



*Serving the Midlands, South West and Wales*

## **WPD Customer Panel**

Nottingham Depot

Tuesday 27<sup>th</sup> June 2017

# Today

- 10.00 Business performance update and SECV submission  
Robert Symons (Chief Executive)
- 11.00 Review of previous minutes & research update  
Alex Wilkes (Stakeholder Engagement Manager)
- 11.30 Innovation update  
Roger Hey (Future Networks Manager)
- 12.15 Engagement plan for local network investment map  
Julie Richmond (Graduate Trainee)
- 13.00 Lunch
- 14.00 Split session:
- A: Innovation
  - B: Social Obligations



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# Chief Executive's Update

Tuesday 27<sup>th</sup> June 2017

Robert Symons

Chief Executive



*Serving the Midlands, South West and Wales*

# **2016/17 Business Plan Delivery**

## **- Performance Update**

# Safety

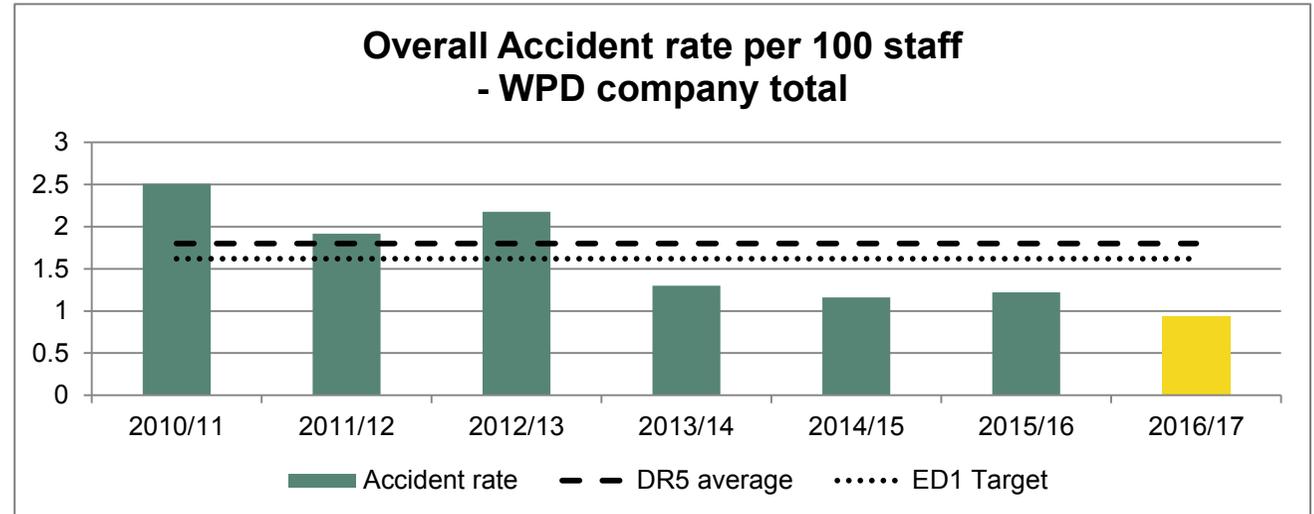
## 2015/16 performance:

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

### 2015/16 key:

- ✓ Achieved;
- ✓ On track, some areas to improve;
- Output under review
- ✗ Not met

## 2016/17 performance:



- 62 accidents (131 in 2012/13), one fatality
- Implemented various safety initiatives following 2015/16 staff safety events (e.g. enhancements to on site risk assessment)
- Four contractor safety conferences held, involving c.100 contractor organisations and c.400 of their staff
- Inspection & Maintenance programme on track with target
- Educated 70,479 children at 4,776 events (40% above target)

# Reliability

## 2015/16 performance:

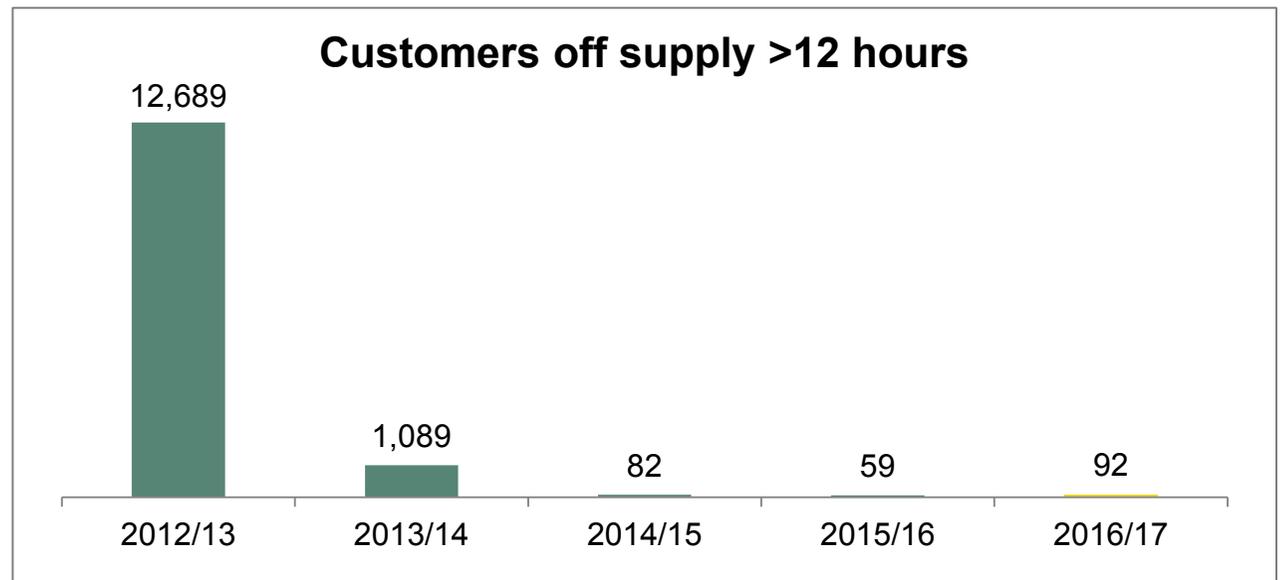
11.	Network performance	✓
12.	Speed of restoration	✓
13.	12 hour outages	✓
14.	Guaranteed standards	✓
15.	Worst served customers	✓
16.	Flood defences	✓
17.	Tree clearance (resilience)	✓
18.	Black start resilience	✓

### 2015/16 key:

- ✓ Achieved;
- ✓ On track, some areas to improve;
- Output under review
- ✗ Not met

## 2016/17 performance:

- HV faults restored within 1 hour: **89.21%** (target = 85%)
- Storm resilience tree trimming: **782km** (11% above target)
- Flood defences at primary substations: **17** (42% above target)



# Environment

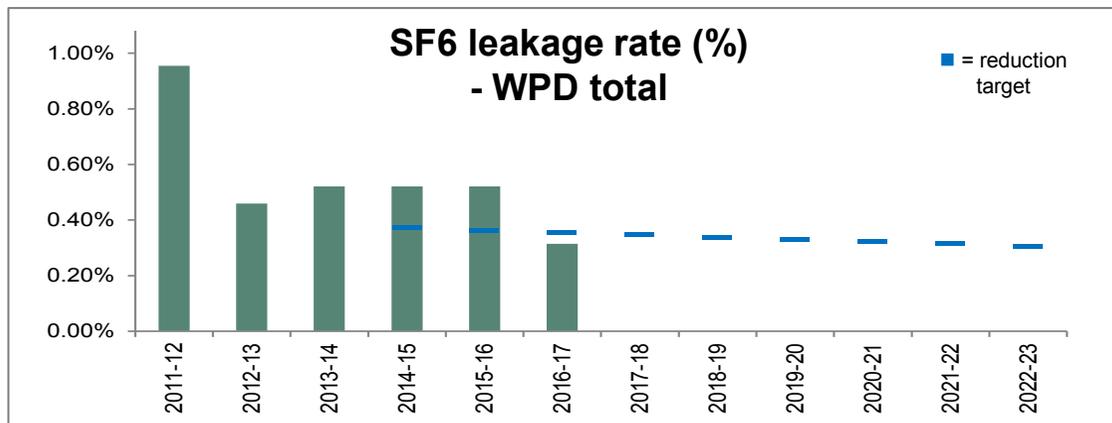
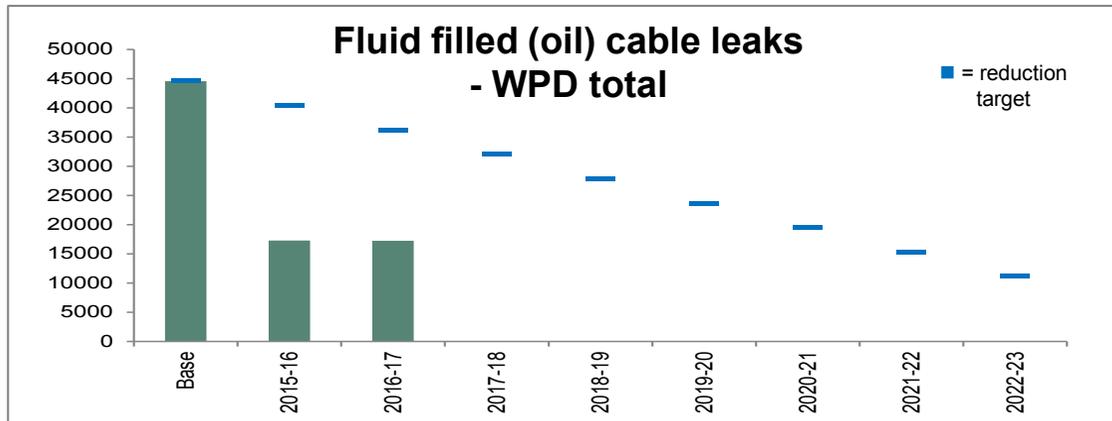
## 2015/16 performance:

19.	LCT response time	⚠	27.	Energy efficiency - buildings	✓
20.	Identifying LCT hotspots	✓	28.	Reducing waste to landfill	✓
21.	Uprating assets - LCT hotspots	✓	29.	Reducing BCF	✗
22.	Developing smart solutions	✓	30.	Reducing oil leaks from cables	✓
23.	Using smart solutions	✓	31.	Reducing SF6 leaks	✗
24.	Oversizing transformers for losses	✓	32.	Installing bunds	✓
25.	Uprating cables for losses	✓	33.	Undergrounding lines in AONBs	✓
26.	Lowering vehicle emissions	✓			

