# PART 2: Benefits of Our Engagement

### Summary of our engagement

Part 2 of this report demonstrates some of the key areas where we have engaged with stakeholders during 2013/14, the outcomes of this engagement and the benefits these have had on both our stakeholders and UK Power Networks.

The chart below, based on stakeholder engagement reporting best practice, provides a summary of some of the main issues we have engaged on with our main stakeholder groups, previously identified in Part 1. These main issues identified below follow on from our materiality exercise which we carried out to identify issues affecting both our stakeholders and our business. This was represented in a materiality matrix in Part 1.

The issues in the centre of the chart are those that were material to multiple stakeholder groups in 2013/14 and consequently these guide the topics presented in Part 2 of this submission. These key issues are signposted by a tick box header throughout the rest of Part 2 for each topic and the main stakeholders engaged are represented by icons in the chart below.



Figure 1: Summary of UK Power Networks main stakeholders and how and what we engaged on during 2013/14

### **Severe weather** events

Between October 2013 and February 2014 our networks, particularly the South East and East of England regions, were affected by three periods of severe weather with some of the worst wind and rain for a number of years. The weather and ground conditions during and after each storm gave us different challenges in restoring customer supplies.

The numbers of customers affected that experienced a power cut greater than 3 minutes for each severe weather event was as follows:

Event	Number of customers
October 27 2013	626,000
December 23 2013	322,000
February 14 2014	236,000

The table below provides an overview of the external stakeholder engagement we undertook during the restoration of customer supplies and as part of our review process subsequent to supplies being restored for each storm. As a result of this internal and external engagement we identified key stakeholder issues related to our performance that informed the improvement initiatives we have put in place.

Selected external stakeholder engagement			
	Inbound calls	205,000 during and after St Jude, 175,000 over Christmas, 38,000 in February	
	Website visits	149,309 during and after St Jude, 165,268 over Christmas, 39,913 in February	
	Critical Friends Panels to discuss issues	3 held with 65 stakeholders attending	
	Online survey	225 customers completed (available to all customers on our website)	
	Public consultation events	4 held in worst affected areas after the Christmas storm to engage with customers	
	Goodwill payment communications	Over 43,000 letters sent proactively to customers who qualified for increased industry standard good will payments.	

### Issue

In all our engagement stakeholders raised the issue of the call centre response time.

#### Initiatives before the Christmas storm

- A live power cut map was launched on our website so customers can view the network faults in their area. The map provides information on the estimated time of restoration and the affected post codes.
- An online self-service fault reporting application was launched on our website so customers can tell us of a power cut.
- Storm roles have been identified for the right people across the company.
- Overflow call centres have been created in five office locations.















Stakeholder groups engaged

### **Initiatives since the Christmas storm**

- Dedicated storm page with latest information, link to the online fault map and photos from affected areas gave customers the information they required without having to make a call.
- We are currently building an application that will allow customers to upload photos.

**Benefits:** The average time to respond to customer calls was reduced at Christmas to a third of what it was in the St Jude storm and in February calls were answered 11 times quicker than at Christmas with 85% of calls being answered within 20 seconds.

The live power cut map has proved successful in providing our customers with information – between 23rd and 30th December we received 63,000 visits and during the 3 days it took to restore customer supplies in February we received nearly 45,500 visits.

During the Christmas period 988 customers logged damage reports online with 1,617 customers logging damage reports in the 3 days of power cuts in February.

The increase in numbers of customers contacting us through our online tools and social media (4,400 tweets received from customers during restoration of supplies after the St Jude storm, 7,000 received over the Christmas period, and 1,206 received in February) and the proactive customer calls we made, increased the effectiveness of our communications. During the storms our social media was manned 24/7 and we responded to all tweets.

### Issue

For many of our stakeholders it is important that we continue to improve the support we give to our vulnerable customers.

#### **Initiatives**

- We partner with the British Red Cross for them to provide assistance to vulnerable customers in the event of a power cut.
- We proactively contact customers registered on the PSR database when we were aware there was a fault in their postcode.
- Customer Champions (staff volunteers) attend worst affected areas to support customers, especially those that are vulnerable.
- Depending on the length of a power cut meals, refreshments and accommodation are provided to vulnerable customers.
- In February we had a team dedicated to coordinate between the service delivery centre and our Network Operations teams to provide affected vulnerable customers with generators to ensure supply disruption was minimal.
- After the Christmas power cuts we held public consultations in four of the worst affected communities that included information on our PSR and have provided Parish Councils with articles for their magazines concerning the PSR.

