equipment replaced with highest leakage rate	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1: NOW	Worst 1% <i>Oil leaks 4% → 1%</i> <i>SF6 leaks 0.6% → 0.5%</i>	£14.0m	10p
Option 2	Worst 5% <i>Oil leaks 4% → 1%</i> <i>SF6 leaks 0.6% → 0.3%</i>	£65.0m	50p
Option 3	Worst 10% <i>Oil leaks 4% → 1%</i> <i>SF6 leaks 0.6% → 0.2%</i>	£132.0m	£1.00

WORKSHOP 1: DISCUSSION

1. REDUCING POWER CUTS



Which investment option do you support?

2. SEVERE WEATHER/EMERGENCY RESILIENCE



Which investment option do you support?

3. PROTECTION AGAINST FLOODING



Which investment option do you support?

4. REDUCING OIL & GAS LEAKS FROM EQUIPMENT



Which investment option do you support?

WORKSHOP 1: ELECTRONIC VOTING

(For results, please see workshop report summary on website)



COFFEE BREAK

SPECIFIC SERVICE IMPROVEMENT LEVELS

WORKSHOP 2:

- Service to remote customers ('worst served')
- Undergrounding in National Parks and AONBs
- New Connections (process speed & communications)
- Innovative customer communications



SERVICE TO REMOTE CUSTOMERS – “WORST SERVED”

- “Worst Served” if 15 or more power cuts (>3 minutes) in a three year period.
- Currently 10,000 customers (approx. **0.1% of customer base**).

YOU TOLD US:

- Some acceptance that living in remote areas makes power cuts more likely.
- But customers pay largely the same for their electricity, so they shouldn't receive drastically different service levels.
- All customers (not just worst served) want to see small improvement (benefit 2000 customers) and would pay £1.40 extra.
- Only willing to pay significantly more if the improvements are significantly greater– i.e. £3.30 extra to benefit 6,000 customers.

SERVICE TO REMOTE CUSTOMERS – “WORST SERVED”

THE OPTIONS WE’VE PROPOSED:

- The solutions to help improve service would have a modest impact on everyone’s bill, but high cost per benefiting customer (£600-£1350).
- Our current view is to strike a balance.

	Improvement	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1: NOW	10k worst served customers	-	-
Option 2	Reduce from 10k to 8k	£1.2m (£600 per customer)	2p
Option 3: WPD’s current view	Reduce from 10k to 6k	£3.6m (£900 per customer)	5p
Option 4	Reduce from 10k to 4k	£8.1m (£1350 per customer)	15p

UNDERGROUNDING IN NATIONAL PARKS & AONBs

- The cost of undergrounding in National Parks is approximately £150k per km.
- Projects improve visual amenity but are there are no/little supply reliability or carbon reduction benefits.
- A medium/low priority overall.
- But support for WPD to do more than at present, and willing to see some bill increases to do so.

**YOU TOLD
US:**

Base:	Continue to focus on small number of iconic sites: 5 km per year – 40km in 8 years	✗	No support
Level 1:	Extend to 15 km per year – 120km in 8 years	○	Some support
Level 2:	Extend to 30 km per year – 240km in 8 years	✓	Strongest support
Level 3:	Extend to 60 km per year – 480km in 8 years	✓	Strong support

UNDERGROUNDING IN NATIONAL PARKS & AONBs



UNDERGROUNDING IN NATIONAL PARKS & AONBs

THE OPTIONS WE'VE PROPOSED:

- Stakeholders want us to do – which we have proposed.
- Delivery depends on getting an approved programme with relevant stakeholders.
- Larger programmes proposed by other network companies (2010-15) have not been delivered.

	KM overhead line undergrounded (in 8 years)	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1:NOW	40km	£6m	Will be: 9p
Option 2: WPD's current view	70km	£10.5m	16p
Option 3	120km	£18m	28p
Option 4	240km	£36m	56p
Option 5	480km	£72m	£1.12

NEW CONNECTIONS

YOU TOLD US:

- Improving service for new connections customers should be considered a high priority.
- The process should be made quicker and clearer.
- The process should be made easier, and there should be more working in partnership with local authorities and developers.
- Being quicker to put the customer in touch with the right person or having more expertise at initial contact stage, is very important.
- Better communication throughout the process is needed.