### 2015/16 key:

- ✓ Achieved;
- ✓ On track, some areas to improve;
- ⚠ Output under review
- ✗ Not met

## 2016/17 performance:



- Awarded £4.9m funding for Open LV Network Innovation Competition project

# Connections

## 2015/16 performance:

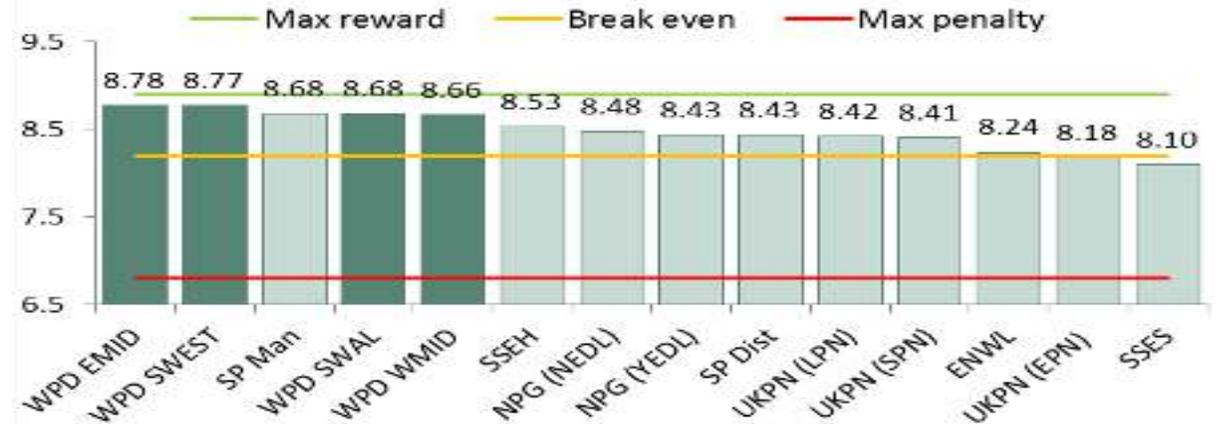
34.	Time to connect	✓
35.	Customer service	✓
36.	Customer surveys - distributed generation	✓
37.	Online project tracking	✓
38.	Online information	✓
39.	Connection surgeries	✓
40.	Improving processes	✓
41.	Guaranteed standards	✓
42.	Raising awareness of competition	✓
43.	Extending scope of contestable work	✓

### 2015/16 key:

- ✓ Achieved;
- ✓ On track, some areas to improve;
- Output under review
- ✗ Not met

## 2016/17 performance:

### Customer satisfaction



	Time to Quote (average number of days)		Time to Connect (average number of days)	
	Single premises	1-4 premises	Single premises	1-4 premises
West Midlands	4.51	6.09	36.24	49.86
East Midlands	3.47	4.72	34.57	48.45
South Wales	4.29	5.79	32.76	48.31
South West	5.16	5.86	36.31	44.82
<b>Ofgem target</b>	<b>8.21</b>	<b>11.73</b>	<b>42.08</b>	<b>52.70</b>

# Customer satisfaction

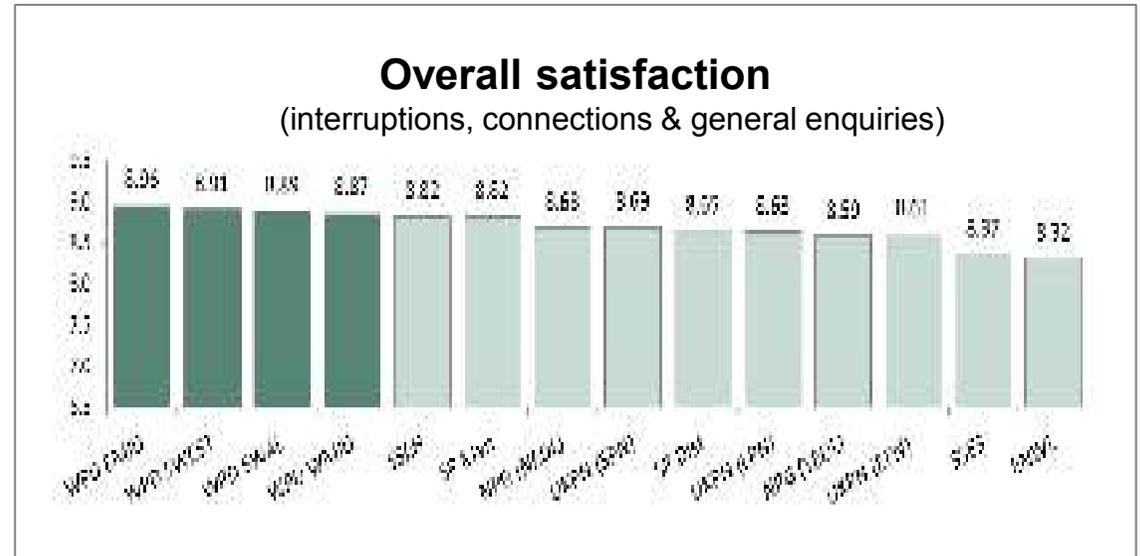
## 2015/16 performance:

44.	BMCS	✓	52.	On demand services	✓
45.	CSE certification	✓	53.	Self service options	✓
46.	Telephone response times	✓	54.	Customer Panel	✓
47.	Abandoned calls	✓	55.	Stakeholder workshops	✓
48.	Call taker availability	✓	56.	Stakeholder report	✓
49.	Providing restoration times	✓	57.	One day complaint resolution	✓
50.	Customer call backs - faults	✓	58.	Ombudsman complaints	✓
51.	Customer call backs - non faults	✓	59.	Power for Life	✓

### 2015/16 key:

- ✓ Achieved;
- ✓ On track, some areas to improve;
- Output under review
- ✗ Not met

## 2016/17 performance:



- Complaints resolved in one day: 84% (target = 70%)
- Telephony:
  - Answered 1.06m calls in an average of 1.58secs
  - Made 374,953 proactive fault calls including 115,747 to vulnerable customers
  - Sent 658,107 proactive text messages

# Social obligations

## 2015/16 performance:

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

## 2016/17 performance:

- 575,752 Priority Service Register (PSR) customers contacted to update their records (95% of annual target)
- Power Up schemes supported 7,205 fuel poor customers - delivered £1.4m annual savings
- Extended Affordable Warmth schemes saved 3,528 customers £1m annually
- £90k “Local Action Fund” support community schemes to deliver £580k annual savings to 1,043 customers
- Compliance with BSI Standard for ‘Inclusive Service Provision’ – 4<sup>th</sup> consecutive year

### 2015/16 key:

- ✓ Achieved;
- ✓ On track, some areas to improve;
- Output under review
- ✗ Not met



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# Ofgem Stakeholder Engagement and Consumer Vulnerability (SECV) Incentive

# Stakeholder Engagement and Consumer Vulnerability (SECV) Incentive – 2016/17

- Three ten page documents made up the submission
  - Part 1 - Demonstrates minimum requirements & details our strategies
  - Part 2 - Stakeholder engagement outcomes
  - Part 3 - Consumer vulnerability outcomes



# Timeline of the process

- Submitted for **Friday 28 April**
- Ofgem **assessed the Part One** submission and confirmed WPD meet their minimum requirements
- The Consumer Vulnerability section was **audited by Ofgem-appointed consultants** on 6<sup>th</sup> June 2017
- Submissions will be reviewed by the Panel against set assessment criteria
- DNOs invited to 20 minute Q&A session with the Panel on **26 July 2017**

# Part 1 – ‘Strategy & minimum requirements’ details....

- Our strategies for ‘engagement’ and ‘social obligations’
- Evidence of the range of engagement mechanisms we use
- The 149 key outputs engagement led to in 2016/17
- Independent evaluation and accreditation
  - BSI standard on inclusive service for vulnerable customers (e.g. held for 4<sup>th</sup> consecutive year)
  - Customer Service Excellence (highest compliance in the UK)
- Evidence of our culture: Senior management buy in and local delivery
- Survey results which measure the impact of our engagement

# Part 2 – ‘Stakeholder engagement outcomes’ details....

- Our core engagement mechanisms
  - E.g. Customer Panel & annual workshops
- Cost benefit analysis
  - Willingness to Pay research to evidence that the actions we take (often qualitative) are valued by customers
- Government engagement
- Industry collaboration
- Key actions to address long-term strategic priorities
  - Future networks - becoming a DSO
  - Resilience - keeping the lights on

## Key outputs we've delivered:



DNO to submit stakeholder-approved smart meter privacy plan to Ofgem

**2GW\***

NETWORK CAPACITY unlocked and low carbon future energy scenarios developed



\*since 2013

**39**



actions taken after annual workshops with **270** stakeholders



**INCREASE** in PSR sign-ups following WPD parliamentary event



**1.03m**

**PROACTIVE CONTACTS** to customers in power cuts



**8.91/10**

**HIGHEST OVERALL CUSTOMER SATISFACTION FOR 6TH YEAR IN ROW**

# Part 3 – ‘Consumer vulnerability outcomes’ details....

- Our key projects and outcomes achieved, to deliver against our four strategic objectives:
  1. Improve our understanding of vulnerability
  2. Improve the quality of data on the PSR
  3. Provide tailored support during power cuts
  4. Address fuel poverty