**Benefits:** The British Red Cross attended 74 sites in October and 37 sites at Christmas. The reduced deployment was as a result of BRC relief work in the Philippines over the Christmas period.

Proactive calls to affected vulnerable customers to offer assistance – 247 in October, 441 at Christmas and 1,311 in February.

7 help centres set up in worst affected areas to provide hot meals and drinks in October. At Christmas we provided 2,393 meals served across 50 locations to customers and 739 hotel rooms for identified vulnerable customers.

Our Customer Champions provided assistance to vulnerable customers in the worst affected areas.

We provided generators for temporary supplies to 38 affected vulnerable customers.

Awareness at a local community level is being raised about the benefits of the PSR.

### Issue

In all our engagement stakeholders raised the issue of increasing public awareness of UK Power Networks and forging links with local communities to better facilitate the dissemination of information.

#### **Initiatives**

- The system of sending stakeholder updates on the preparations
  we are taking and then progress updates on our response to
  get customer supplies reconnected was refined. It was also
  clear that improved communications were required with parish
  councils and local authorities.
- UK Power Networks' contact details are available in the first few pages of the Yellow Pages, Thomson local and BT phone books making it easy for customers to find our contact details during a power cut. Where possible our contact details appear in the 'emergency' section of the phonebooks which are on page 2 or 3.
- Between 25 October to 15 November responses were made to around 465 media enquiries, resulting in 72 broadcast media interviews and 22 press releases. Between 22 and 28 December responses were made to about 400 media enquiries, 49 of which resulted in TV and radio interviews and 13 press releases were also pro-actively issued to journalists. Between February 14 to 19, we responded to 31 media enquiries and directed media to the website for information. The website was updated from 6pm to 11pm each day. Further follow up enquiries were made when weekly media (ie print) were going to press.
- A dedicated telephone line for Local Authorities is being reinstated during system emergencies.

**Benefits:** 13 stakeholder updates on severe weather conditions, preparations and restoration status were sent to approximately 1,900 key stakeholders over the Christmas period. One stakeholder stated at a Critical Friends Panel that these allowed them to pass this information on to relevant colleagues and as a result their organisation was better prepared when the storm hit.

Improved flow of information between UK Power Networks and Local Authorities increases awareness of customers affected by power cuts and more assistance can be provided to affected customers. Between February and 31 March we have used this service 127 times with vulnerable customers identified in 62 of these.

### Issue

In all our engagement stakeholders raised the issue of the accuracy of Estimated Times of Restoration (ETR) of supply.

#### Initiatives since the Christmas storm

- Scouts will inspect the low voltage network within the first 24 hours to identify damage and assess and plan supply restoration. The scouts also identify any public safety issues and guard these until the supply is isolated.
- After 24 hours Customer Information Officers accompany engineering teams to facilitate and improve accuracy of information from these teams to the service delivery centre and customers.
- Change in the restoration hierarchy so that low voltage restoration work is planned on a parish basis so that engineers don't leave a parish until all customers are on-supply.

**Benefits:** Improved knowledge of the number of faults affecting different areas means that restoration work can be prioritised based on the number of customers affected in each area.

In February 70 Customer Information Officers meant more accurate information was provided to customers and this service will now be extended so an Information Officer accompanies every repair crew.

### Internal reviews

After every incident on our network of the nature and effect that we and our customers experienced between October and February we carried out internal reviews of our performance. Since the Christmas storm our reviews have allowed us to identify 10 key principles that will apply to all future system emergencies that will benefit the information we provide to customers, including the accuracy of Estimated Time of Restoration of supplies and the efficiency of response in the field. These principles are:

- Additional storm roles identified for the right people across the company.
- A global ETR for all customer supplies will be established within the first 2 hours of power cuts.
- All damage will be accessed within 24 hours and all known public safety issues will be made safe.
- Authorised overhead linesmen will be allocated to overhead network repairs.
- All operational authorised staff (except linesmen) will focus on restoring customer supplies.
- When the global ETR is more than 48 hours Customer ETR planning teams will continually operate in each region to implement a strategy based on low voltage supply/single customer information.
- Customer Information Officers will ensure up-to-date information is input to the system used by the call centre to advise customers of the status of restoration works.

