

---

# UK Power Networks Consultation on Outputs Integrated Report

---

December 2011

A Report to UK Power Networks  
Prepared by Dialogue By Design

Email: [info@dialoguebydesign.com](mailto:info@dialoguebydesign.com)  
Website: [www.dialoguebydesign.net](http://www.dialoguebydesign.net)

The views expressed in this report are those of the authors and may not reflect those of UK Power Networks

## Contents

---

<b>1</b>	<b>Introduction</b>	<b>4</b>
1.1	Reading this report	5
<b>2</b>	<b>Executive summary</b>	<b>6</b>
2.1	Safety	6
2.2	Customer satisfaction	6
2.3	Conditions for connections	7
2.4	Environmental performance – environmental impact of our operations	7
2.5	Environmental performance – facilitation of the low-carbon economy	7
2.6	Network availability and reliability	7
2.7	Social impact	8
2.8	Company-specific outputs	8
<b>3</b>	<b>Summary of workshop</b>	<b>9</b>
3.1	Introduction	9
3.2	Safety	11
3.3	Conditions for connections	13
3.4	Customer satisfaction	16
3.5	Environmental performance - environmental impact of our operations	18
3.6	Environmental performance - the low carbon economy	24
3.7	Network availability and reliability	27
3.8	Company-specific outputs	30
<b>4</b>	<b>Summary of online consultation</b>	<b>34</b>
4.1	Introduction	34
4.2	Safety	34
4.3	Conditions for connections	36
4.4	Customer satisfaction	38
4.5	Environmental performance - environmental impact of our operations	39
4.6	Environmental performance - the low carbon economy	42
4.7	Network availability and reliability	43
4.8	Social obligation	46
4.9	Company-specific outputs	46
<b>5</b>	<b>Summary of interviews</b>	<b>48</b>
5.1	Introduction	48
5.2	Regional issues	48
5.3	Safety	48
5.4	Conditions for connection	49
5.5	Customer satisfaction	51

5.6	Environmental performance - impact of our operations	52
5.7	Environmental performance – low-carbon economy	53
5.8	Network reliability and availability	54
5.9	Social obligation	55
5.10	Company-specific outputs	56
<b>Appendix</b>		<b>57</b>
A.1	List of participants	57
A.2	The engagement questions	60
A.3	Workshop evaluation report	64
A.4	Raw data from other strands of engagement	71

# 1 Introduction

---

UK Power Networks is undertaking extensive stakeholder engagement at key stages of their business plan cycle. This is part of the review of their investment plans to be presented to Ofgem in 2013.

The focus of this phase of engagement is discussion on outputs; an output being the delivery of a product or level of service. In response to discussions with stakeholders and Ofgem, UK Power Networks will make commitments to the delivery of a set of outputs as part of the future business plan.

This report provides details of the findings of three separate strands of engagement; a workshop, online consultation and interviews. Three further responses were received which did not fit the engagement structure; these can be found in appendix 4. The aim of all three strands was to give stakeholders the opportunity to discuss the outputs in each of the six categories defined by Ofgem. UK Power Networks also wanted to hear how to measure performance in a way that is meaningful to stakeholders and thus develop possible outputs further. The findings from this process will help UK Power Networks form specific commitments for the delivery of the outputs.

The six categories defined by Ofgem are as follows:

- Safety;
- Conditions for Connections;
- Customer Service;
- Environmental Performance;
- Network Availability/Reliability;
- Social Impact.

For the purpose of this stakeholder engagement, UK Power Networks have further developed these into a set of 8 categories:

- Safety;
- Conditions for Connections;
- Customer Satisfaction;
- Environmental Performance - Environmental Impact of our Operations;
- Environmental Performance - Facilitation of the Low-Carbon Economy;
- Network Reliability and Availability;
- Social Impact;
- Company-specific Outputs.

## 1.1 Reading this report

This report includes a brief overview of the issues that were raised under each of the Output Categories across all three engagement strands; the full report from the workshop, and a summary of the points made on both the online consultation and the interviews. Full transcripts for the online consultation and the interviews can be found in appendices 4 and 5 respectively. The summary and the full reports have been prepared by Dialogue by Design (independent facilitators). This report simply provides an account of the feedback that was received and does not seek to offer recommendations.

## 2 Executive summary

---

This section aims to deliver a cross-cutting summary of issues and themes emerging from the workshop, the online consultation and the interviews.

It is worth pointing out that while these strands of engagement refer to the same subject (the consultation on outputs), they differ at a more detailed level, e.g. in terms of the specific questions that were discussed. Readers are encouraged to study the additional reporting materials provided, including the consultation responses.

The following section takes each output in turn and provides a summary of views and ideas expressed by stakeholders.

### 2.1 Safety

The possible safety outputs, which are a measure of public safety incidents and a measure of compliance with legislation, are both supported by stakeholders who also provide further ideas as to how they can be measured. Many stakeholders suggest new outputs related to safety, the most common being a measure related to near-miss incidents. Education is important to stakeholders, who put forward engagement with the public and training of employees as possible outputs. Other measures recommended by stakeholders include safety levels achieved during street works and frequency of road traffic accidents.

### 2.2 Customer satisfaction

Stakeholders comment on similar topics across all strands of the engagement process. The decision to phase out the telephone survey is supported by most stakeholders, and there is general consensus that they should be replaced with online surveys. Stakeholders feel that there should be an improvement around communications made by UK Power Networks, for example communication and coordination on areas such as street works. They also suggest that responsiveness to customers with various and sometimes bespoke connection needs should be improved.

Some stakeholders feel that UK Power Networks should recognise that they serve a variety of customers. This varies by both type of customer and geographic region and should be a stronger consideration across the business. Stakeholders also express concern over a measurement of the number of new customer services, stating that it is the quality of the service that is important.