## Key outputs we've delivered:



**691,499**

**PSR**  
**CUSTOMERS**  
proactively  
contacted to  
update their  
details



HIGHEST  
EVER PSR  
SATISFACTION  
OF

**9.13/10**



**11,766**

fuel poor  
customers  
supported



**£3m**

annual  
savings for  
customers

**4,700**

field staff  
training in  
vulnerability



**£90k**

fuel poverty  
innovation fund  
created

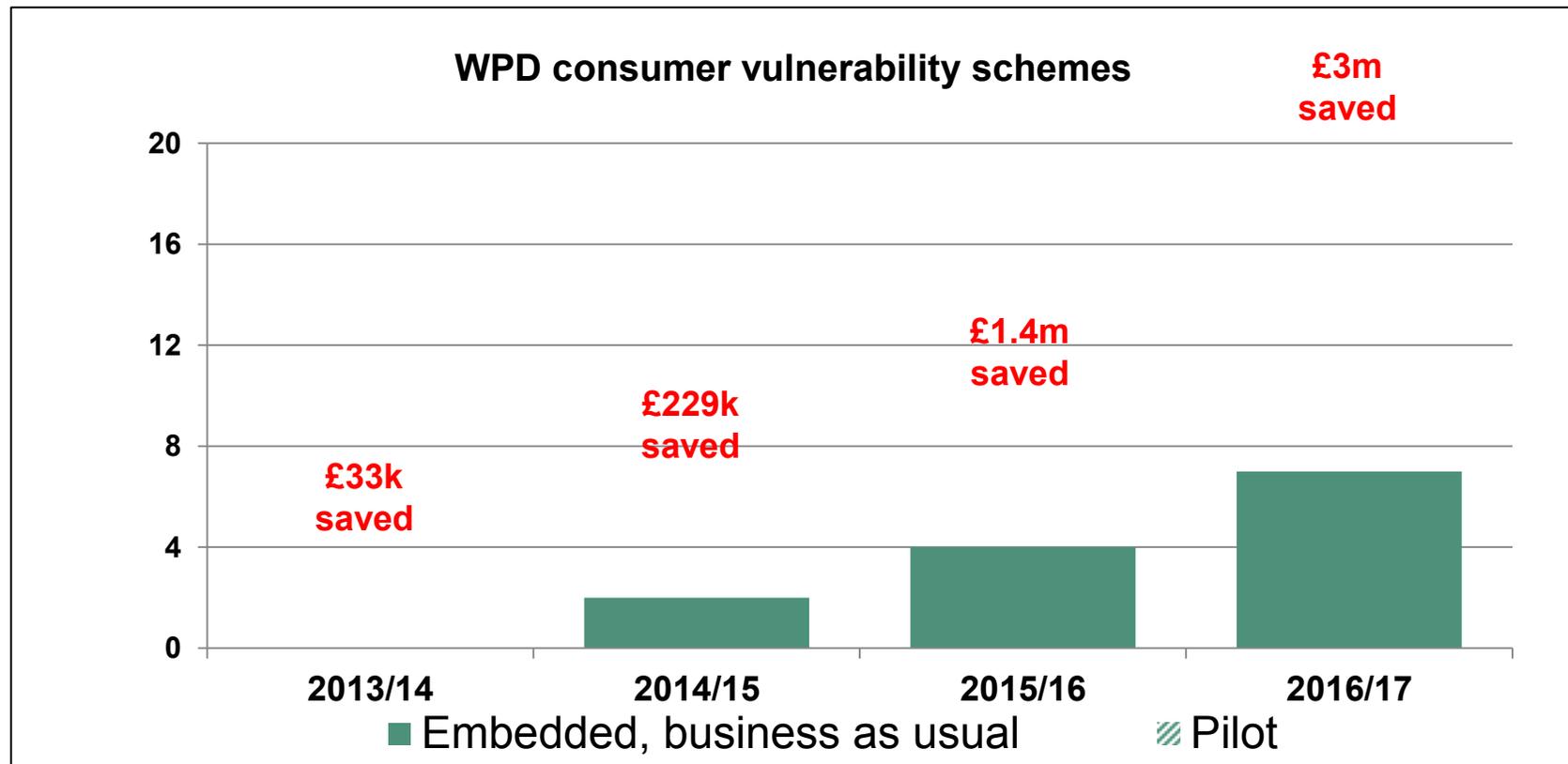


SAVING  
CUSTOMERS

**£581k**

# WPD's approach

- Several companies focus on one-off projects that don't deliver long-term benefits
- WPD focus heavily on embedding successful delivery into business as usual as quickly as possible (e.g. our PSR data cleansing)
- But at the same time continuing to pilot new, innovative ideas



# Social Obligations - key actions:

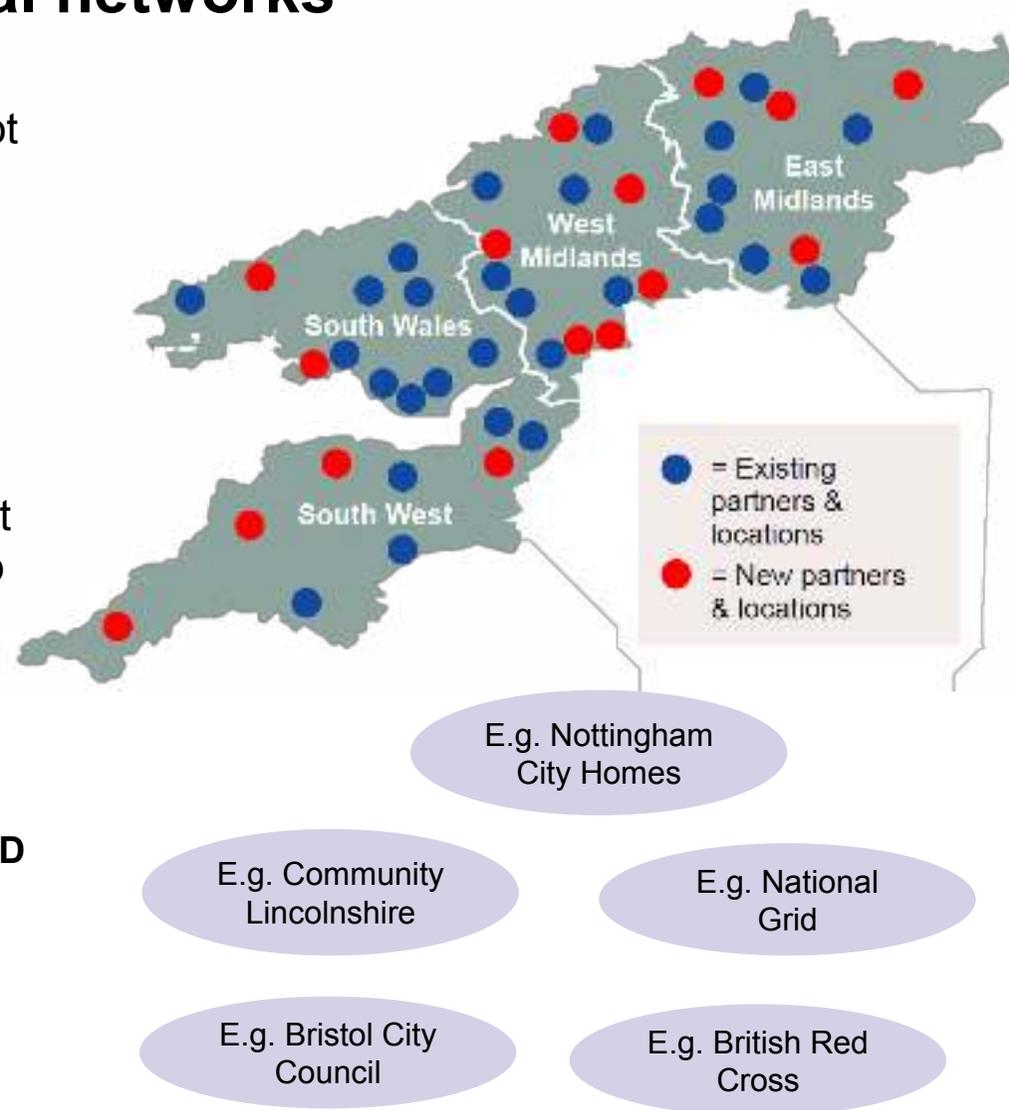
## Field Staff training

- All 4,700 field staff have now been trained to support customers who could be vulnerable in a power cut
- Field staff are now equipped to
  - Add customers to the Priority Service Register
  - Arrange for the British Red Cross to provide practical/welfare support during incidents
  - Distribute crisis packs to vulnerable customers
- During December alone the British Red Cross were utilised four times
- In 2016/17 the Red cross were called out 23 times (increased from 7 in 2015/16)



# Social Obligations - key actions: PSR referral networks

- Purpose is to identify vulnerable customers not already known to WPD
- We work with a wide range of agencies who deal with 'hard-to-reach' customers via their front-line services
- Don't just 'signpost' customers to the PSR, but gain informed consent to directly sign them up
- Formal processes in place with 34 organisations, in 44 locations, to:
  - **Give resilience advice about power cuts**
  - **Sign customers up to the PSR using the WPD online form or freepost leaflets**
  - **Hand out crisis packs**



# Social Obligations - key actions:

## Fuel poverty schemes

- 3 approaches, 14 projects, £3million saved for fuel poor customers

### Approach 1: 'Power Up!' schemes

Purpose	How it works	Number	Lead partners	2016/17 performance
Support vulnerable customers already known to WPD (PSR) who are also in fuel poverty	<ul style="list-style-type: none"> <li>During our PSR data cleanse some customers give 'warning signs' of living in cold homes or struggling to afford their bills</li> <li>WPD have created schemes to handle these referrals</li> <li>Offer support in 6 areas:               <ol style="list-style-type: none"> <li>Income maximisation</li> <li>Tariff switching</li> <li>Energy efficiency schemes</li> <li>Boiler replacements</li> <li>Behaviour change (e.g. how to operate heating system)</li> <li>Health referrals</li> </ol> </li> </ul>	4 <ul style="list-style-type: none"> <li>E. Mids</li> <li>W. Mids</li> <li>S. Wales</li> <li>S. West</li> </ul>	<ul style="list-style-type: none"> <li>Northamptonshire Citizens advice</li> <li>Coventry Citizens Advice</li> <li>Energy Saving Trust</li> <li>Centre for Sustainable Energy</li> </ul>	<p><b>7,205 customers supported</b></p> <p><b>£1.4 million saved a year</b></p>  <p>The infographic consists of two overlapping circles. The left circle is light blue and contains the text '£64 Average referral cost'. The right circle is a darker blue and contains the text '£197 Average saving'.</p>

# Social Obligations - key actions:

## Fuel poverty schemes

### Approach 2: 'Affordable Warmth' schemes

Purpose	How it works	Number	Lead partners	2016/17 performance
Support vulnerable customers <u>not</u> known to WPD	<ul style="list-style-type: none"> <li>▪ Fund existing fuel poverty community-based organisations</li> <li>▪ Extend their support and ask them to identify the customers themselves</li> <li>▪ Refer customers back to WPD's PSR</li> </ul>	4 <ul style="list-style-type: none"> <li>– E. Mids</li> <li>– W. Mids</li> <li>– S. Wales</li> <li>– S. West</li> </ul>	<ul style="list-style-type: none"> <li>▪ Nottingham energy Partnership</li> <li>▪ Warm Zones</li> <li>▪ Severn Wye Energy Agency</li> <li>▪ Plymouth Energy Community</li> </ul>	<b>3,528 customers supported</b>  <b>£1 million saved a year</b>  <b>1,863 added to the PSR</b>

### Approach 3: £90k innovation fund

Purpose	How it works	Number	Lead partners	2016/17 performance
Develop new approach to identify & support fuel poor & vulnerable customers	<ul style="list-style-type: none"> <li>▪ Open to not-for-profit organisations</li> <li>▪ Successful schemes must:               <ol style="list-style-type: none"> <li>1. Help reduce bills.</li> <li>2. Deliver energy efficiency</li> <li>3. Tackle link between cold homes and poor health.</li> <li>4. Identify new PSR customers</li> </ol> </li> </ul>	5	<ul style="list-style-type: none"> <li>▪ Northamptonshire Citizens advice</li> <li>▪ Cornwall Rural Community</li> <li>▪ Derbyshire Council Healthy Homes</li> <li>▪ Birmingham Disability Centre</li> <li>▪ Wellington Homes</li> </ul>	<b>1,043 customers supported</b>  <b>£580 saved a year</b>

# Summary

## Performance

- We are on track to meet all our Business Plan targets
- Success in ED1 will secure our long term future:
  - The best network performance
  - The best customer service
  - Being efficient
  - Being adaptable

## Stakeholder engagement & consumer vulnerability

- Engagement leads to action – no talking shops
- In 2016/17 engagement has led to 149 measurable outcomes and improvements
- Our social obligations programme is delivering huge benefits – 11,776 customers, saved £3m
- We are taking action to improve the quality of data on our PSR
- Our 4,700 field staff have a key role to play
  
- There is more to do - what do you think of our programme?  
- what should our priorities be for 2017/18?