### **Vulnerable** customers













Stakeholder groups engaged

One of our main customer subgroups are our vulnerable customers as identified in our Stakeholder Engagement Strategy. and/or Significantly more likely than a typical consumer to suffer detriment, or that detriment is likely to be more substantial.

The following two pages give an overview of the improvements we have made to our services provided to our vulnerable customers as a result of feedback from our stakeholders throughout 2013/14. The two areas of focus for these improvements have been around better communication and welfare provision.

### Communication

### **Local Authority Liaison**

Following on from earlier stakeholder engagement in 2012/13 where we received feedback from Local Authorities stating that they wanted to know when there is a power cut in their area, we launched in May 2013 a proactive communication process with all County Councils and London Borough Councils in our footprint, in the event of a power cut. This process is triggered under the following conditions:

- A power cut affecting 20 or more properties that is off for 8
- A power cut affecting 5,000 or more properties that is off for 2
- Any incident where we have activated the British Red Cross or **Customer Champions**
- Any other situation where it is felt appropriate to notify i.e. an incident where a significant number of vulnerable residents are identified

We have also embedded this procedure into our Service Delivery Centre KPI's.

**Benefit:** This initiative allows for the exchange of information. As a result we have seen improved collaboration and a joined up approach to the welfare support of our vulnerable customers.

### **Ensuring stakeholders are included**

Feedback from the 2013 Voice of the Customer research and other engagement events identified the need for improved promotion of our PSR services. The report which involved 560 stakeholders, stated that "there was a lack of clarity about PSR and customers were unsure of what UK Power Networks will do for those on the PSR".

One initiative we implemented to broaden the publicity of our services was the development of braille versions of our key customer literature:

- Our PSR booklet
- Power cut booklet for domestic customers
- Power cut booklet for business customers.

Future developments will include:

- Translating these into 7 languages based on census data
- Providing audio tapes of the PSR booklet
- Creating visually impaired versions with large print.

Benefit: Targeted guidance for hard to reach customers in a more usable format.

Increase in uptake of PSR customers.

### Parish council communication

One common theme to come out of the feedback received throughout the year was for the need to raise customer awareness of who we are and the services we provide.

We wrote to 2,187 Parish Councils inviting them to publish an article in their local newsletter. This article was designed to raise awareness of UK Power Networks and to promote the benefits of the PSR. To date we have received 192 requests for the article, of which 31 have already been published. An article promoting the PSR will be included in 2014's Norfolk Carers Handbook. Over 80,000 copies will be distributed to carers with an electronic copy available on-line at www.norfolkcarersinfo.org.uk.

**Benefits:** Cost-effective promotion of our vulnerable customer services in line with our vision of being both a Responsible Corporate Citizen and Sustainably Cost Efficient.

With an improved understanding of our vulnerable customer base, we will better be able to plan welfare support during future power cuts.

Strengthening local community links.

Parish Council contacts identified to provide improved communication channels during future incidents.

### **London Customer Liaison Officers**

As a result of stakeholder feedback with regards to improving our services in London we began to fill the London Customer Liaison Officers roles and so far we have four in place. These officers provide a dedicated contact between our customers and our network operations teams. The officers provide this link for both planned and unplanned power outages.

**Benefits:** Improved relations with our customers.

Greater awareness of UK Power Networks.

Improved accuracy of information provided to customers.

### Improved welfare provision

### **Emergency power cut boxes**

One consistent message that came out of our Vulnerable & Fuel Poor Customer workshop in December 2013, the Storm Consultations held in February and Critical Friends Panels 4, 5, 6 and 7, detailed on our website, is the need to provide practical support during power cuts to vulnerable customers.

During the year we developed packs for our most vulnerable customers that include practical items that would be of use during power outages. The boxes include a torch, a telephone that works

without a mains power supply, a glow in the dark sticker with our priority contact details and useful tips on precautions you can take to prepare for the possibility of a power cut. Initially we distributed 2,500 boxes to our most vulnerable customers on our Priority Services Register during November.



**Emergency Pack** 

We also connected generators during the severe weather events; a mixture of Single Premise for vulnerable customers and network generators for critical infrastructure and vulnerable customers.