## 2.3 Conditions for connections

Stakeholders generally feel that there needs to be more transparency of costs, and better communication, with an account manager being suggested by a number of stakeholders. Stakeholders often state that they are prepared to pay more for greater certainty and better service in regards to connections. There is support for greater competition, with suggestions of measuring market share and greater ease of comparison between providers. Whilst stakeholders like the idea of measuring value for money they also highlight that timeliness and quality of work are as important as cost and they would often be prepared to pay more in exchange for these.

## 2.4 Environmental performance – environmental impact of our operations

Stakeholders who contributed online or as part of a phone interview comment predominantly on the output for measuring the amount of overhead infrastructure removed from an AONB. Across the three engagement streams this output is considered important with stakeholders wanting it to be retained. It is requested by some stakeholders that this output should not just be limited to AONBs. Some stakeholders encourage undergrounding for new overhead infrastructure in AONBs, however other stakeholders mention the possible impact of undergrounding on flora, fauna and archaeology.

Another area for concern for stakeholders is the need to target a wider range of greenhouse gases, as they vary in their impacts on the climate.

## 2.5 Environmental performance – facilitation of the low-carbon economy

An important output for most stakeholders is a reduction of CO<sub>2</sub> emitted as a result of investment choices. Maximising capacity headroom is considered an important factor with stakeholders who feel that there needs to be investment made now and not at a later date.

Many stakeholders are supportive of UK Power Networks taking a lead role in implementing electric vehicle charging points and thereby socialising the cost of this infrastructure. Other stakeholders have mixed feelings about how charging points can be used as a measure because there are so many variables in the development of such a network, such as the level local authority support.

A few stakeholders question whether the provision of electric vehicle charging points is a good measure since they are not convinced that electric vehicle technology will be taken up.

## 2.6 Network availability and reliability

Many stakeholders support increasing capacity ahead of need. However, they also highlight the different value that this has for different regions and different customers. There is often a suggestion that it is those who benefit who should pay. With regards to interruptions, stakeholders suggest that it is the impact of the interruption that is important rather than the length or frequency, and that this includes business and social impacts. There is wide agreement that 18 hours is too long to wait for restoration, for both business and domestic, and UK Power Networks needs to take a more proactive stance in communication with customers in these circumstances. There is also support for measures of interruptions based on the number of customers affected and greater investment to prevent high impact

low probability events, especially in relation to central London. Main fuse failures, restorations impacted by severe weather and the 18 hour restoration output are highlighted as important to emergency planning.

### 2.6.1 Network availability and the low-carbon economy

There is wide support amongst stakeholders for increased investment to accommodate localised generation and decentralised energy, with support for CHP. Stakeholders believe there will also be a need for demand management.

## 2.7 Social impact

There is a suggestion that reinforcing infrastructure in remote areas could be considered as a "support service" for those who are only served by electricity. There is support for minimising the impact of street works through working with others, including other utilities, local authorities and closer working relationships with developers.

## 2.8 Company-specific outputs

Stakeholders generally support an output incentivising closer working relationships with others, with street works receiving particular mention. Stakeholders also mention that this should be transparent and should focus on the costs saved through collaboration. On stakeholder engagement, stakeholders suggest that engagement with a variety of stakeholders is important, and that it must be continuous and ongoing.



## 3 Summary of workshop

---

### 3.1 Introduction

A workshop was held at BMA House, in London on the 17th November 2011. The purpose of the workshop was to help participants understand the context of outputs and give stakeholders the opportunity to review and suggest measures.

The invitation mailing was based on a stakeholder analysis and targeted organisations and individuals with an interest in UK Power Networks. The meeting was well attended, with 62 stakeholders from across all three of the networks that UK Power Networks covers attending the event. A list of attendees can be found in appendix 1.

#### 3.1.1 Welcome and introductions

Keith Hutton from UK Power Networks welcomed participants and gave a brief introduction to UK Power Networks, the domestic arrangements and the agenda.

#### 3.1.2 Aims of workshop

The aim of the workshop was to give stakeholders the opportunity to discuss the outputs in each of the six categories. UK Power Networks would like to hear how to measure performance in a way that is meaningful to stakeholders and thus develop possible outputs. This will help form specific commitments for the delivery of the outputs.

#### 3.1.3 Agenda

09:30	Refreshments and registration
10:00	Welcome and introduction
10:15	Presentations on UK Power Networks and the outputs
11.30	Stage 1 of working sessions
12.45	Lunch
13.45	Stage 2 of working sessions
15:30	Next steps and wrap up
16:00	End

#### 3.1.4 Working agreements

- Contribute your thinking;
- Share the airtime;

- Be open and candid;
- One at a time;
- Mobiles off.

### 3.1.5 Session 1 - Opening address and development of the Business plan

#### Presentations

Basil Scarsella, CEO of UK Power Networks, gave a presentation on UK Power Networks, their business vision, and their commitment to engagement with stakeholders. He highlighted that stakeholders' views are fundamental to UK Power Networks' commitments and future investment plans.

Ben Wilson, Director of Strategy and Regulation of UK Power Networks, gave a presentation on the development of the Business plan. This included Ofgem's new regulatory framework, how it relates to this outputs consultation, and on the development of the outputs themselves.

The presentation was followed by questions and answers.

#### Ben Wilson - Plenary

Q. Of the outputs that you will be reporting on, can you say something about the innovations you are working on?

A. This is something that wasn't the focus before. We're trying to be consistent with our size and approach across the three regions. In London we are working with Low Carbon London funded by Ofgem. It is a project about introducing technology such as smart meters in London to see if it makes a difference to consumers and how they use electricity. Another issue is can we twin wind generation with usage, for example cheap electricity when the wind blows, do customers accept that. We don't supply electricity so there is a challenge on us to work out how we work with suppliers.

Q. You're not a retailer, how do you pass on incentives to consumers?

A. We charge distribution to suppliers. It is a flat cost but here are marginal costs that change from time to time. At peak times we are looking at major investment to meet demand; we could introduce time of use tariffs that will be passed on to consumers via the supplier. If that flattens demand it reduces the amount of investment needed on the network.