# QUESTIONS ?

Anything else you would like to discuss?

e.g.

- The election/energy policy
- DSO transition
- Network security (cyber attack/terrorism)



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# **Actions from the last meeting (March 2017)**

Nicki Johnson

Stakeholder Engagement Officer

# Actions from March 2017 Customer Panel

Action	Update
1. Panel requested info on number of customers connected in three minutes and other relevant timescales during storm Doris	✓ Response sent with agenda
2. WPD to confirm how government departments collaborate cross-sector	✓ Response sent with agenda
3. Each meeting to include a section on previous actions and pre-meeting factored in as required	✓ On the agenda
4. Next agenda to include performance update and research	✓ On the agenda
5. Panel leader to canvass views for agenda items/views before or when agenda circulated	✓ Done
6. Three weeks prior to meeting, sight of a draft agenda/mention of previous actions would be useful	✓ Done
7. Panel review WPD proposed actions as a response to workshop feedback.	✓ Comments received Outputs endorsed/published
8. Panel endorsed recommendations for changes to the SME booklet.	✓ Changes actioned
9. WPD to consider an electronic version (web/App) so users could store numbers/emails and save/share a version locally	✓ A web version is live
10. NJ to send out a draft of the referrals guidance booklet for views	✓ Version two discussed today



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## Research update

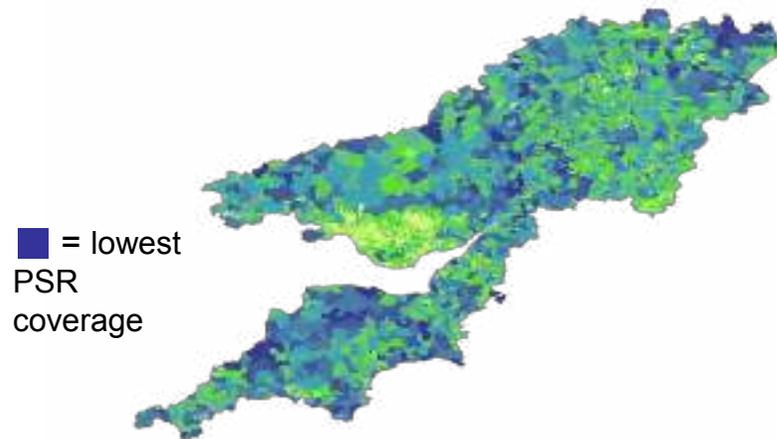
# Who's on our Wires

Alex Wilkes

Stakeholder Engagement Manager

# Who's on our Wires – What is it?

- Detailed social indicator mapping using 41 different data sets, including
  - Government statistics on benefit claims and long term disability data
  - Health data
  - Socio-demographic datasets
- Identifies areas with highest concentrations of vulnerability in the WPD area, using multiple definitions
- Used in conjunction with our 'Horizon Scan' of existing fuel poverty schemes & partnership opportunities
  - Identified 177 existing fuel poverty schemes & expert partners
- Now updated every two years following stakeholder feedback



# Who's on our Wires – What has been delivered?

- Four summary multiple indicator maps were produced
  - Priority Service Register eligibility
  - Fuel poverty
  - Network vulnerability, and
  - Low community resilience
- Full tabular data behind the maps
- 27 individual categories were analysed to produce the maps, including
  - *Unemployment, benefits, lone parents, rented dwellings, age thresholds, mental health benefits*
- We have now open sourced the information, inviting project proposals

# We use the data in four key ways

<b>Identify gaps in PSR coverage</b>	Inform choice of new partners for PSR
<b>Fuel poor households</b>	Target delivery of affordable warmth services
<b>Substation vulnerability score - new</b>	Aid network investment decision-making
<b>Community resilience - new</b>	Target WPD's new resilience guides to most vulnerable communities

## How we will use the data in 2017/18

- More granular targeting of existing schemes part of our partnership renewal conversions
- PSR referral networks
- Impact on Capital Expenditure  
E.g. worst served customers

## Who's on our Wires – Customer benefits

We can target our fuel poverty work to the area of greatest need, address the most prevalent issues and work with the most appropriate agencies

- Four 'Power Up' referral schemes to support fuel poor customers identified during WPD's PSR data cleanse. **7,205 customers saved £1.4m a year**
- Four 'Affordable Warmth' outreach schemes to identify and support fuel poor customers not known to WPD. **3,528 customers saved £1m a year**
- Five innovative pilot schemes funded via WPD's £90k fuel poverty local action fund. **1,043 customers saved £581k**

### New for 2017

- Substation vulnerability indicator
- Community resilience work
- Off gas grid fuel poverty collaboration with National Grid Gas in rural Derbyshire
- Smart meter trial in high deprivation, high power-cut area

# Questions

- Are our intended uses of the data correct for 2017/18?
- Should we more formally invite partnership opportunities to work with us to use this data?
  - Focus must be on outcomes
- Is there relevance to you/similar organisations?
- Are there additional research areas you want us to now consider?

## NEXT GENERATION NETWORKS

### DNO to DSO The Role of Flexibility

Roger Hey – 15 June 2017



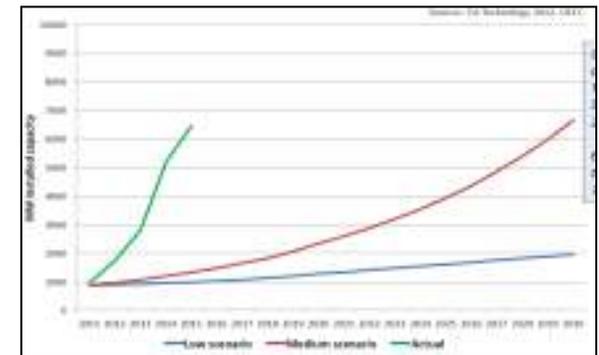
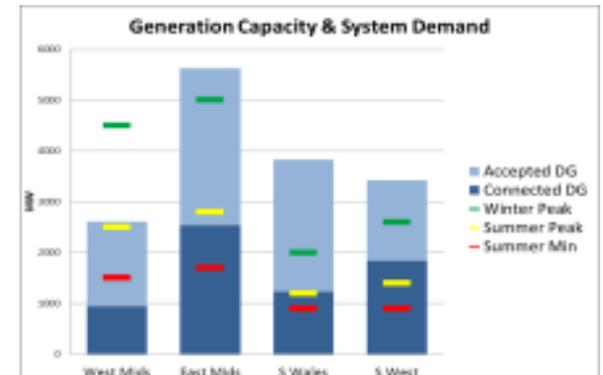
# Distribution System Operator (DSO)

- A Distribution Network Operator (DNO) provides a network sized to support times of maximum demand and/or generation output. It is sufficiently large to enable the GB Market to consider it having infinite capacity.
- A Distribution System Operator (DSO) exploits ICT to deliver a network that makes optimal use of capacity:
  - smarter network solutions (eg. DAR; ALT, Meshing, ANM, Intertrips)
  - Non-network solutions (eg. DSR, DG, Storage, Reactive Power Services)
- DSO roles will include:
  - Modelling, managing, contracting and dispatching power and energy flows
  - Brokering ancillary services
  - Local and regional network balancing and congestion management
  - Relationship with the GB SO: Coordinate operations and provide services
  - Become a platform for energy suppliers, communities and other market participants to have visibility of network congestion in order to facilitate optimal DG and DSR solutions

***Increased network visibility, advanced control systems and data analytics will allow the DSO to predict energy volumes and despatch flexibility services***