**Benefit:** Vulnerable customers will be better prepared in the event of a power cut and at less risk.

Promotion of PSR through word of mouth.

### **National Energy Action**

From our 2012 Vulnerable and Fuel Poor customer workshop we knew we had expand our reach into fuel poverty and we partnered with National Energy Action (NEA) to develop a suite of projects designed to deliver energy efficiency, fuel poverty and electrical safety information to a range of vulnerable customers.

The first step was to better understand where our vulnerable communities were and NEA produced a report for us profiling three London Boroughs, detailing various indices that will contribute towards a customer being vulnerable both to fuel poverty and during a power cut. We used this report as a template to produce our heat maps discussed further below. With this greater understanding, we agreed a number of projects which we have committed to as part of our business plan:

- Young Carers workshops further explained below
- · Walk in community surgeries
- UKPN local community energy champions

**Benefit:** The project results have helped us inform and deliver our fuel poverty project, target activities including the provision of priority services and understand the nature of vulnerability to embed into our business plans.

Any change in behaviour around energy usage that we can promote could benefit the network through reduced load.

Raising safety awareness will improve public safety.

These events are ideal opportunities to further promote our PSR.

### **Young Carers Fuel Poverty Workshops**

Following feedback from our Vulnerable and Fuel Poor Customers workshop and research project results, we partnered with the NEA to provide education sessions on energy efficiency, fuel poverty and electrical safety to this vulnerable group. A total of five workshops have been delivered since their launch in November 2013, with two held in schools and three in local community centres.

In total 73 young carers between the age of seven and seventeen have attended these workshops and to date their feedback has been 95% positive.

**Benefit:** Through these sessions the young carers are also given information on how to cope with power cuts and the support available from UK Power Networks. They also are given access support and assistance with their energy bills and UK Power Networks gains a greater understanding of the needs of a specific customer group.

### **Vulnerable Customer Heat Maps**

Feedback received from our stakeholders in the Critical Friends Panels in October 2013 and February 2014, the Vulnerable Customers workshop, our online storm survey after the Christmas power cuts and the public consultations we held in February 2014 confirmed that we need to be more innovative in finding ways to identify vulnerable customers.

Upon completion of a pilot research project with the NEA where we profiled three London Boroughs known to have high deprivation statistics, we created detailed heat maps using deprivation indices overlaid with our own live fault information and PSR data.

Using this tool we will be able to identify where power cuts are affecting potentially vulnerable communities and known PSR customers who may require additional welfare support.



**Benefits:** Increase PSR numbers by targeting communities for awareness campaigns.

Improved energy awareness through targeted delivery of Fuel Poverty events.

Informed decisions on when and where to deploy the British Red Cross (BRC) or our Customer Champions to assist vulnerable customers in the event of a power cut.

Improved response times for welfare support in the event.

#### **British Red Cross**

Our partnership with the BRC and the services provided were of particular importance during the severe weather events. 321 BRC personnel provided welfare support during the storms between October 2013 and February 2014. The welfare provided included the issuing of consumables such as torches, phones, flasks and blankets to 1,912 of our vulnerable customers.

Taking some of the learning points from the St Jude storm we made changes to our process during the Christmas incident to help the BRC in their efforts to provide welfare support including:

Proactive communication giving advanced warning of storm fronts.

Situating a BRC coordinator in our Service Delivery Centre for the duration of the restoration following the severe weather events.

**Benefits:** Proactive communication to warn BRC of the storm risk allowed for better planning to give maximum availability of volunteers.

With the BRC coordinator working on site, we saw improved communication and enhanced deployment. This proved very successful and will be adopted for all future major incidents.

### Safety

Safety is an integral part of everything we do and impacts both internal and external stakeholders.

### Public safety

We have a responsibility to ensure the health, safety and welfare of everyone in the communities we serve.

**Benefits:** Over 200,000 children have received our safety message over the past year through public safety events and school visits. Over 150,000 learning aides were downloaded from our safety education 'Powerup' website. We also held 16 public safety events to coach specific groups of stakeholders, including farmers, 999 services and builders on safety issues associated with our networks.

In addition we use information brochures, electronic channels and other events/initiatives to reach the wider population and during 2013 we delivered our safety message to more than 81,000 stakeholders through these channels.