NEW CONNECTIONS – PROCESS SPEED

**THE
OPTIONS
WE'VE
PROPOSED:**

	Average time from first contact to completed connection	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1: WPD's current view	Small scheme: 30 days Large scheme: 90 days	-	-
Option 2:	Small scheme: 20 days Large scheme: 60 days	£28.3m	22p
Option 3	Small scheme: 10 days Large scheme: 30 days	£56.6m	44p

NEW CONNECTIONS – COMMUNICATION

THE OPTIONS WE'VE PROPOSED:

	Communication methods	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1: NOW	A separate point of contact at each stage: enquiry, application, wayleaves/consents, on-site works/construction.	-	-
Option 2: Current view	Now plus a dedicated contact number (better expertise at first contact)	£3.2m	3p
Option 3: Current view	Now plus applications, payments, job tracking etc online	£2m	1p
Option 4	A single local point of contact	£50m	35p

CUSTOMER COMMUNICATION METHODS

**YOU TOLD
US:**

- Customers' preferred method of communication is still the telephone.
- But having accurate, useful and up-to-date information is key
- Not all customers would use new/innovative communication channels, but having more communication options and giving customers a choice is seen as a good thing.
- The options for which customers are most willingness to see an increase in bills, is for information via text messages and social media.

INNOVATIVE CUSTOMER COMMUNICATION METHODS

THE OPTIONS WE'VE PROPOSED:

	Communication methods	Total cost over 8 years	Maximum extra on domestic bill every year
Option 1: NOW	Telephone operators and automated messages to respond to calls	-	-
Option 2: Current view	Now plus 2-way text messaging	£3m	3p
Option 3: Current view	Now plus social media channels	£3m	3p
Option 4: Current view	Now plus real-time outage info on the website	£2m	2p

WORKSHOP 2: DISCUSSION

5. SERVICE TO REMOTE CUSTOMERS ('WORST SERVED')



Which investment option do you support?

6. UNDERGROUNDING IN NATIONAL PARKS AND AONBs



Which investment option do you support?

7. NEW CONNECTIONS (PROCESS SPEED & COMMUNICATIONS)



Which investment option(s) do you support?
Who pays? (all customers or just connections customers)

8. INNOVATIVE CUSTOMER COMMUNICATIONS



Which investment option(s) do you support?
Have we missed something? Any other ideas?

WORKSHOP 2: ELECTRONIC VOTING

(For results, please see workshop report summary on website)



LUNCH



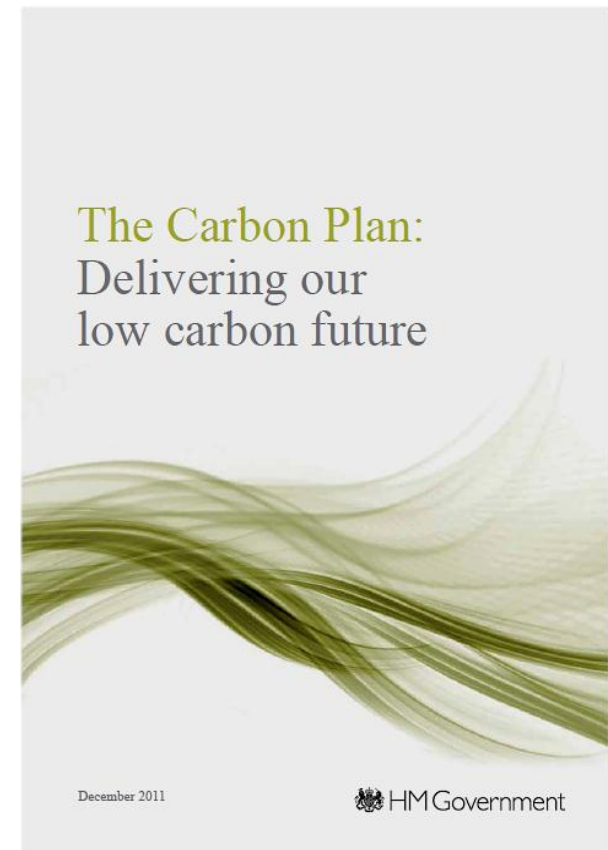
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WORKSHOP 3: LOW CARBON SCENARIOS FOR ED1

Nigel Turvey
Design & Development Manager

BACKGROUND

- **Growth in demand** due to economic conditions and new/revised connections, & expected change due to need to move to a low carbon economy.
- Government's approach to energy and climate change set out in "*The Carbon Plan: Delivering our low carbon future*", published Dec 2011.
- Sets out potential scenarios to put UK on track to halve greenhouse gas emissions, on 1990 levels, by the mid-2020s and an **80% reduction by 2050**.
- In The Carbon Plan, DECC set out **4 illustrative scenarios** of how the targets can be met.
- Ofgem require each DNO to chose a 'best view' scenario for planning purposes and to explain how it will flex to meet different outcomes.