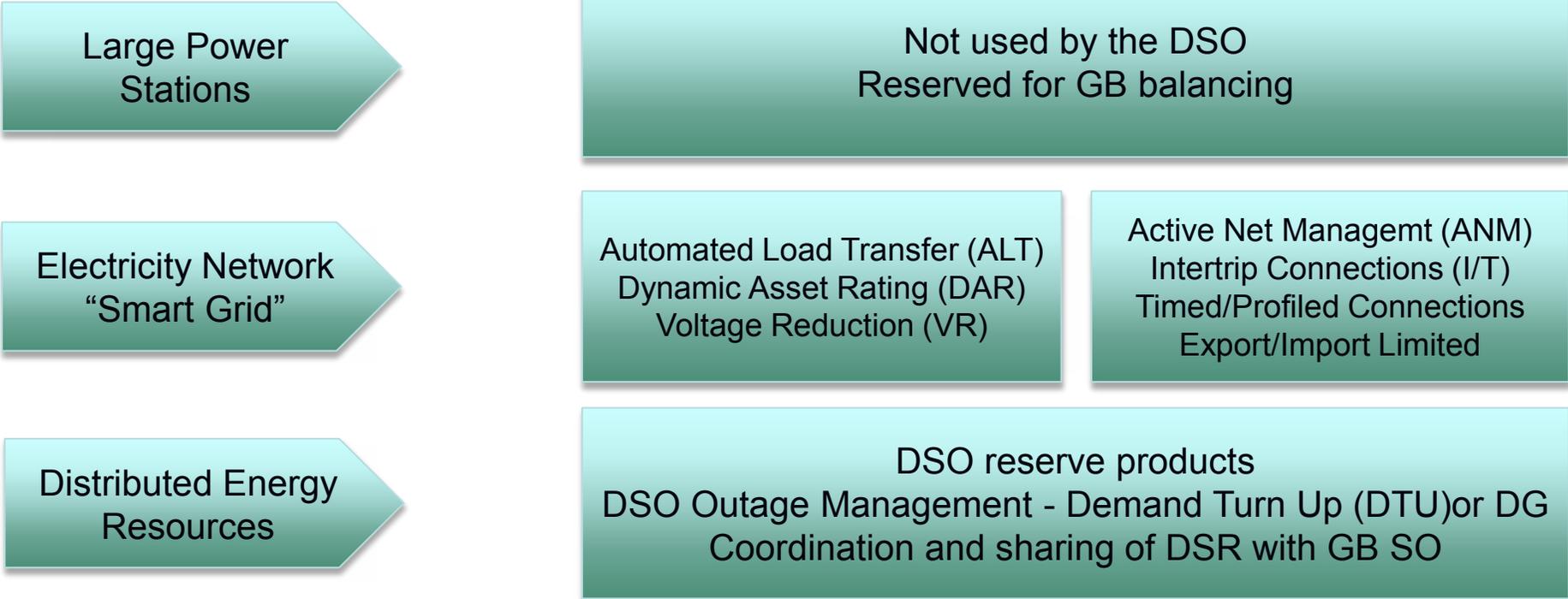
# DNO to DSO Drivers

- International and UK binding Climate targets – delivered through renewable DG, Low Carbon Heat and Transport
- Rapid changes in distributed generation and other Distributed Energy Resources (DER)
  - much more DG (14GW Winter Peak; 20GW DG, 12% of Energy)
  - Behind the meter impact is unknown; volatile market/incentives
  - 8GW of Energy Storage applications
  - Growing ancillary services market - DSR at a national level
- Consideration of whole system optimisation
  - Centralised Generation, Gas, Heat and transport fuels
- ICT revolution and ubiquitous telecommunications
- Significant uncertainty over the pace of change
  - Electrification of Transport and Heating
  - Risk of stranded assets
  - Long lead times and planning restrictions to build conventional



# DSO Flexibility Services

Electricity System Flexibility can come from three sources:



# DSO Flexibility Services

Electricity System Flexibility can come from three sources:

Large Power Stations

Not used by the DSO  
Reserved for GB balancing

Electricity Network  
"Smart Grid"

Automated Load Transfer (ALT)  
Dynamic Asset Rating (DAR)  
Voltage Reduction (VR)

Active Net Management (ANM)  
Intertrip Connections (I/T)  
Timed/Profiled Connections  
Export/Import Limited

Distributed Energy  
Resources

DSO reserve products  
DSO Outage Management - Demand Turn Up (DTU) or DG  
Coordination and sharing of DSR with GB SO  
Development of constraint visibility platforms

DSO

# DSO Flexibility Services (Smart Grid)

DSO Flexibility from the Electricity Network and Connections:

## Electricity Network "Smart Grid"

- We are technology agnostic.
- Security and resilience are critical.
- High availability and fail-safe
- Alternative connections are customer led
- Rollout is prioritised by need.
- Plan to exploit Smart Meter data
- Our Future Networks Programme is delivering insight and will allow for a rapid rollout to BAU.

Automated Load Transfer (ALT)  
Dynamic Asset Rating (DAR)  
Voltage Reduction (VR)  
Power Electronic Equipment

Active Net Management (ANM)  
Intertrip Connections (I/T)  
Timed/Profiled Connections  
Export/Import Limited

Network  
Automation

New equipment

Demand  
Customers

Distributed  
Generators

Storage  
Operators

FALCON  
Isle of Scilly  
LV Templates  
Smart Hooky

FlexDGrid  
Equilibrium  
D-SVC  
FACTS (LLCH)

Low Carbon Hub Connect & Manage Electric Nation FREEDOM Early Learning	PV in Suburbia SoLa BRISTOL Sunshine Tariff Virtual Private Wire FlexDGrid
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# DSO Flexibility Services (DSR)

DSO Flexibility from Distributed Energy Resources:

## Distributed Energy Resources

- We are technology agnostic.
- DSO flexibility products have different technical requirements to the GB SO.
- DSR is a market provided service.
- Products designed to secure supplies at the lowest possible *whole system* cost.
- Our Future Networks Programme is delivering insight and will allow for a rapid rollout to BAU.



Reserve product – “Flexible Power”  
Outage Management - Demand Turn Up (DTU)  
Coordination and sharing of DSR with GB SO  
Development of constraint visibility platforms

Distributed  
Generation

Demand Turn  
Down

Demand Turn  
Up

Storage

FALCON  
Entire

FALCON  
Entire

SYNC

Solar Storage  
FALCON  
I&C Storage  
Connect&Manage  
SoLa BRISTOL

# New responsibilities of a DSO

As WPD moves from being a Distribution Network Operator to a Distribution System Operator, it will carry out its existing functions and take on some new ones so as to:

- develop and maintain an efficient, co-ordinated and economical system of electricity distribution;
- to facilitate competition in electricity supply, electricity generation and flexibility services;
- improve the resilience and security of the electricity system at a local level;
- facilitate neutral markets for more efficient whole system outcomes;
- drive competition and efficiency across all aspects of the system; and
- promote innovation, flexibility and non-network solutions.

# A DSO four-point plan

**Expand the existing roll out and application of smart network solutions to the higher voltage networks**, prioritising areas which are the most likely to benefit. From this we will optimise investment decisions, deliver greater network flexibility and maximise customer connection choice (flexible connections for demand, generation and storage).

**Contract with customers and aggregators for non network solutions.** Co-ordinate with other parts of the industry by helping to establish visibility platforms for suppliers, aggregators and customers. This will include the requirement to raise the awareness of DSR and to help customers to value stack where appropriate.

**Co-ordinate with SO** at the T/D interface. Share data and forecasts in multiple time horizons. Maintain overall system security. Consider whole system issues and propose solutions. Secure additional flexibility through prosumer awareness – actively support Power Responsive. No exclusivity in DSO flexibility contracts.

**Protect the integrity and safety of lower voltage networks.** We will maximise the use of smart meter data, apply additional network sensing where relevant and implement simple control schemes. We aim to develop wider flexibility for the use of import/export capping as an alternative to conventional solutions only reinforcing the networks when these solutions cannot deliver what is required.



## Future Networks Programme

### Assets

- Telemetry
- Decision support
- Improved assets
- New assets
- Flexibility
- Automation
- Incident response



### Customers

- New connections
- Upgrades
- Information
- Self Serve
- Products/Service
- Tariffs
- Communities



### Operations

- Reliability
- Forecasting
- DSO
- DSR
- GBSO Interface
- Efficiency
- SHE and Security



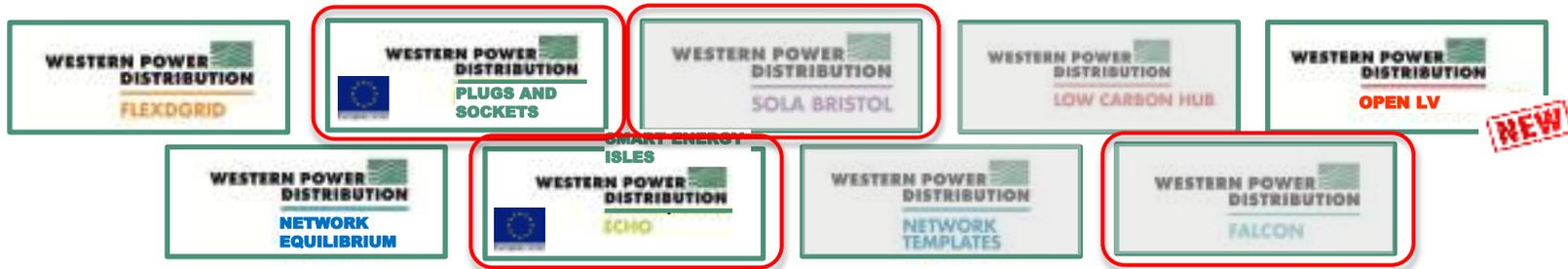
## Network and Customer Data

- Airborne Inspections
- AIRSTART1
- Telecoms Analysis
- Superconducting Cable
- SF6 Alternatives
- MVDC Test Lab
- Smart Energy Laboratory
- Statistical Ratings
- Primary Network Power Quality Analysis

- Hybrid Heat Pump Demonstration
- Hydrogen Heat & Fleet
- Carbon Tracing
- HV Voltage Control
- Solar Storage
- LV Connect and Manage
- Sunshine Tariff
- CarConnect
- Industrial & Commercial Storage

- DSO/SO Shared Services
- Project SYNC
- Project ENTIRE
- Smart Meter data for Network Operations
- Distribution Operability Framework
- Times Series Data Quality
- Voltage Reduction Analysis
- LV Connectivity
- Smart Systems and Heat2

Note: 1 – Funded by Aerospace Technology Institution; Note 2 – Funded by the Energy Systems Catapult



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# Project Entire



- A combination of funding from Innovation, RIIO-ED1 settlement and customer connections.
- Builds on the learning of previous projects which allowed shared SO/DSO access to flexibility.
- Facilitates a competitive market for flexibility at the lowest possible cost. Whilst ensuring full coordination of SO and DSO requirements.
- Establishes principles for coordination of prosumer DSR with Electricity Network flexibility.
- Allows prosumers to revenue stack across multiple streams.
- Attempts to access prosumer segments currently not active in GB SO programmes.