A. Our bill is only 15% so the question is how much of a difference will that make to the overall price?

### 3.1.6 Session 2 - The Carousel – Working Groups

#### Introduction

James Martin Jones from Dialogue by Design explained the format of the carousel working groups.

Six stations, one for each scenario, were set up around the room. Each station was staffed by the responsible UK Power Networks director or senior manager and a facilitator to scribe and record comments on flip chart paper.

Participants were divided into six groups and each group spent approximately 25 minutes at each station before moving to the next one. They were asked to consider the existing outputs, possible outputs and suggest new ideas or other comments.

As each group in turn visited a station they built on ideas that previous groups had developed.

The following sections are a transcription of the notes made by facilitators during the course of the workshop.

## 3.2 Safety

Director: Murdo Allan

Facilitator: Helena Poldervaart

There were no existing outputs for this category, so participants commented on the two put forward by UK Power Networks and added some of their own. Participants at this discussion station were particularly invited to 'unpack' the two existing outputs and suggest specific measures which would sit underneath them.

**Possible output - A measure of public safety incidents affecting people, other than those working for/on behalf of UK Power Networks, that result from our operations**

- Impact on vulnerable people (e.g. people with stair lifts, hard of hearing using enhanced telephones etc).
- People who unofficially enter UKPN property e.g. vandals, thieves, children via broken fencing / windows.
- 3<sup>rd</sup> party activity which causes problems e.g. unofficial generator, security measure removed.
- Security of sub station against intrusion. The measure is the UKPN response time.
- A measure which relates to education of public on safety e.g. what to do if you see a broken fence, impacts of your actions. But how can you measure this accurately? [*UKPN confirmed that they already have ways of measuring the impact of their educational activities*].
- Metal theft: the measure is co-ordination between UKPN, police, scrap metal dealers, judiciary.
- Power theft e.g. squatters illegally connecting up: the measure is co-ordination between UKPN, Local Authorities, Police.
- Vegetation clearance and impact on public safety.

**Possible output - A measure of our compliance with legislation. This could take the form of a count of incidents of non compliance, investigations by a Health and Safety body etc. perhaps weighted to reflect the relative importance or risk associated with each.**

- Where power supply falls outside the scope of voltage e.g. too high / low, as there are related safety implications.

- **Major problems** e.g. outage of a large area: measure is sharing of information between UKPN and the Category 1 responders. The contact information which Police hold often stops at National Grid level, whereas they also need more regional and local contacts. The emergency planning team for each police force should be given this information. Local Authorities are in a similar position, that is to say memorandum of understanding with Red Cross.
- A measure relating to protection of holes in the road – how often they are checked etc.

## Disconnections

- **Certificates** – measure is that they are provided on time, as there are all kinds of safety impacts if there are delays in getting them to key people such as Local Authorities and contractors.
- **Certificates also need to be easy to obtain** – participants reported difficulty in obtaining them at all from the contractor which carries out the disconnection, or from UKPN itself.
- **Timeliness of disconnection** e.g. on building sites: if the disconnection is not carried out swiftly, the risk is that contractors carry on working in an unsafe environment. A measure would be a swift and simple process for emergency disconnection. Participants noted that they are happy to pay for this.

## Records

- **Accuracy:** records of, for example, where cables run, whether they are live, need to be accurate and adequate.
- **Easy accessibility to people who need the information** (preferably online): at present accessibility is limited to those authorised, due to OS licensing issues.
- Online publication of safety information.

## New outputs

- **Security accreditation** e.g. building sites: the measure is UKPN working with the local police, benefiting from their expertise in designing out criminality. A more proactive approach than reaction to a security breach once it's happened.
- A measure which is about better working between UKPN and other agencies.
- **Contacting UKPN when there is a problem and obtaining reliable advice.** Participants agreed that it is not obvious to the general public that they should contact UKPN in the event of a supply problem such as a power cut or unusual electrical activity. When the power is off, people cannot access their online bills to find the number and they are most likely to call their own electricity supplier. It was suggested that a national number is needed (similar to the emergency gas number) and that it could be stuck on to electric meters.
- A measure which is a record of each contractor's health and safety record, with this being used as a selection criteria when hiring contractors.
- **Staff training in health and safety:** standards achieved, number and level of staff trained, site visits etc.

- Temporary substations for building developments. Recently there have been problems with obtaining UKPN permission to build these e.g. using gantries, due to safety concerns. This is a major problem in London. The measure is an agreed solution / spec between UKPN, the developer and the Local Authority.
- Provision of method statements and risk assessments to developers and others: concern expressed was that they simply don't reach them. The measure is provision and in a timely manner.
- As part of the method statement, a consistent and agreed hole size to be provided.
- Distribution of safety rules and manuals: measure is adequate copies with up to date information.
- Active management of overhead line clearances and making the public aware of them, e.g. anglers.

### Comments

- Is this all just box ticking? It matters as it affects others, e.g. financially.
- Do some of it in partnership with stakeholders – UKPN do not need to do it all.
- It does matter – it's about UKPN responsibility to the community, one of its values.
- Measure [performance] against European best practice, which tends to be better than UK best practice. Go beyond mere compliance.

*Ofgem does not currently recognise safety in its outputs and therefore does not take expenditure on it into consideration. Participants discussed whether education should be recognised, as that would help defray its costs. There was no consensus on this – some thought it was a core responsibility of UKPN and there should be no financial recognition, others disagreed.*

- Ask Ofgem to provide free TV airtime to publicise the service provided by UKPN. This is all part of public education.

### 3.3 Conditions for connections

Director: Mark Adolphus

Facilitator: Andrew Acland

#### Existing output - Guaranteed Standards of performance

- Measurement needs external industry representation on the audit process prior to submission to Ofgem.
- Connections part of website should have link to where details are published.

#### Existing output - Obligations under licence condition 15

- Publish actual performance notes.
- Have improved delivery.
- Situation is getting worse.
- ICPs would like to be recognised as customers and have performance standards applied to them.
- Current 32 standards could be streamlined.
- Some current employees have insufficient technical knowledge.
- No measure on diversions and NTL works.
- More transparency of costs.
- Need to incentivise speed and accuracy and fixed prices.