### Award winning employee safety programme

The Stay Safe campaign was implemented as a response to improve employee safety and bring about a safety culture change within the organisation. So far 2,600 employees have attended the Stay Safe launch day training programme. We have produced five films through this programme with our first one winning two accolades at the International Visual Communication Awards and the 5th film 'Speak Up' taking the Gold award in 'Professional Education' and a Silver award in 'Internal Use' at The New York Film Festival in April 2014. In 2013/14 our Stay Safe campaign was shortlisted for a Health & Safety Award by Utility Week with the winner announced in June 2014.

**Benefits:** We had an industry-leading safety performance in 2013 with four employee Lost Time Incidents (LTIs) in more than 10 million operational working hours, a 75% reduction on the LTIs in 2012. Figure 2 below shows our LTI reduction over time.

A key measure of the campaign's success is not only our improved incident rate but more importantly that over 400 staff have volunteered to train as frontline coaches to mentor colleagues and encourage everyone to question behaviours.

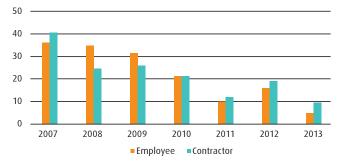


Figure 2: UK Power Networks Lost Time Incidents record from 2007-2013















. . . Stakeholder groups engaged . . .

### Employee health & wellbeing programmes

The health and wellbeing of our employees is of the utmost importance. Our Towards Zero strategy, which has been recognised with three Big Tick awards by Business in the Community (BiTC), has extended our wellbeing programme to offer voluntary lifestyle checks to all employees. The strategy aims to reduce the number of cardiovascular risk factors faced by our employees, as well as focusing on musculoskeletal and mental health issues. As a result we launched new partnerships to help deliver a range of new services including physiotherapy, rehabilitation, and free and confidential 24 hour support on personal and work related issues for employees and their immediate family.

**Benefits:** Towards Zero is set to improve the lifestyle of all our employees through positive messages and professional advice and support to live a sustainably healthier lifestyle and improve overall health, fitness and wellbeing. The focus on health and safety through Stay Safe and Towards Zero has resulted in an increased level of staff engagement and retention and a positive safety culture which is good for the business and supports our vision of being an employer of choice.

### Contractor safety

As a result of initial discussions from a Principles Group, chaired by our Director of Capital Programme & Procurement and attended by our contractors' Executive and/or Senior Management, a Health & Safety subgroup, led by our contractors, was set up this year.

The subgroup members discuss H&S issues, peer review incidents and any lessons learnt in greater detail. Members have been given access to UK Power Networks' online library of safety documents and engineering specifications and it is planned to further develop this service to enable members to share their own information. UK Power Networks has also encouraged members to sign up to the Department of Health's Public Health Responsibility Deal pledge for Construction and Civil Engineering Industries to manage the causes of occupational disease and take action to improve the health and wellbeing of their people.

**Benefits:** The subgroup has formed Specific Action Teams to look at H&S issues in greater depth with KPIs now in place to monitor specific areas of performance. Work is already underway to incorporate companies in our contractors' supply chains into the work we are doing.

These initiatives have been significant in reducing our contractor LTIs from 19 in 2012 to 9 in 2013.

### Working to raise standards in society

We support a number of key public health and safety programmes providing advice and support, including being an active member of the Business in the Community (BiTC) Business Action on Public Health Leadership Team for the East of England.

**Benefits:** Through initiatives such as the Public Health Leadership Team and Estates Excellence programme we champion health and wellbeing, share lessons learnt, and help to improve Health & Safety standards in SMEs and the wider business community, including commercial landlords.

### **Connections**

Annually we complete approximately 86,000 connections and 31,000 quotations as well as receiving approximately 88,000 telephone enquiries.

### Overview of 2013/14 engagement

DG Surgeries in EPN and SPN	28
DG Customer Experience Workshops	3
Competition in Connections Workshops	3
Connections Customer Forum	1
Total number of stakeholders engaged through our formal Connections engagement events	427

## Distributed Generation (DG) interactive maps

In October 2013 a DG mapping tool was launched to show our stakeholders the position and location of our 11kV, 33kV and 132kV overhead network and substations in our East of England and South Eastern regions. To date 211 DG customers have registered to use this tool.

In response to stakeholder requests we will soon add the DG capacity map that shows the network capacity of different areas of our network as a layer to the DG mapping tool.