Five Constraint Managed Zones (CMZs) identified for trial (M40 growth corridor – all demand peaking)

Zone	Conventional Solution	Flexible Power Requirement
Warwick-Harbury	New 132kV circuit	20MW (long term)
Berkswell	New super-grid transformer	20-60MW (medium term)
Brackley; Banbury	New 132kV circuit	20MW (long term)
Rugby Daventry Pailton Whitley	New BSP (132kV/33kV s/stn)	5-20MW (medium term)
Milton Keynes	New BSP (132kV/33kV s/stn)	10-30MW (medium term)

THANKS FOR LISTENING

**WESTERN POWER**   
**DISTRIBUTION**

*Serving the Midlands, South West and Wales*

Roger Hey  
**Western Power Distribution**  
Future Networks Manager

[wpdinnovation@westernpower.co.uk](mailto:wpdinnovation@westernpower.co.uk)

[www.westernpowerinnovation.co.uk](http://www.westernpowerinnovation.co.uk)



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# Engagement plan for local network investment map

Julie Richmond  
Graduate Trainee

# Motivation

- WPD is spending £7.1 billion on network investment during RIIO-ED1 period
- Stakeholders would like to see more local engagement
- Currently lacking in any investment information past major projects

# WPD Website

- Currently no display of investment on network
- Occasional articles in “News” section
- Only information on selected projects – difficult to find projects in certain area
- Small section with outdated generic investment information
- Projects in LTDS only available upon request and high level knowledge required



The screenshot shows the Western Power Distribution website. The header includes an Accessibility icon, a search bar, and social media icons for Twitter, Facebook, and YouTube. The main navigation menu contains links for Home, Power cuts, Connections, Services, About us, Safety & incidents, Contact us, Careers, and Innovation. The 'About us' section is expanded, showing links for Our business, Use of System charges, News, News archive, Video library, Finance, Shareholder information, Priority services, Innovation & low carbon, Useful information for the public, and Useful information for suppliers and major users.

### South Wales steelworks sees improvements

15/02/2017

A £1.7 million project to maintain and upgrade the 132kV power network supplying a major South Wales steelworks site, is underway.

The first stage of the new initiative, which supplies Newport's Tata Steel Orb Works site, involves the upgrading of high voltage transformers and the removal of switchgear at Newport South grid substation.



*WPD Project Engineer Jack Lawthorn with a manager of the project in front of Newport South Grid Substation following the installation of a new high voltage transformer.*

"The project is part of WPD's ongoing asset replacement programme – work that will further safeguard electricity supplies for customers for years to come," said WPD Project Engineer Jack Lawthorn, who is managing the scheme.

The grid substation supplies electricity to over 9,000 customers locally. Its upgrading is part of our commitment to invest over £7 billion on the electricity network between now and 2023.



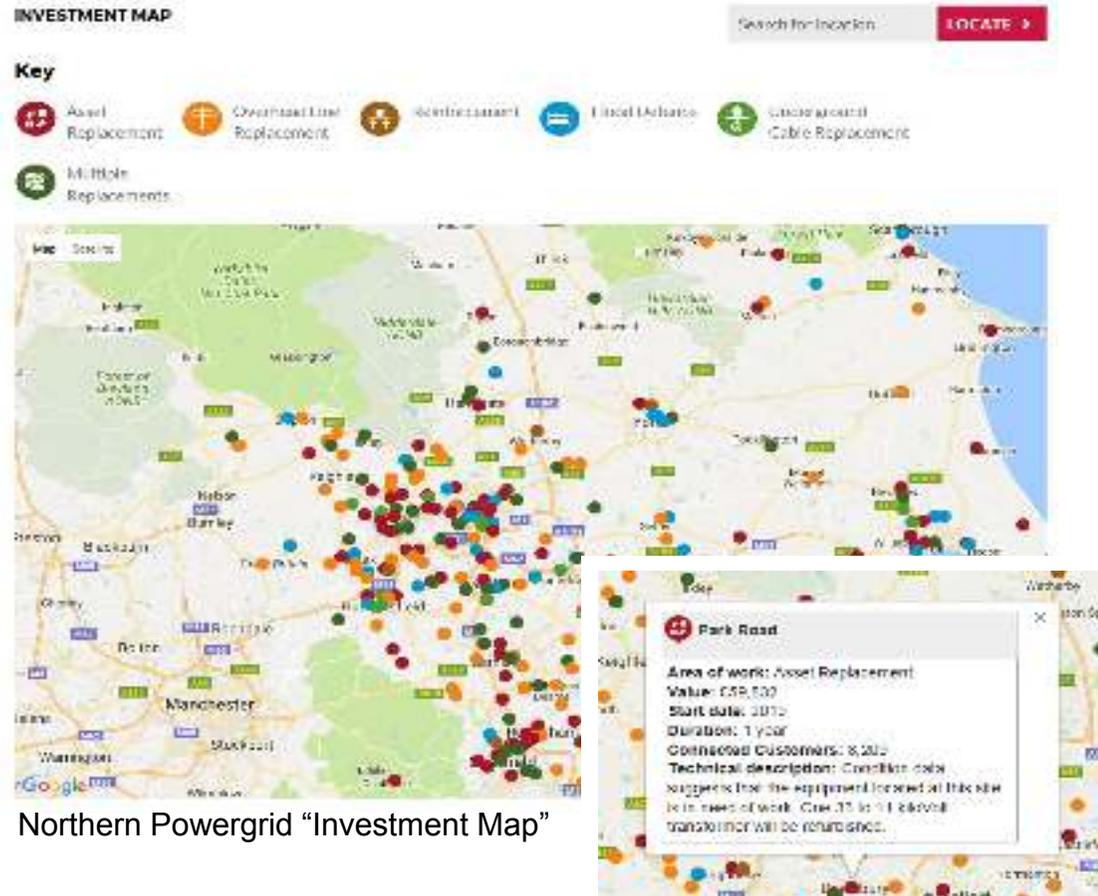
**Contact us**

Emergency information  
0800 6783 105

General contact enquiries  
0800 096 3080

# Other DNO Engagement

- More project detail on websites
  - Dedicated “projects” websites
- Bespoke events regarding engagement
  - Specific projects/areas
- Various levels of investment maps



## Purpose of scheme

- Raise WPD's profile locally and build relationships with key stakeholders (e.g. MPs, Local Authorities etc)
- Explain the impact of network investment on local network services
- Lay the groundworks for closer coordination with local authorities, developers etc
- Explain how we are building networks for the future (smart networks and ensuring sufficient capacity)
- Provide DMs with a broad overview of works in their area

# Potential Outputs

- Local area brochure
  - Details to follow
- Interactive online map
  - Easy to navigate to from main website
  - Simple colour coding
  - Relevant project info
  - Filters
  - Brief technical description
  - Possible link to news articles/more detailed info
  - Possibility to update or add historic data
- Local engagement events
  - Ran by Distribution Managers in local depots



# PROGRESS

# Data Gathering

- Decided range of information to be included
- Meeting with North Lincolnshire and Derby DMs
  - Agreed to support project
  - Discussed their views on what should be included
- Liaised with local depot staff
  - Return of standardised spreadsheet
- Discussed inclusion with Future Networks and Primary System Design

# Data Requirements

- For each included project, the following information is required:
  - Project title
  - Category (asset replacement, flood defence, cable undergrounding etc...)
  - Location
  - Total expenditure
  - Start date
  - Duration
  - Number of customers affected
  - Brief project description
  - Benefits to customers

Ⓜ **Asterby, Witchole Cottage**  
**Total Spend:** £5,500  
**Start Quarter:** Q3 2017  
**Customers Affected:** 3  
**Duration:** 12 weeks

**Details:** Due to the increase in load locally, a pole transformer will be upgraded to increase network capacity.

**Customer Benefits:** This will allow more customers to connect to the network in the area.



- Is there anything missing from the list?

# DM Meetings

- Both North Lincolnshire and Derby DMs positive about project and saw positive outputs/customer benefits
- Outputs to include normal business figures
  - Key network performance stats, e.g.
    - Power cut frequency
    - Power cut duration
  - X number of substations maintained
  - X number of transformers tested
  - **Is this of value/interest to stakeholders?**
- Concern with striking balance between areas to reduce complaints

# Data collection from local depots

- Liaise with staff from local depots
  - Time spent contacting different people with no real results
- Originally asked for 10 projects over a range of different categories
  - Returned varying numbers of projects and data consistency
- Required back-and-forth conversation to get the right data

## Booklet Draft

- Booklet drafted using received data
- Includes brief overview/intro to WPD investment
- 4/5 pages of local projects
- Inclusion of PSD projects and innovation



# Contents

## Front cover

Contact details

WPD investment

WPD introduction

Local team introduction

Project explanation

Map of projects

Local projects

Major projects

Innovation

Is there anything else that should be included?



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### WPD Investment

Our network covers densely populated residential areas and widely dispersed rural communities from the Wash in Lincolnshire down through South Wales and to Land's End and the Isles of Scilly in Cornwall. The diversity of our network can cause a variety of issues across the distribution area. This combined with the age of the network (the vast majority of our assets were built in 1950s) and recent environmental challenges means that we will need to invest more than ever to keep our network efficient and reliable in order to keep the lights on.



Our business plan outlines our investment commitments until 2023 and was submitted to our regulator, Office of Gas and Energy Markets (Ofgem), in 2015. WPD was the only DNO out of 6 in the UK to have their Business Plan 'fast-tracked'. This allowed us to maximise and secure our investment funding early. In 2015-2023 we have committed to investing £7.1 billion in our network while reducing charges to customers by an average of £12 (11%) per year. This results in a total investment of £2.13 billion in the East Midlands network.

Between 2015 and 2023, WPD are investing

**£XX million**

in North Lincolnshire.

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Local projects

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Is there anything else that should be included?

### Map & Stats

WPD are constantly carrying out works to maintain and improve our network yet, the large one-off projects that we commission by looking at the entire network tend to get reported more often. However, we believe that the smaller, local projects are just as important and therefore must be reported to the customers that are affected in the local area.

This brochure will detail a selection of the projects that are planned and being completed in 2017 and 2018 in the North Lincolnshire area.

The map below shows the locations of 2017 projects in North Lincolnshire. For information of works in the rest of the WPD area, please visit our website.



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## Projects in Lincolnshire

### Alford

**U** Belchford, Flint Hill Farm

Total Spend: £8,000

Customers Affected: 2

Start Quarter: **XX**

Duration: **XX**

**Details:** Approximately 100 meters of overhead line is being replaced with underground cables due to vertical clearance issues.

**Customer Benefits:** This will alleviate both the safety issues surrounding the clearances and the environmental issues.



**A** Bratoft Burgh Le Marsh

Total Spend: £115,500

Customers Affected: 180

Start Quarter: **XX**

Duration: **XX**

**Details:** Replacing 2 pole mounted transformers, switchgear, 10 poles, 0.8km underground LV cable and 1.2 km overhead line. This scheme has been raised and approved by WPD as condition based asset replacement.

1km of 11kV overhead line will also be dismantled and rebuilt at Bratoft, Burgh Le Marsh Heath Meadows. In addition we will install an 11kv interconnector for network security.