### Customer service

- More flexibility to meet different customers' different needs is sometimes preferable to fixed standards.
- Better communications with customers required. Need one dedicated person to deal with each customer.
- Need to re-structure so customer-focused rather than just box-ticking.
- Suggestion of a facility for advice on helping customers clarify requirements.

Possible output - Greater certainty over time to deliver some parts of a connection.  
Investment would be required to achieve this.

- Find a mechanism for UKPN to create infrastructure ahead of need - developers would support this – but ordinary households should not be expected to fund this.
- Lack of upstream capacity can prevent developments happening – a more strategic approach to creating capacity with investment from developers and in liaison with local authorities.

### Spending up-front

- Spending money up-front is preferable to waiting.
- Prepared to pay more if there is a guarantee of certainty.
- The option of paying more is preferable for some customers.

### Who pays?

- Question remains of who pays more and how much.

- It is unreasonable that some customers end up paying disproportionately for infrastructure even if their needs are modest.

### Increase communications

- Forward investment in dialogue.
- One point of contact would also expedite service.
- Need stronger network of contacts among people inside UKPN with local authorities to help forward planning.
- More dialogue between local authorities on development would facilitate forward investment in infrastructure ahead of need.

### Possible output - Incentivise companies to innovate regarding connections

- Better coordination among departments and local policies and practices.
- More dialogue with customers about their requirements – and sharing expertise with customers.
- UKPN is too date driven – being more responsive to individual customers would be preferable.
- More differentiation between customers would be helpful e.g. current rigidities mean experienced people can end up doing simple jobs and vice-versa.
- Think about how to enable collaboration in how connections are offered to customers.
- Need to review flexibility and service offerings in relation to different market segments.
- More bespoke design input at an early stage.
- Quality of service has got lost.
- Transparency around charges for connections.
- Greater clarity in published guidance on load assessments.
- Getting a connection to export is a nightmare.
- Publish availability of power in specific locations.
- Driven by measurements - not by customer need.
- The social function value of infrastructure development should be recognised: needs to be a mechanism for reinforcing the network overseen by the regulator.

### Possible output - Output value based on value for money

- Make it less costly overall for ICPs to enter the market.
- Greater price transparency.
- Soft measures of satisfaction
- Pricing is not always a key determinant of value for money – delivering on time sometimes more important. Certainty of delivery can be more important than price.

- Could measure by price per kW installed.
- UKPN needs to look at own benchmarks for value for money.

Possible output - Greater competition. Should network companies be measured on commitment to this?

- Penetration of the market by ICPs
- More specific data on UK Power Networks' sites.
- Consistency of quotation between contestable/non contestable quotes.
- Greater competition should improve value for money
- More consistent measurement of disconnection process
- Timeliness of quotations could provide indicator of degree of competition.
- More transparency for development of pricing methodology
- More commerciality in construction contracts.
- Measured by feedback from end users
- How to measure: market share

Comments - On measures regarding delivery of connections

- Legal process needs to be measured, streamlined, improved, made more flexible.
- Massive future skills gap: is UKPN starting to train a new generation of workers?
- Number of connections with/without reinforcement.
- MW requested verses connected.

### 3.4 Customer satisfaction

Director: Martin Howard

Facilitator: Carl Reynolds

Existing output - Priority services register/vulnerable people

UKPN has a database of people who are vulnerable, but it is only as good as the data that people give us. If they don't update us, we don't know. There is also a Data Protection sharing issue. Need a comprehensive list to improve service.

*Idea*

- Smart metering may enable people to register themselves and provide info from UKPN.  
*Measure* usefulness of this.



Vulnerable has several meanings – Ofgem has 22 categories, UKPN uses 7. And in extreme weather more will be vulnerable

*Idea*

- Use an on-line system to enable local authority managers to know specifically which streets are affected by outage.
- Set up automated response by phone

Enable internal sharing of real time outage information to enhance service from call centre.

*Idea*

- Could set up system of carers and call them.
- Develop partnerships with RSLs. Give them good data about outages, but rely on them to ID and do initial support to vulnerable people.

Need to market the fact that people can register to be put on this system

Existing output - Telephony survey

The requirement for this is being phased out in 2012. It uses a representative sample of the public.

*Idea*

- *Measure* using post outage or post-works satisfaction survey to get more specific data.
- *Measure* using on line surveys, but issue of motivating people to fill them in

Existing output - Broad Measure of Customer Satisfaction

Doesn't reflect the range of different customers. And that outages, for example, have different effects on different customers.

*Idea*

- Mapping all people connected to each substation to make contact and remedial action better in an outage. *Measure* improved response time and action.
- More proactive calling of customers post-outage. *Measure* this against number of calls from customers in the same outages.

People don't understand the difference between supplier problems and distributor problems

UKPN needs to make its internal communications better, for example communication between technical team and customer facing teams.

More awareness of the difference between supplier and distributor, so people know who to call in an outage. This is being worked on.

*Idea*

- *Measure*; how many people know who to call in an outage?

Some support for measures to be reported regionally, but mainly advocacy for measures to enable people to understand complexity eg impact of outage, or number of times to different types of customer.

**Existing output - Worst served customers**

*Idea*

- A *measure* of impact on the customer might be better. For example a micro-second outage in the LSEx would have more financial impact than an outage to homes in Harlow.
- Might understand this as a measure of value. Would the institution pay more to minimise risk of disruption?
- Keep current *measure*, but have descriptions of varying impacts and to types of customer to enable more sense to be made of measure.

**Possible output - Service improvements**

Need higher quality of information and service from UKPN. Especially to developers who have a variety of connection needs, including for export. Experience of many such customers is lack of coordination between teams in UKPN and a general unresponsiveness. But some improvements seen recently.

*Idea*

- Use 'account managers' as a single point of contact to both take people through customer journey (eg for multiple connections or to enable export from PV systems) and to troubleshoot internally. *Measure* would be of customer satisfaction with this. And comparator with same customers over time.