Below is a screen shot of the DG mapping tool showing the Ipswich area, the green dots are 33kV pole positions and the blue dots are 132kV pole positions. The green and blue larger icons are grid and primary substations. The 11kV network can only be seen once you zoom in.



**Benefit:** Our customers have access to detailed information of our network that allows them to undertake an initial assessment of the feasibility of a potential development site and save time and money through reducing the number of formal applications for Connections quotes.

### Competition in Connections

We have made several steps to meet our competitors' requests to extend the scope of work they are able to carry out:

In July 2013 we made competitors carrying out final connections to high voltage mains a business-as-usual contestable activity.

**Benefit:** Competitors can now do a greater proportion of the work to connect their customers.

In January 2014 we launched a linking and fusing service enabling competitors to carry out live jointing to underground low voltage cables on the interconnected London network.











Stakeholder groups engaged . . .

**Benefit:** This benefits our competitors by allowing them to provide street lighting services for central London boroughs where they were not previously able to do so. In the first three months we delivered the service on 24 occasions for two competitors, enabling assets to be connected in two London boroughs. Requests currently in the pipeline bring a further nine boroughs into scope.

## Service development through responding to stakeholders

In response to feedback received in Critical Friends Panels we organised Connections forums for developers and engineers to discuss Connections process issues in detail. A Technical forum will be held in June to discuss in greater detail issues that were raised in these recent forums concerning design standards.

**Benefits:** Customers are provided with greater transparency and accountability within UK Power Networks and their feedback on specific issues help us develop our services to best meet their requirements. One example of this is where issues have been raised regarding the breakdown of costs in our quotations, which is an intended outcome of our Business Transformation programme.

### Ask the Expert

Our Connections initiative, 'Ask the Expert' was launched in December 2012 in response to stakeholder feedback concerning a lack of a central point in UK Power Networks for technical support that led to lengthy Connections applications processes. This service is available for anyone to access technical information and support before beginning an application. Currently we receive most enquiries by e-mail, but later in 2014 a telephone service will be made available. We have also trialled a face to face session with a Local Authority's mechanical and electrical engineering teams.

**Benefits:** The service provides ownership of Connections customer issues and ensures queries are followed through to resolution. Since August 2013 UK Power Networks' employees can now use this service to help resolve issues that their customers have.

This service saves our customers time and money by directing them to the right application forms, reducing handovers and lead in times in the application process. Customers receive information on our design policies (including an explanation and document or link to G81, our online technical library) and technical advice and solutions to better plan their applications. Guidance is given on when the application should be made and potential issues (i.e. legal, environmental, electrical) are highlighted that could take time to resolve. When a project's requirements aren't feasible the customer has a point of contact for discussions on potential solutions.

Customers can budget their projects more accurately through understanding issues from a high level network view down to site level, including guidance on how best to plan their sites and identifying when the customer's designs aren't sufficient for the requirements of their project.

In 2013/14 we received 1,071 new enquiries with an average of 3 customer interactions resulting from each enquiry totalling 3,213 communications between UK Power Networks and our customers. Our customer satisfaction survey results for this service has an average score of 9.43/10.

### **Innovation** Projects











Stakeholder groups engaged

As a major stakeholder committed to identifying opportunities for advancing developments in our network and contributing to a low carbon economy, we recognise that we cannot do it alone. We have partnered with several stakeholders to maximise the benefits for all those involved including the customers we serve. The following two pages outline our engagement on five of our major innovative projects highlighting some of the short and long term benefits to date. The first project, Low Carbon London, follows on from our case study in Part 1.

### Some key highlights from last year include:

### Low Carbon London (LCL) (2011 to 2014)

LCL has been investigating the impact of a wide range of low carbon technologies on London's electricity distribution network and, in particular, how customer demand profiles can be influenced to support the effective delivery of electricity.

#### We have partnered with:

CGI	Imperial College	National Grid
EDF Energy	London	Siemens
Enernoc	Institute for Sustainability	Smarter Grid Solutions
Flexitricity	Mayor of London's office	Transport for London

#### Engagement

We have spoken at national and international conferences and held learning events for colleagues in other DNOs, the energy industry, the public sector and community groups. The findings will be shared at further learning events and all reports will be made available on our Innovation website.