**Customer Benefits:** This project will improve the quality of supply to customers in the area due to improving the network assets and increasing the capacity.

**R** Horncastle

Total Spend: £1,550,000

Customers Affected: 663

Start Quarter: Q1 2017

Duration: **XX**

**Details:** This year-long project involves a large amount of 33kV reinforcement with the majority funded by WPD. Reinforcement in this case is driven by the increased load in the area.

**Customer Benefits:** Completion of this project, due Q2 2018, will increase the capacity and reliability of the 11kV (and LV) network.

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Major projects

## Innovation

Is there anything else that should be included?

### Innovation Projects in East Midlands

#### Electric Nation

Electric Nation is a trial project running throughout the WPD area, investigating the use of Electric Vehicles (EVs) and their impact on the electricity network. It will trial an innovative managed charging system allowing control over charging at peak times.



As the EV market increases in the UK, WPD are looking to:

- Understand the effects on the network of charging various vehicle and battery types
- Understand how vehicle usage affects charging behaviour
- Evaluate the reliability and acceptability to owners of EVs of demand control services and the influence these have on charging behaviour.

The project began in April 2016 and will run until October 2019. For more details please visit the website: [www.electriconation.org.uk](http://www.electriconation.org.uk)

#### ENTIRE/Flexible Power

Project ENTIRE focuses around the use of Demand Side Response (DSR) to help manage the network more efficiently. DSR involves customers adjusting their usage to help the network. Where cost effective, DSR can help defer or avoid reinforcement reducing costs for customers.

ENTIRE aims to address the conflicts between DNO requirements and those of other parties such as National Grid. To achieve this, WPD will develop new systems and contracts with commercial customers to provide benefit to the network under its Flexible Power brand. Customers will also be encouraged to seek alternative revenue sources when not required by WPD, either independently or through WPD's managed service. This focus on stacking revenues should increase the value for participants whilst reducing the cost to the wider customer. The project will run in the East Midlands along the M1- M40 corridor with an aimed completion of 2020. More details can be found at [www.flexiblepower.co.uk](http://www.flexiblepower.co.uk)



# Next Steps

1

- Finalise booklet content
- Confirm with DMs and Finance

2

- Rollout to all East Midlands DMs
- Company wide rollout

3

- Booklet professionally designed

4

- Begin interactive online map design
- Decide layout, design and interactivity

5

- MPs engagement event
- Local stakeholder engagement events



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# Social Obligations Session

**Customer Panel Meeting  
27 June 2017 – Nottingham**

# Agenda

- Referral networks brochure
- New project updates
  - Community Energy - Karen McCalman
  - Scouts project - Nicki Johnson



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# Referral networks - a new leaflet

**Nicki Johnson**

# Background

- Referral networks are working well but can be improved
- A Panel member asked for some guidance
- Purpose is two-fold
  - **Attract** Local Authority departments, charities, organisations and persuade them to join us as referral networks then send us PSR customer data for our register.
  - **Provide guidance** for new and current referral partners on what we need/expect and can provide
- Initial views were sought at the last meeting, comments taken into consideration
- Draft of the document circulated in May – well received
- Version two to be reviewed today

# Discussion – review and finalise leaflet



Help us to help others during a power cut

Help people to join our FREE Priority Service Register



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

Many organisations, local authorities and charities are in the homes and lives of customers who could find themselves vulnerable to a power cut. We want to help by registering them on our free, confidential register so we can give tailored support in the event of a power cut.

We are asking organisations to partner with us so we can reach more customers through their work.

**Who we are and what we do**

Western Power Distribution (WPD) is the electricity distribution network operator for the Midlands, South Wales and South West England.

We deliver electricity to over 7.8 million customers over a 55,500 square kilometre service area and are responsible for the network of underground cables, overhead lines and substations that distributes electricity to customers' homes and businesses every day.

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




**What is the Priority Service Register and who can register?**

Every network operator and supplier holds and maintains a Priority Service Register. This helps us to collect details about customers who may experience extra difficulty in a power cut. The service is FREE and CONFIDENTIAL, only shared between us and the customer's energy and water suppliers, so that we can offer free additional services to those who need it most.

Customer details are never used for marketing or shared with agencies other than those specified above and emergency responders in situations such as flooding.

- Medical needs
- Disability
- Communication needs
- Temporarily vulnerable

The customers who can benefit include:

- Anyone who relies on electricity for medical reasons (e.g. a customer on kidney dialysis);
- Anyone who may find an unexpected power cut particularly difficult to cope with or distressing (e.g. a person with a disability, or someone with dementia);
- Anyone who has a specific communication need when getting in touch with us (e.g. because they are blind or partially sighted, deaf or hearing impaired, or don't have English as their first language);
- People who may be temporarily vulnerable e.g. hospital leavers or parents with new-born babies.

# Community energy groups and vulnerable customers

- Working in partnership with Regen
- Produce 100 Information packs for community energy groups to share with vulnerable customers
  - Understanding smart energy/meters
  - Energy saving measures
- Two training/dissemination events
- Key output to encourage community energy groups to sign customers up to the Priority Service Register
- How might you use this?
- Is it worth replicating?
- Are there similar groups we could expand to?





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# Regen SW Scouts Project

**Nicki Johnson**

# Scouts and vulnerable customers

- There are 450,000 young people involved in the scouting association
- Trial in Exeter tapping into one scout group, linking a Community Energy group and an artist
- Develop resource packs and workshops for scouts and activities/challenges for the scout to undertake with their elderly friends/relatives
- For example – scouts could....
  - undertake activities to obtain badges
  - ask relatives about their first memories of electricity



# Scouts and vulnerable customers

- Outputs – potential roll out reaching scouts who can sign up their friends and relatives to the WPD PSR
- Make links between scouts and Community Energy groups
- Potential to roll out a badge which allows scouts to help vulnerable customers nation-wide

## Questions

- Which age groups should we target?
  - Beavers (aged 6-8)
  - Cubs (aged 8-11)
  - Scouts (aged 11-17)
- Is there anything else we should be doing?
  - E.g. including a safety message



# **WESTERN POWER** **DISTRIBUTION**

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**DSO Transition**

**– afternoon surgery session**

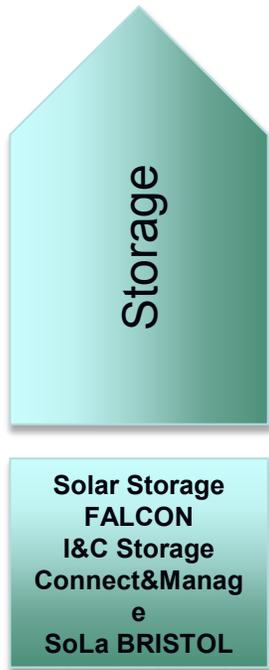
**Roger Hey**

# DSO Transition Plan

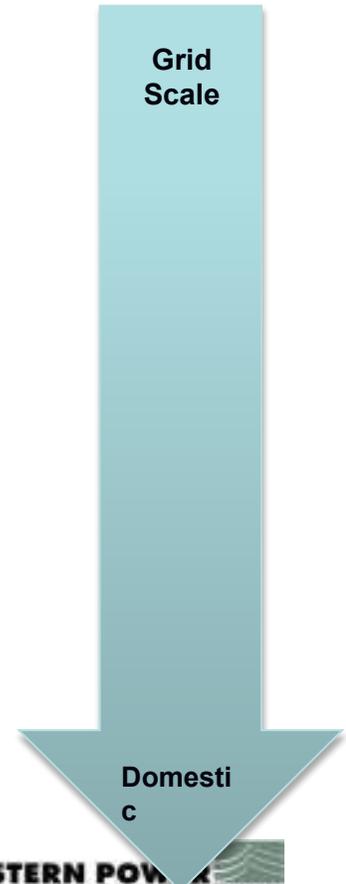
DSO Transition Programme				
Data Integrity	Market Integration	IT Systems	Customer Propositions	Equipment
Alignment of Data – Common Information Model	WPD regional energy scenarios	Power System Modelling	DSR products by customer segment	Telecommunications readiness
Energy and Utilisation Data – MWh not MW	WPD Operability Framework	Energy Management and Forecasting	DSM tariff structure	Transducers and measurement equipment
Network Connectivity	DSR Shared Service (link to GBSO)	Time Series Data Storage and Visualisation	Alternative Connection Agreements	Settlement and metering data for Network Operations
	Visibility Platform (link to aggregators / suppliers)	Asset Management Systems	Managed Connection Agreements	Managed Connection Interface Devices
	Network Charging Methodology	Settlement and Billing		Active Network Management Technology
Organisational Change / New Functions				

# Energy Storage – WPD Innovation Projects

## DSO Flexibility from Energy Storage



- **Solar Storage**
  - Co-location with Solar DG.
  - Testing revenue stacking conflicts and optimisation
- **FALCON**
  - Assessment of DSO owned storage
  - Technical and Commercial insight
- **I&C Storage**
  - Co-location with larger demand customers
  - Connection design options and DSR services
- **SoLa BRISTOL**
  - In-home storage plus PV. DC networks. Community microgrid optimisation.
- **Connect and Manage**
  - Integration of domestic storage (connection options)
  - DSR revenue stacking and smart grid integration



# WPD CUSTOMER PANEL



Last revised : 29.06.17

## Meeting Minutes

Notes by: Nicki Johnson

<b>Date</b>	Tuesday 27 June 2017	
<b>Time</b>	10.00-15.00	
<b>Venue</b>	WPD Nottingham Office	
<b>Attendees</b>	CA - Craig Anderson, Warm Wales MA - Mari Arthur, Sustain Wales HC - Hugh Conway, Major Energy Users Council HE - Helen Ewing, Severn Trent Water SG - Sean Gauton, University of Nottingham JG - Jo Giles, National Grid PM - Pauline Mahon, Vulnerable customer representative KM - Dr Kerry Mashford, National Energy Foundation DM - Duncan McCombie, Yes Energy MR - Michael Rowe, IET ASp - Alex Spreadbury, B&Q JS - Jim Spriggs, British Red Cross CT - Cathy Tibbles, Leicester Parish Council DW - Debbie Wright, British Gas <b>Visitors</b> Sarah Clark and Anne Scutt-Webber, Affinity Water	<b>WPD</b> RS - Robert Symons, Chief Executive AW - Alex Wilkes, Stakeholder Engagement Manager RH - Roger Hey, Innovation Manager KMc - Karen McCalman, Social Obligations Officer NJ - Nicki Johnson, Stakeholder Engagement Officer JR – Julie Richmond (part) Graduate Trainee
<b>Apologies</b>	<i>Brian Davies (Neighbourhood Watch), Dr Ben Bedwell (University of Nottingham), Charlie Cox (University Hospital of N. Staffs), Allen Creedy, (Federation of Small Businesses), Ian King (Warwickshire Police), Glyn Lambley (Interserve, University Hospital of Leics), Helen Lines (RVS), Ron Loveland, (Welsh Assembly), Wally North (Forestry Commission), Daksha Piparia (Citizen’s Advice), Nikki Roberts (South West Water), Ben Rhodes (Devon &amp; Cornwall Business Council), Julie Smith (Action on Hearing Loss), Bob Weaver (PowerCon UK), Morgan Wild, (Citizen’s Advice), Simon Wright (formerly EST)</i>	

## 1. Alex Wilkes (AW) – Welcome

## 2. Robert Symons (RS) – Performance Update

Robert updated the group on the business plan outputs and performance against them in 2016/17.