Need to improve internal responsiveness in UKPN. Could compare to other DNO eg WPD.

*Idea*

- Customer satisfaction *measured* from beginning to end of service, from design to completion.
- *Measure* reduced customer complaints or problem calls

### 3.5 Environmental performance - environmental impact of our operations

Director: Clive Steed

Facilitator: Rebecca Gwynn-Jones

**Existing output - Network losses**

- Need to better visualise what parts of the network have what losses. Kilowatt levels as well as kilowatt hours and to understand the difference between these two measures and what equals good, what equals bad.
- Don't check PFC enough - losses are happening due to customers and harmonics/unbalance.

#### Possible output - Technical losses

- This impacts on other outputs e.g. if there are less losses then less copper is needed, less temporary generation needed, less transport etc.
- Smart meters improve ability to pick up on problems.
- More accurate reporting of actual energy use in offices would help to better judge load need. (see also connections pod)
- Battery storage
- UKPN's unmetered energy connections of own network – need to meter this
- Are you looking at energy loss in transformers eg. Being on standby and generating heat?
- Is there potential to recycle this lost heat without charging end user for it? How to feed this into local DN
- If you had to “buy” the amount lost it would incentivise reduction!
- Look at embedded carbon and maximise use of what have eg. run the system at fuller capacity  
- run it hotter

#### Possible output - Non-technical losses

Question from stakeholder - How much of a problem is this?

Answer - Smart meters will help. Also work with and police, for example - on cannabis farms.

Question from Stakeholder - Will this be a growing problem?

Need to consider fuel poverty in relation to this.

- Unmetered customer connection
- Dynamic eg. Street lighting how it is actually used.
- Capturing this assessment process upstream.

#### Existing output - Business carbon footprint

Go for outputs on the areas with biggest CO<sub>2</sub> impact

Energy from offices and depots

- Smart office approach, battery storage solutions etc.
- More pilot schemes
- Utilisation of office fleet

- Need focus on staff training to maximise participation/change in behaviour

#### Contractor emissions

- What are barriers to better collaboration – between water, energy etc. suppliers? How much do you try and work with each other?
- More cooperation will reduce impact eg. not repeatedly digging up road.
- Need more information as to what and why.
- Are they maximising areas which are under their control?
- Scotland has system for this coordination called “Janet”. This seems to work well.
- CO<sub>2</sub> footprint on procurement.

#### Temporary generation

- Single point incident analysis to reduce.
- List of local back-up generators (customers who can help out) to help reduce the carbon footprint of getting temporary generator to site.
- Battery based.

#### Transport emissions

- Going towards hybrid vehicles.
- Also look at mileage getting to faults ie. how local are contractors This also aids business efficiency.
- Low-carbon

#### Other business carbon footprint outputs

- CO<sub>2</sub> impact of street works by causing congestion etc. So look at work in school holidays etc.
- Operational processes – to what extent can use remote monitoring management rather than people moving around.
- Condition based on maintenance and remote monitoring.
- How do other world cities do it like New York and Hong Kong?

#### Possible output - SF<sub>6</sub> leaks

- More accurate reporting
- Investment in technology
- Condition monitoring
- Can you use more alternative technologies approach – need risk assessment of these.
- Why still used when known so long as carcinogenic? Give more priority and act!

#### Possible output – Street works waste

- All businesses should be addressing this including energy distributors!
- Amount of excavated material
- Reduce the amount of street works waste
- Extend minimising waste to minimising water wastage.
- Also need to minimise other waste. As part of current good business practice

#### Possible output - Oil leakage

- Risk based?
- Current performance?

Question from Stakeholder - is this a big risk?

Answer - it is reducing over time but still can be big impact now and then; for example on an accidental rather than routine basis.

Stakeholder comment - This has been an ongoing problem with UKPN making sporadic attempts to solve – a better approach is “total war” to eradicate it.

#### Possible output - Flooding risk reduction

- Joint investment with water industry should be way forward (utility trench sharing)
- Need to inform/liase with Local Authorities who now have duty rather than Environmental Authority.
- Reinforcing flood design/switch gear to raise if off the floor
- Good identification needed of where facilitating supply will have negative impact. Not just on flooding but also on carbon footprint, security, emergency services etc.

#### Possible output - Reporting incidents to Environmental Authority

- Electricity failures mostly cause water industry reported incidents, therefore joint targeting with water industry
- Local Authority now have duty rather than Environmental Authority for flooding so don't just report to Environmental Authority, but also to Local Authority.

#### Existing output - Visual impact

## Visual impact on AONB, National Parks

- National Parks are to be opened up to sustainable development – what will this mean
- This is more about social impacts
- Is environmental impact built into new developments? eg. looking at alternative routes to avoid all sorts of areas where visual impact can be/should be minimised.
- Street works also need target for visual impact reductions

## Possible outputs - Other

- Maximising capacity of existing network (see also connections pod) will lead to reductions in CO<sub>2</sub> generating activity.
- Extend this to water reductions
- Fuel Poverty - 16% is still enough to affect energy prices so want to see UKPN accept responsibility to mitigate fuel poverty not pass over to suppliers alone.
- A measure of EMF's and noise

## Supply chain/purchasing

- Look at the recycled content/reusability of components. You are in powerful position to require suppliers to provide more sustainable options
- Look at CO<sub>2</sub> impact of imported components. For example copper from china

## Renewable technologies

- Pilot DG offices
- Balancing wind power and storage etc.