CARBON PLAN SCENARIOS

- In The Carbon Plan, the 4 scenarios are:

Scenario 1	Scenario 1 – high abatement in low carbon heat
<ul style="list-style-type: none"> • High levels of renewable heat • Medium levels of fuel efficiency • High levels of insulation 	High level of emissions reductions from uptake of low carbon heat in buildings and industry (8 million installations) with significant emission reductions from transport (60g CO ₂ /km) and significant thermal insulation of buildings (5 million solid wall insulation).
Scenario 2	Scenario 2 – high abatement in transport
<ul style="list-style-type: none"> • High levels of fuel efficiency • Medium ambition on low carbon heat • High levels of insulation 	High level of emissions reductions from transport (50g CO ₂ /km), with comparatively lower reductions from low carbon heat (7 million installations) and significant thermal insulation of buildings (5 million solid wall insulation).
Scenario 3	Scenario 3 – high electrification of heat & transport
<ul style="list-style-type: none"> • High levels of fuel efficiency • High levels of low carbon heat • Low levels of solid wall insulation 	This reflects a future where there is high electrification in heat and transport, with significant uptake of EVs and heat pumps (as in scenario 1 and scenario 2) and lower comparative levels of insulation (2.5 million).
Scenario 4	Scenario 4 – credit purchase
<ul style="list-style-type: none"> • Low levels of fuel efficiency • Low levels of low carbon heat • Medium levels of solid wall insulation 	Reflects a future where more than one key technology under-delivers, and carbon credits are purchased. It assumes 1.6 million low carbon heat installations, medium levels of insulation (4.5 million) and fuel efficiency of 70g CO ₂ /km.

CARBON PLAN SCENARIOS AND THE SMART GRID FORUM

- For us to use the Carbon Plan Scenarios, they need further development to take accounts of:
 - Regional split of uptake of 'Low Carbon Technologies (LCTs)'
 - (Heat Pumps, Electric Vehicles and Photovoltaic installations)
 - Distribution connected generation
 - Energy efficiency
 - Uptake of Demand Side Response
 - Volumes of new connections
- Ofgem and DECC co-chair the Smart Grid Forum which has tasked DNOs with developing a detailed cost benefit model to assess the benefits of using 'smart grid' technologies over continuing to use only conventional techniques to develop the distribution network
- A report on the work assessing GB as a whole has recently been published, concluding that smart grid technologies will result in lower costs over the long term



WHAT ARE 'SMART GRID' TECHNOLOGIES?

- New pieces of equipment or monitoring/control of existing equipment to:
 - Maximise ratings
 - Reconfigure the network as demand changes; and/or
 - Better coordinate generation and demand to reduce the need for more network.

E.g: 'Real time thermal ratings'

- Rather than having general assumptions about the conditions equipment will operate under (outside temperature, wind speed, shape of the demand etc), measure them in real time to maximise the rating available.

'Dynamic reconfiguration'

- Today we use automated switching to reconfigure networks during power cuts. We can take this further and reconfigure the network as demand changes to share load equally between adjacent circuits.

'Permanent meshing of networks'

- Connecting a number of circuits together to balance loads and allow higher utilisation of in-feeding transformers.

'Demand/Generator side response'

- Entering a commercial arrangement for customers to change their usage or generation at the request of the DNO.