Some of our engagement and outputs during our project trials are summarised below:

- With project partner EDF Energy, 6,000 customers had smart meters installed in their homes giving them the means to understand their energy consumption and allowing us more visibility of customer demand profiles.
- During 2013 over 1,100 from the above group were recruited to take part in the first dynamic time of use (dToU) tariff trial providing customers with day-ahead price signals indicating periods of the next day when electricity may be either significantly cheaper or more expensive.

**Benefits:** Early results from the dToU trial show changes in customer demand profiles which could enable them to reduce their energy costs whilst providing support to the network during times of constraint.

The success of this trial has given us the confidence to propose the deployment of DSR during RIIO ED1.

### Flexible Plug and Play (FPP) (2012 to 2014)

FPP is investigating cheaper and faster connection of Distributed Generation (DG) to constrained parts of the network by trialling smart grid technologies and smart commercial agreements. DNOs face the challenge of accommodating high concentrations of DG connections on the electricity network and high demand for connections can be costly and time consuming for the customer.

### We have partnered with:

Alstom Grid UK Ltd	Imperial College	Smarter Grid
Fundamentals Ltd	London	Solutions Ltd
GE Power Conversion	The Institution of Engineering and Technology	University of Cambridge Vodafone
GL Garrad Hassan	Silver Spring Networks	rodololic

As at 31 March 2014 new interruptible connection agreements had been offered to 24 renewable generation developers wanting to connect large scale DG to our network in the East of England and 9 had been accepted. We have undertaken significant knowledge sharing and engagement activity within the industry through our learning events and also through our learning reports and academic papers, all of which are publicly available on our website.

**Benefits:** These new interruptible connection offers can deliver significant financial benefits to developers through reduced upfront connection costs and will become part of our standard business offerings during RIIO ED1.



## Smarter Network Storage (SNS) (2013 to 2016)

SNS involves installing a 6MW/10MWh storage device to explore the full-system value of large-scale storage and will include a range of commercial and technical trials to explore and improve the economics of electrical energy storage. The project aims to help reduce the future costs of energy storage in the UK and increase network investment efficiency, supporting the adoption of more low carbon technologies on the electricity network.

## Vulnerable Customer and Energy Efficiency (2014 to 2017)

This project will work with fuel poor customers exploring the means to encourage their participation in energy efficiency and demand side response (DSR). Within in the London Borough of Tower Hamlets the project aims to recruit and maintain the participation of 550 British Gas electricity customers who are tenants of either Tower Hamlets Homes or Poplar HARCA.

### Flexible Urban Networks – Low Voltage (FUN-LV) (2014 to 2016)

The recently started project will explore how the use of power electronics devises to mesh networks can enable DNOs to optimise the capacity of existing networks, enabling the connection of greater numbers of low carbon technologies and distributed generation in urban areas.

### We have partnered with:

AMTSybex Pöyry
Management
Consulting
University

Imperial College
London Swanbarton
KiWiPower S&C Electric
National Grid

**Benefits:** Inform the ways in which storage can be most economically incorporated into future DNO business plans and the design and structure of future products or services that storage may provide to DNOs and TSOs.

Assessment of the impact on different future market scenarios on the business cases, including varying carbon prices, high versus low wind penetration and demand side response.

Compare the performance and value of storage flexibility to other forms of flexibility.

Deferral of significant and disruptive conventional reinforcement for East of England customers, through the deployment of a storage test-bed, which will further reduce losses and peak demands.

### We have partnered with:

**British Gas Poplar** Housing and **Bromley by Bow** Regeneration **Community Community** Centre Agency (HARCA) **CAG Consultants Tower Hamlets** Homes **Institute for Sustainability** University **College London** 

National Energy Action

#### **Engagement**

Over the last year we have engaged with our partners on project specification, contract award and methods of dissemination of project outputs.

**Anticipated benefits:** Enable fuel poor customers to understand how they can benefit from energy efficiency and participate in DSR.

Quantify the 'network service' (demand reduction and time-shifting services) that these customers could provide.

Understand the challenges and best approaches to engaging with these groups of customers.

Provide DNOs with evidence-based learning on working with third party agencies to deliver energy efficiency and DSR campaigns to fuel poor customers.