## Other issues

- Feed in from renewable local DG – discussion on technical feasibility and need for investment. – fault levels
- Reporting of performance is a key part of all this
- Go wider than statutory duties if want to be good corporate citizen – ie go beyond compliance. Extra cost will most likely be one off at start – take long term view – fits with your company. (Be at forefront and not just in your industry)
- Show stakeholders you are not regulation driven.
- Reducing consumerism (with suppliers)
- Could give advice to negate requests for increased connections – reduce their CO<sub>2</sub> footprint.
- Relativity of issues is important ie.
  - Network loses

- Carbon footprint
  - Embedded loss carbon
- Which has more impact/which is easier to effect etc.
  - Want to see CO<sub>2</sub> reduction target – be open about this and how going about it.
  - Future proofing/planning to reduce number of times return to do works (see also cooperation with other utilities) – investing once and properly.
  - Areas already covered seem the right ones to report on - but what is the value of the contribution and extent to which are responsible corporate citizen. No good if “window dressing” What will the metrics be/how ensure real impact/change.
  - CSR ratings produced by BITC could be used, enables comparisons and other industries too.
  - For which reductions would consumers be willing to pay? Interesting/need to find out
  - Look at which measures will cost money and which can save money.
  - Use social return on investments as well as financial – like the London bench-marking system
  - Measuring not just business as usual but unavoidable situations separately.
  - Look at off-grid solution as alternative to connection which would have very high carbon footprint.
  - Any ways of reporting back to customers on not using during peak demand.
  - Look more are enabling customers to reduce their carbon footprint.
  - Look at facilitating energy efficiency for customers to avoid CO<sub>2</sub> footprint of new connections.

## Questions

Q: Which are biggest priorities within carbon reduction?

- This would be useful information to enable comparison.
- Make the information comparable across all headings. Not some per mile, some per head etc.
- Go for outputs which will have biggest impact.
- Connectivity of embedded generation.

Q: Are you IS 14001?

A: Yes

Q: LTDs – difficult to take on board...

A: We are not allowed to speculatively invest.

Q: How much do you invest in CO<sub>2</sub> reduction? This needs to be transparent

Q: How much training do you do on sustainability?

A: Not much

## 3.6 Environmental performance - the low carbon economy

Director: Dave Openshaw

Facilitator: Pippa Hyam

### Possible output - Technology selection

- Short and long term issues for technology – One option is to encourage behaviour change by using technology to support change of times when people use electricity.
- Examples include a project in Sacramento, California where transponders are used in houses to automatically reduce or limit the amount of energy that appliances use. This evens out spikes and reduces demand. This could make for very complicated tariffs.
- DNO's are close to the source of demand and are well positioned to develop innovative approaches working with developers and suppliers.
  - *Measurement*: of innovation in this area could be include the number of collaborations on use of new technologies.
- CHP – is low-carbon; DNOs should be going out of their way to enable CHP- this won't replace other forms of energy but will be in addition to other energy services.
- Be more proactive; push CHP – Do not be a barrier
- What do you do in the summer? With heat storage this can be more flexible.
  - *Measurement* - Number of CHP connections
  - *Measurement* - Number of CHP without reinforcement.

### Storage

- Storage: domestic or regional? It would be possible to reverse electric car batteries to use as home store.
- Use of batteries, can also feed back to grid. – There is an example being tried in Norfolk by UKPN – there may be opportunities for heat storage too.
- Look at Hydrogen as a means of storing electricity. – This is seen as next stage of transition – the move from a low-carbon economy to a hydrogen economy.
- Storage (e.g. wind and PV batteries) – this has the potential solves your problems.
- Utilise your own property for generation eg. PVs on substations – This would be excellent PR. Use the electricity for auxiliary supply.
- *Measurement* - Using CO2 as a measure is very subjective to measure, you may find it difficult to be credible – use energy use instead.
- The cost of and availability of technologies are a long way away from being available to most customers.



Possible output - Investment choices to aid low-carbon devices and sources of generation; eg. electric vehicles and heat pumps

- Who provides Electric Vehicle charging points? incentives to developers.
  - *Measurement* - EV points is good measure as are others such as CHP connections and heat pumps.
  
- What are you doing that is innovative to facilitate the connections?
  - *Measurement* - The measure needs to be how you are enabling connections, the DNO should not be a constraint
  
- Who funds reinforcement? – Should it come from DNO and therefore society through charges?
- Is there work going on looking at charging technologies for EV's? Are these being looked at? Is this DNOs Job?
  - Talking to EV industry on design and operation issues charging system etc.
  - Smart Charging systems on the car; now or later?
  - Charging at a lower rate for longer – Role of DNO is engaging in this kind of technology.
  
- *Measurement*. It is difficult to measure an enabling role. – Try to quantify enabling measurers. What are the enablers?

Possible output - Maximising capacity headroom eg. electric vehicles and heat pumps

- DNOs need to ensure capacity for electric vehicles' are available and therefore costs should be largely socialised
- Regulator will force you down smarter route to enable generators to develop projects and not penalise them.
- How can you be ready to demonstrate what the market needs and be more generator friendly e.g. condition monitoring.
- By spending money now how much will you save in the future? – can't treat each new generation on a case by case basis because will get more and more expensive – if you don't do it now will cost more later.

Possible output – Non-network solutions

- Home charging – find ways of setting non-essential charging and tariffs.

- A lot of this is to do with tariffs but how much can you influence?
- Potential for tariffs getting even more complicated
  - *Measurement* - Is there a non technical customer measure
- Don't wait for customers to change their behaviour, you need to do this automatically e.g if you if you use X amount of electricity the supply will cut out.
- Smart meters – How do you get house holders to change behaviour?
  - *Measurement* - How you are working with suppliers could be measured in relation to smart meters and appliances.
- Can you find something innovative in terms of passing on saving from network reinforcement costs, How to measure savings? E.g. number of PVs connected, CO<sub>2</sub> saved, money saved.
- A DNO is only 16% of the bill so how much impact can that have?
- DNO is not visible to the customer – communication

Possible output - Network utilisation eg. electric vehicles and heat pumps

- Improving network load factor by advice (to get rid of peaks)
  - How people understand - could pay people to use power in troughs.
- Industrial users will find tariff changes very welcome.
- No-one is being penalised for over capacity. No charges for over capacity, nothing to incentivise demand management and reducing their capacity needs, manufacturing and engineering consultants over specify and have to design for excessive energy use.
  - Designing for peak demand and full occupancy (ie. over designing).
  - Part of the corporate social responsibility agenda
  - Responsive demand contracts – pricing structure to reduce this excessive capacity.