HC asked if WPD visits schools and RS confirmed we do and specialised staff are trained to highlight dangers so children know not to enter substations, etc. DM asked how we compare to other DNOs and RS confirmed we have a social responsibility and a business responsibility to protect equipment and children but we couldn’t say how many other DNOs do school visits.

### Reliability

With respect to Target 60, HC asked if we have LV figures and RS explained we don’t but restoration naturally takes longer as we don’t have the flexibility of rerouting the power as easily.

### Connections

HC asked if the survey results (see slides) have something to do with reinforcing ahead of demand and RS said various factors impact them. HC mentioned a public meeting where Ofgem said you should not build ahead of need. Another DNO said they would have built a larger network, put more assets than required

in into a particular project and wasted customer's money had they built ahead of need. RS mentioned that developers, in the event that networks are constrained, might plan connections to meet capacity.

#### Customer Service

DM said one day is good for dealing with complaints but asked if it would be better to resolve them in one contact (one day could still be lots of calls). RS explained it is unlikely to be multiple calls and staff are empowered to resolve complaints immediately and visit the customer where needed. HC asked if enquiries are logged as complaints and RS explained they are not as we have guidance on what constitutes a complaint (i.e. if a customer expresses dissatisfaction).

RS covered proactive calling for vulnerable customers and PM mentioned vulnerable customers can have a visit from the British Red Cross if needed.

#### Social Obligations

CA asked about affordable warmth, wondering what WPD'S ambition is and how many schemes WPD wants to engage with. RS explained we are willing to partner with more organisations if they can provide outputs. AW mentioned we are close to reaching the outputs and investment specified in the Business Plan. We could do more, but we need to return to stakeholders to find out how far we go.

KM felt, if we have only so much capacity in delivery, helping customers to manage their use can improve the strain on the network at the same time as targeting affordable warmth. RS said managing customer use may only make a small difference and would not remove the need for reinforcement. AW mentioned we are trying to integrate some of the impact of behaviours on energy use into our innovation projects. For example, our open LV project is working with community groups to look at a range of techniques which may defer the need for reinforcement.

#### Safety

SG asked about safety performance. He noted individual incidents get thoroughly investigated and asked if, over the last four years, WPD has reflected more widely on all accidents. RS talked about the increased safety and behaviour message for ALL staff in recent years. We have a continuous programme of training, site visits, & independent audits. Furthermore, safety is always included in the annual staff roadshows – at the beginning to ensure all employees realise how important it is. WPD has worked hard on behaviour to highlight any gaps in the safety plan, including a safety roadshow and actor-led workshops. RS noted we mustn't ignore safety and it is vital people don't assume they are safe because we have added so many layers to safety. HC asked if we hold a record of 'near misses' and RS confirmed we do.

### **3. Robert Symons (RS) – Stakeholder Engagement and Consumer Vulnerability Incentive**

CA made a reference to resilience, saying following the Grenfell fire there was a lack of post emergency resilience response. He asked if there was to be a new metric for how organisations pool resilience - what would it be? RS said there are mechanisms for us to coordinate activity such as in the flooding – regular meetings with police, fire services, Local Resilience Forums, etc. Supplies would have been immediately disconnected at Grenfell – liaison is good and we can react very quickly. CA felt there will be a metric on whether resilience forums are doing enough. AW confirmed if there are metrics to come out of the enquiry we will be involved as we attend the Energy Emergencies Executive meeting and are liaising with police, LRFs, etc.

HC has asked for information about black start – RS explained this is when the whole network is out and restored in sections.

**ACTION – 1. Black Start to be covered on the next agenda**

MR has been talking to organisations about WPD and noted some organisations still don't know about our Priority Services Register. He felt the Clinical Commissioning Group could be instrumental in sharing information for hospital leavers, for example. CA said NEA have published a carbon monoxide report and noted that only 1 in 7 who should be registered are on the PSR in some areas.

**ACTION- 2 – CA to circulate the NEA report.**

AW explained we are looking to find schemes in relevant regions where data shows it is needed. There are challenges to this – engaging with one local group doesn't always mean the message will pass through the whole organisation. We often need to engage individually in each area.

#### **4. Nicki Johnson (NJ) – a review of March Actions**

NJ took the group through the actions of the March meeting and progress that has been made on the interactive SME brochure (now online) and the forthcoming referral brochure.

#### **5. Alex Wilkes (AW) – Who's on our Wires?**

AW gave the group an update on WPD's Who's on our Wires research.

SG asked about the granularity of the data and AW confirmed data goes down to LSOA (Lower Layer Super Output Areas) level (cut down by voting ward) and down to substation level for us.

KM mentioned that EPC data on properties is now freely available. KMc confirmed some was included in the data sets. AW noted we have the capacity to drill down into the data but can only do that in partnership with relevant agencies. DM asked if we can share the data set titles.

**ACTION 3 – WPD will share the titles of the data sets within the relevant results/methodology online.**

CA asked if WPD could approach each LRF and ask where their most vulnerable communities are then combine PSR data and social service data that LRFs have.

**ACTION 4 – AW will get our emergency planning officer to take this to their LRF meeting**

The panel were invited to answer the following questions :

- *Are our intended uses of the data correct for 2017/18?*
- *Should we formally invite partnership opportunities to work with us to use the data?*
- *Is there a relevant to your particular organisation?*
- *Are there addition research areas you want us to consider next?*

**Action 5 – Panel members to email NJ with any responses.**

#### **6. Roger Hey (RH) – Innovation update**

Roger Hey gave the group an update on the role of flexibility in the move from DNO to DSO.

HE asked if there's potential for ordinary existing connections to increase in cost? RH said in return for offering flexibility, customers could be offered payment to alter the way they use power and thus would have costs reduced. New connections customers could also be offered reduced capacity at certain times. AS asked whether a non-domestic connection in the future could have economic signals in the connection price to urge people towards more flexible connection agreements. RH doesn't think there would be any

change to the charging methodology and standard connections for those customers who it is best suited for should remain. RH said we remain conscious of the stability of the system and we try to ensure there are no unrequired consequences.

## **7. Julie Richmond (JR) - Engagement plan for local network investment map**

JR took the Panel through a proposed document designed to update stakeholders on our investment plans in their region and asked for feedback on content.

- HC asked if a brief outline of the equipment used and brief technical detail e.g. '33km of overhead cabling' could be included. KM agreed a small amount of technical data would be useful.
- KM asked if people who want to raise an issue can do so in advance. AW said we could provide users with the option to ask about schemes/plans.
- JG felt it would be useful to include the end date rather than just the duration of work.
- HE wanted us to add 'how' customers might be affected.
- AS said we need a record to allow us to see what has been improved on the network – so the details remain online as a history function (key/filters to keep old data at the back showing planned, underway and completed work, for example).
- DM felt it must be easy for the business to keep data up to date. AW said we will roll out the model in the East Mids with a possible annual refresh.
- KM felt 'a future look' – upcoming projects should be included in the contents

## **Nicki Johnson – Panel Surgery Session A – Social Obligations**

NJ canvassed feedback from panel on the referral document designed to explain our process and invite agencies to refer customers in to our Priority service Register.

The Panel made some choices:

- The finish should be 'option 2' - thicker, not glossy, can be written on, has no glare and feels thicker
- The document should contain nice clear fonts, less variations in size/types and minimum font size 11
- We should also have an interactive PDF
- Some extra FAQs were discussed and agreed
- White space will be added for the user to write notes in

**Action – NJ to feed changes back to the designer and finalise/publish the document.**

## **Roger Hey – Panel Surgery Session B – Innovation**

### **Discussion on DSO Four Point Plan**

- Universal support for the logic in prioritising the deployment of smart grid solutions to 33kV and 132kV networks.
- Majority support for coordinating our DSR requirements with other parties such as supplies and aggregators. A suggestion from the bigger energy users that there is likely to be limited flexibility on the demand side. Also they need simplicity not a complex market for business customers.
- Interest in our idea of developing connection options for each customer sector. Although some scepticism that domestic customers would engage in flexible or limited connections. The view was that simplicity was essential.
- Agreement that we need to coordinate with the GBSO to ensure a whole networks best outcome. Some views that we should go further to take into account whole system benefits (e.g. Local siting of DG to avoid need for large centralised generation).

### **Discussion on our proposed additional ANM zone**

- The group reviewed the updated programme for ANM rollout. The group raised no issues with the locations identified and understood the logic of how they were selected.

### **DSO Strategy and Transition Programme Consultation**

- The group had an excellent discussion on the proposed workplan. An error in the cost table was identified. There was no objection to the workstreams and overall structure.
- The group thought it was logical for WPD to fund this work from the current ED1 settlement and were positive about it being delivered through line teams.
- There was some surprise at the needs for the volumes of activity/cost in the Data Integrity workstream.

**Action - The group requested that the Customer Panel are included in the circulation list when we publish the consultation.**

### **Summary of actions**

- 1. Black Start will be covered on the next agenda.**
- 2. CA to circulate the NEA report**
- 3. WPD will share the titles of the data sets which are within the link to the relevant results and methodology online with the Who's on our Wire's information**
- 4. AW will get our emergency planning officer to discuss vulnerable communities at an LRF**
- 5. Panel members to email NJ with any thoughts or responses to questions raised on the Who's on our Wires project**
- 6. NJ to feed changes back to the designer and finalise/publish the referrals document**
- 7. WPD to circulate the DSO consultation to the Panel**

### **Meeting dates for 2017**

Thursday 28 September 2017 - Tipton  
Tuesday 12 December 2017 - Derby