### We have partnered with:

CGI Imperial College London IGE Digital Systems PPA Energy

#### **Engagement**

Engagement will focus on ensuring that learning is shared to advance the debate on future network architecture and making networks more flexible and resilient through capacity sharing between substations.

**Benefits:** FUN-LV will support the continued improvement of services to customers through better connection offers in urban areas as a result of knowing where best to connect and by managing voltage, power flows and fault current.

During 2013/14 we also launched our Innovation website – www. ukpowernetworks.co.uk/innovation



We will be hosting three Critical Friends Panel events on Innovation this year across our three network regions; EPN, SPN and LPN.

Stakeholder groups engaged . . . . .

### **Engaging** employees

UK Power Networks engaged with employees at different levels and on different issues throughout 2013/14. Some of the main issues included performance, transformation, revised business plan submission and safety.

### Our Business Transformation programme

Our Business Transformation Programme (BTP) between 2013 and 2015 will simplify, consolidate and integrate our business systems and processes. In our 2012 employee engagement survey our employees told us that our current system and processes need to be more efficient in order for them to do their job properly and offer the best service to our customers. Here are some of their comments.

"We do things differently across our patch which really frustrates customers."

"Sometimes I need to enter the same information five times! The process is inefficient and leads to data accuracy issues."

"My job takes twice as long as it should because of the duplicate processes and systems. This impacts customer lead times."

Our BTP Steering Group headed by our CEO engaged with staff in a variety of ways, including Leadership events and 'in the Field' sessions. Employees have been informed of not only the blueprints and design of the new systems and processes but they have also been asked to test and trial the tablet devices we will use for day to day business.

Employee engagement including engagement on BTP and user acceptance rate measurements in preparation for BTP implementation have been very positive and increased within the business, giving us additional confidence for the implementation phase.

**Benefits:** The Business Transformation programme will enable UK Power Networks to provide long term benefits to its customers and employees and meet the outputs stated in our resubmitted business plan. Some of the key benefits are:

We will have smarter, faster and easier to use HR and Finance systems. Modern self-service tools and reducing the number of systems to input data will help employees perform their roles more efficiently.

Major process improvements will be made to our Customer Services, including fulfilling service requests when the customer requires, swift resolution of enquiries and complaints to customers' satisfaction and providing customers with multiple channels through which to engage with us.

Our Connections process will also be improved, including customers having greater control and visibility of their service request with greater accuracy and clarity of information being provided by us. Projects will be delivered according to the customers' preferred timelines.

JK Power Networks' **Stake** 

Our response to faults will also be improved through improved performance in getting people and equipment to site so power is restored as soon as possible as well as improving the reliability of the network.

Our improved processes will ensure we deliver major projects using leading tools and technology to outperform our targets; get the right resources and supplies in the right place, at the right time, at the right unit cost and integrated with our business; and ensure better planning, design and delivery of engineering works (including maintenance, inspections and tree cutting).

### Field staff individual performance review (IPR) improvements

Feedback from Network Operations Area Managers and Field Staff Supervisors led to improvements in the performance review process in January 2014. The process of reviewing performance three times per year in the field was considered too infrequent and inconvenient.

External research of how other utilities undertake performance reviews together with internal discussions with managers and unions led to a new IPR process. Reviews are now carried out in the field through monthly discussions.

Benefit: After only a quarter of a year we are starting to see benefits in the behaviour change this has created. It has allowed us to measure performance more objectively with tangible evidence collected on site during the year and means that there is no downtime for staff, increasing productivity and ensuring we maintain robust operational cover throughout the

### Community Matters

er Engagement Incentive Sci

In 2013/14 our annual employee engagement survey, as part of the Sunday Times Best Companies survey in which we were classed as 'Ones to Watch', highlighted that our employees wanted to know more about the local community initiatives we have. As such we have introduced our Community Matters initiative where employees can find out and get involved with our local community activities.

**Benefits:** Through this initiative our community and our business benefits from the increased engagement with anticipated improvement in performance. Our employees and their local communities will benefit through matched funding, grants for specific projects or items required by amateur sports clubs, employee donations, volunteering, grants awarded to community projects for reducing fuel poverty, enhancing energy efficiency and promoting the low carbon economy.

In 2013 we gave more than £40,000 to 84 charities and approximately 250 employees volunteered just under 2,000 hours. We also gave over £100,000 in our first round of our Power of Giving community fund.