Possible output - Reduce constraints on distributed generation

- Currently it is very complicated needs to be easier and reliable needs to be more visible to developers on information that is needed.
  - Process needs to be simplified
  - Look at domestic PV as an example

Possible output - Increase network utilisation to accommodate low-carbon generation.

- Need kit that minimises transmission losses.
  - Network visibility needs improving

- Low loss transformers
- Without this it becomes more complicated. The cost of making the network viable should be socialised!

#### Other issues

- All CO<sub>2</sub> targets need to be achieved in next price control period – This will be very difficult.
- Being a positive force on talking about this.
- What would happen if DNO's were required to own and operate some of this technology?
- Would it have an impact on innovation and investment choices?
- Investing in CHP infrastructure because it is fuel neutral can work on gas and move to non carbon fuels.
  - Can't always be CO<sub>2</sub> neutral but it is a step in the right direction
  - Include CHP and CHP with gas because it is efficient.
  - Timeliness – getting it all ready to go. It's difficult to judge if you are too early or too late.
  - Cost to consumers. Get involved in green deal discussions.

### 3.7 Network availability and reliability

Director: Barry Hatton

Facilitator: James Martin-Jones

#### Existing output - Customer minutes lost (CML)

This is a sensitive issue.

There is a need to clarify what a “customer” is:-

- There should be a measure of what a customer is, based on the impact of the minutes lost.
- The economic and social impacts of CML should be measured (e.g. vulnerable people/care homes)
- Customers are not homogeneous.

#### Existing output - Customer interruptions (CIs)

The output itself is fine, but the downside is that no account is made of the impact on customers of short interruptions (less than 3 minutes). The number of these interruptions and how often they take place is not taken account of. The impact of these short interruptions on customers is often substantial, and their overall impact is often hidden. (3 other groups confirmed their agreement with this view).

An impact analysis on this and other outputs would give UKPN a better feel for what is going on. A structured sample could be used for this.

#### Existing output - Main fuse failure (EGS1)

- “Specified period” = 3 or 4 hours.
- There is an issue of when the event actually starts. This can depend on when customer reports it.
- More general point: how well do you understand the causes of failures?

#### Existing Output - 18 Hour restorations (EGS2)

- Aim for 12 hours restoration time.
- 18 hours for an average household seems very long time. 10 hours would seem more reasonable, as it is roughly half a day. This links back to the social and economic impacts referred to above.
- Informing customers of how long reconnection is expected to take is also very important.
- Beating this output time also reduces customer complaints.
- Is any measure taken of the impact of longer interruptions? This would be difficult to measure, but it would be interesting.
- It would be good to consider having different restoration time requirements depending on the customer – e.g. whether it is Canary Wharf or a village in Kent.
- LV takes longer than HV.
- It would be good to give customers time-banded information on how long it will take to respond.

#### Existing output - Multiple interruptions (EGS2a)

- These are a bug bear, as finding them and sorting them can take many months. The output should be around making/completing a valid repair.
- “One size fits all” doesn’t work here – it would be good for Ofgem to recognise this.

#### Existing output - Supply restorations where more than 5000 customers are affected (EGS2b)

- This is more representative of the effect of the power lost.

#### Possible output - A measure of “average” impact of a high impact/low profitability event

- HILP events are likely to happen more often in the future.

- Measuring these would help coordination with police and emergency services.
- UKPN has done some scenarios on this, but we are not allowed to distinguish between customers. At the moment, customers have to pay the extra costs of building resilience into their systems. But if UKPN builds in more headroom, especially where there is a special case (e.g. the City, the Olympics) – current regulations require Ofgem to claw funding back, it is considered that UKPN has overinvested.
- Cross subsidy is an issue. In UKPN's new business plan, domestic customers are separated from business customers. If there are separate tariffs, the issue goes away. It makes sense to recognise the different needs of different customers.

Possible output - A measure of the average number of customers who experience a loss of power supply for each fault.

- How about a measure of the number of customers for whom we have prevented loss of supply by taking pro-active action?
- Is the level of network reliability sufficient to make sure customers are happy? What do they think, given the cost/benefit balance?

#### Other issues

- We want UKPN (and others) to be good asset managers.
- It would be good to find ways of encouraging the right incentives for optimal distribution.
- If there are outages, customers may still be charged for downtime (because meters continue running when diesel generators substitute for central supply). They should be compensated for this.
- Most outputs tend to be short term. The load index is the one which is really important in terms of higher-level structural issues.
- Vandalism, theft etc – some measure of outages arising in this way would be valuable.
- Consider separating businesses from domestic customers.
- If customers have generators, they are not off supply when an outage takes place – but they should be compensated in these circumstances.
- Where contracted capacity is not used, customers still pay the full contracted cost. This should instead be reimbursed. This would impact on the load index. A measure of avoided reimbursement could be considered.
- Communications are key throughout all the outputs. UKPN has a Red Cross agreement, but 3<sup>rd</sup> parties are not informed, and the Red Cross cannot share this information as it is confidential.
- Be more pro-active on communications– does UKPN have sufficient capacity in-house e.g. to respond proactively e.g. to outages not caused by UKPN? There is currently no response/communication capacity in evidence.
- Joint resilience planning with local authorities etc. would be good.

- Some sort of review of UKPN's network resilience would be good – recommend considering the possibility of co-investing with other utilities (e.g. water utilities) in this.
- If UKPN tells customers what is happening, many of these outputs will take care of themselves.
- Consider a measure on communication.
- Provide more information at the local level, including future resilience assessments.
- More investment in the network would also help reduce UKPN's overall carbon footprint.
- Brown outs – circulating information on these in advance to customers would enable them to put the right measures in place.
- What about a measure of power quality? UKPN does monitor this, but not universally.
- Short outages can be as disruptive as long ones.
- How about a “health check” indicator? A measure of the condition of the network, monitoring and identifying preventable work (online for critical infrastructure?) reviewing cable assets, risk control etc.
- There is a gap between capacity contracted to supply and actual need.
- A lot depends on the segmentation of the market. The outputs were originally designed for the mass market, and have held up okay.
- Consider a measure focusing on minimising the gap between capacity and demand.
- Consider contracting into an information service on impending sun-spots.
- NB the implications of ongoing UK population growth.
- Consider a measure of readiness for the take-up of electric vehicles, heat pumps etc. At the moment the capacity is not there.
- Consider a measure of the consequences of disruption.
- Ring-maining the supply to virtually every substation would help reduce interruptions – but Ofgem is opposed to such investments at present.
- The reality of the way that utilities are increasingly configured is that staff are further and further away from where outages take place.