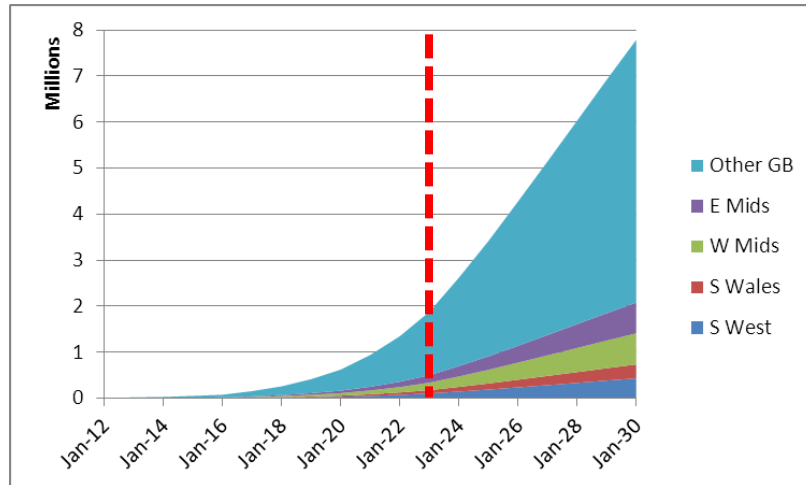
WPDS 'BEST VIEW' SCENARIO

- **Scenario 1 of The Carbon Plan is our 'best view' scenario** in terms of the growth in LCTs.
- This scenario anticipates:
 - **Significant progress in the insulation of buildings** (5 million solid wall insulation),
 - **High uptake of low carbon heat** (8 million installations)
 - **Significant reduction in emissions from transport** (60g CO₂/km by 2030)
- It includes a continuing growth in both onshore wind and large scale solar PV.
- Whilst Demand Side Response (DSR) features, it assumes difficult to achieve significant uptake of DSR that benefits the distribution network.
(Combination of difficulty achieving customer acceptance and greater rewards that NGT and suppliers can offer to use these services for system balancing and market position balancing)
- There is a **continuing need for significant asset replacement** to maintain system safety and security of supply.

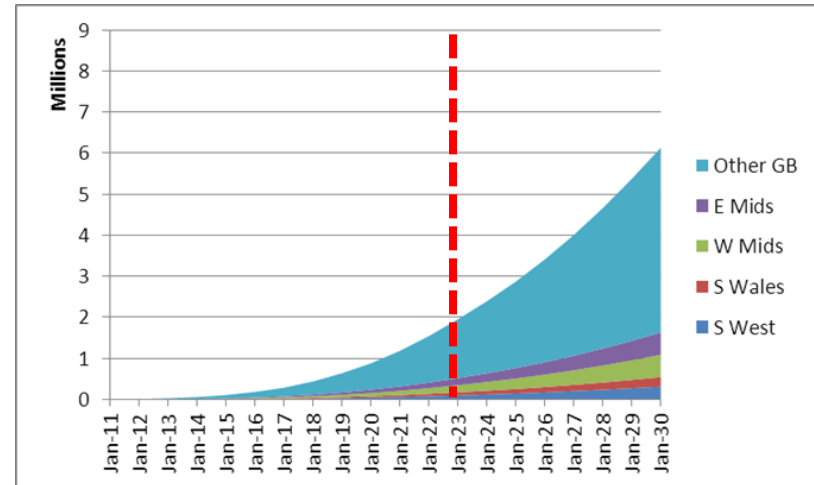
WPDS 'BEST VIEW' SCENARIO

- Includes the following uptake of LCTs

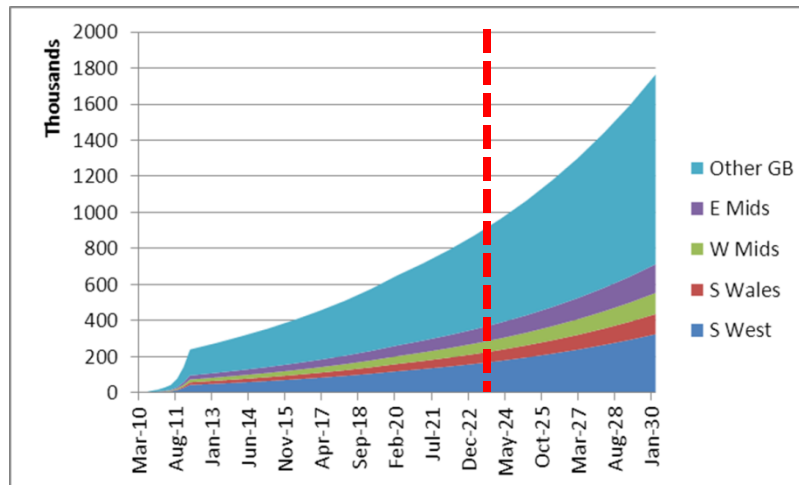
Heat Pumps



Electric Vehicles



Photovoltaic installations



WPD 'BEST VIEW' SCENARIO

- And following capacities (MW) of large scale (greater than 1MW) generation

	S West		S Wales		W Midlands		E Midlands	
	Existing	Total at end of ED1	Existing	Total at end of ED1	Existing	Total at end of ED1	Existing	Total at end of ED1
Wind	150	330	947	1,217	0	90	276	456
PV	33	643	6	81	2	2	13	113
CHP	20	65	135	162	6	96	136	226
Biomass	3	21	106	124	0	0	16	34
Fossil Fuel/other	176	176	326	326	386	404	99	99
Other renewable	3	3	26	26	0	0	2	2
Waste/landfill gas	96	96	81	81	119	119	175	175
Total	481	1,336	1,627	2,017	513	711	717	1,105

Note: Large scale PV is particularly sensitive to ROC allocation – there is likely to be significant network congestion in Devon/Cornwall

WPD 'BEST VIEW' SCENARIO

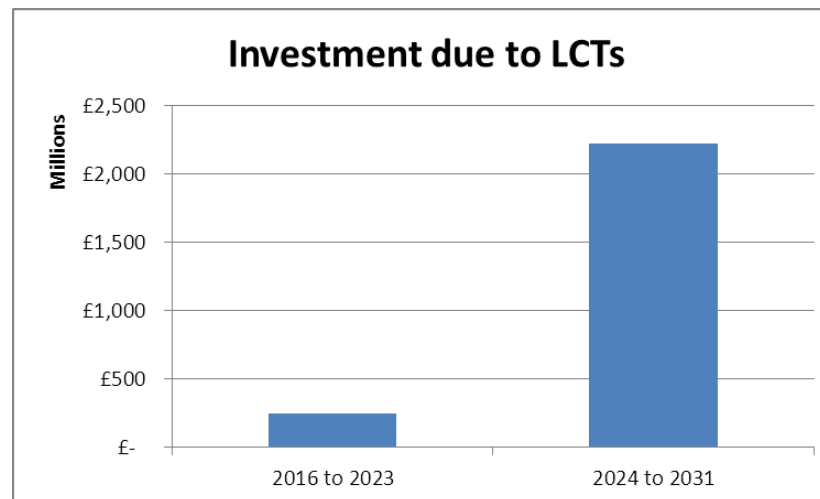
- **Continued improvement in appliance and lighting efficiency:**
 - Assumed to deliver 1.5% per annum consistent with the Carbon Plan.
- **Completion of the smart meter roll out:**
 - Expected to increase this to 2% per annum from 2020 due to greater visibility of usage.
- **Demand Side Response (DSR) low levels:**
 - Building up to 1% of peak demand by end of ED1 with most delivered from large industrial/commercial customers*.
- We expect peak demand to increase as follows:

	Peak MW 2011/12	Peak MW 2022/23
S West	2,831	3,394
S Wales	2,100	2,339
W Midlands	4,751	5,643
E Midlands	5,248	5,916

*Our expected DSR payments are based on 50% of the average £/kW reinforcement cost for the voltage levels above that where the DSR is offered e.g. £40/kW/yr at LV (equivalent to ~20p/kWh assuming ~200 hours/year)

SOME INITIAL RESULTS FROM WPDS 'BEST VIEW' SCENARIO

- We used the model created under the Smart Grid Forum to look at the potential costs and technologies that it predicts.
- For WPD, predicts **extra investment between £150m (£1.20/customer) & £250m (£2.00/customer) by 2023 as a result of the growth** in LCTs (assuming costs are socialised).
- In context, this compares with £300m being spent on system reinforcement in the current period and £1,800m of total investment.
- Of more concern is the significant ramp up in investment forecast by the model in ED2 period.



WPDs 'best view' scenario - questions

?

Are our assumptions reasonable for a 'best view' scenario?
Is Scenario 1 the right scenario?

?

Are the generation (greater than 1MW) and energy efficiency forecasts reasonable?

?

Do you agree Demand Side Response is only likely for industrial/commercial users until at least 2020+?

?

If you had greater visibility of your energy use (smart meters) what impact do you think it would have on your behaviour?

?

Do you agree that customers should not see an increase in power cuts as a result of introducing smart grid technologies?

INFORMATION FOR STAKEHOLDERS

Thank you for attending

- Slides and feedback will be posted on the website www.westernpower.co.uk
- We will continue consultation on our business plan in the coming months, including any themes picked up during previous workshops
- We would appreciate feedback on any of the areas discussed today, please contact

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