#### Comments - On secondary deliverables

A more local representation of the load index would be useful.

### 3.8 Company-specific outputs

Company-specific outputs were introduced to the stakeholders through a presentation and by answering two questions on a back of a postcard.

#### 3.8.1 Presentation

Following the Carousel working groups there was a presentation from Chris Glover- Head of Commercial Services. This focused on the issues relating to customer specific outputs and current measures and current performance were explained.

Street works was discussed and stakeholder views on how it can be included as an output were sought. To further the dialogue on customer specific outputs participant were asked to answer some questions on the back of a postcard.

The presentation was followed by questions and answers.

## Plenary

Q. Why do you separate works that are for road purposes, why are they not included?

A. The work we are doing in London is to try to treat them all the same; we are not opting out of this. We don't want to differentiate that is a fair point.

Q. The targets of 5 days and 10 days what exactly do you mean?

A. It is the time the trench is open - duration of the work.

Q. Percentage of first time reinstatement - what is it now?

A. About 95% in London. In the South East and East of England it is significantly lower.

Q. For the planned work how much of this is going to be on whether you inform other utilities?

A. Trench share is the Holy Grail; a great concept and when it works it works well. The bit we don't have right is that you have gas, electric and water companies who have their own timelines and they are reluctant to change their timelines to suit the others. It is something we can do and it could happen more often. There is that opportunity, the problem is getting people to move their timelines.

Q. How is RIIO going to effect this, what is the innovation change that is going to change this.

A. What we have to do is put forward under RIIO other company-specific outputs. Street works wasn't specifically aimed at RIIO. Our plan was to get this right in London then role it out across the regions.

A. It hasn't fed into RIIO and is something we have to look at

A. What we are keen to find out today is whether this is important enough to put in the RIIO framework, which is why we are discussing it today.

## Next Steps and Wrap Up

Keith Hutton concluded the workshop by briefly describing the next steps in the engagement process, and directing participants to the consultation website where they and their colleagues would be able to

add further comments on the outputs. Participants were asked to fill in a postcard with their thoughts on measuring engagement and an evaluation form which can be found in appendix 3.

## Engagement Postcards

The comments from the postcards are written below:

Are there any subjects that were not covered today that you wished to talk about?

- Joint Resilience Planning. Shared Investment Planning.
- Improved links for large/multisite businesses to contact account managers or similar at UKPN.
- Back up Power supplies/capacity fed from 2 different substation for commercial buildings.
- From my point of view I was able to bring up all the points that I felt were relevant with regard to vulnerable people and emergencies.
- None specifically - most items covered under discussions (main interest areas: customer service, network reliability and vulnerable customers).
- Sub-station, redundant buildings and land. Service head renewals and minor repair works to these after initial site surveyed.
- No.
- No all subjects were well covered. Good reaction from your customers' stakeholders.
- Disconnections
- No
- The event and outcomes were framed in regulation. What strikes me is a gap in where UKPN see themselves in 10+ years.
- No
- Process and procedures - how these appear to be difficult to understand, to obtain, and to fit the requirement.

How can UK Power Networks measure the quality of engagement activities such as this?

- Ensuring this is not a one-off events but work jointly with key-stakeholders to maintain communication through and beyond business planning cycles.
- Sample customer satisfaction questionnaire.
- Not sure.
- Attendance - not just numbers but a variety of players (not just the same faces). Additional interaction/ contributions (i.e. willingness of participants to complete online consultation for example).
- On line feedback.
- Through evaluation!



- Have all your key stakeholders attended? Did all who said they would attend do? Ofgem's reaction to you engaging with key stakeholders. This is first and only event I know of amongst DNOs.
- Ask me in one year if I think we have been heard.
- Whilst interesting to gain an insight over the three networks, I suspect that a 'London' focus group would provide a slightly different insight.
- How the engagement is used to successfully enhance plans and make improvements for both the customer and UKPN.
- Follow up meetings. Willingness to participate. Additional thought emails or events.
- Attendance and participation seemed pretty good. Follow up - do people continue to engage?
- The following day send out an email questionnaire; start to deliver on your commitments, then re-send questionnaire on a regular basis.
- Ask the customers what they think. Pick up the phone.

## 4 Summary of online consultation

---

### 4.1 Introduction

From 12 October to 1 December 2011 stakeholders had the opportunity to respond to an online consultation which gave people an opportunity to provide comments on the existing and possible outputs. The output materials that were available to people who attended the workshops were also made available online.

Stakeholders were asked to provide their opinions on existing outputs and possible new outputs proposed by UK Power Networks, as well as propose any of their own suggestions, for the eight output categories put forward. For the output regarding, Stakeholders were also asked to provide their opinion of network availability and the transition to a low-carbon economy within the output regarding network reliability and availability. The questions from the online consultation can be found in appendix 2. 21 stakeholders responded to the online consultation across all eight categories. Their views have been summarised below. A list of participants can be found in appendix 1.

### 4.2 Safety

Most stakeholders who discuss safety comment on the measurement of accidents. There are many suggestions for developing these outputs and there are several ideas for new outputs. A common new output suggestion is a measure of the frequency of near-miss incidents. However, one respondent feels that UKPN does not need any further monitoring of safety as they will already have their own internal safety policies:

“UKPN will have their own internal safety policies and reporting of incidents, plus the existing oversight of the HSE, CDM regulations, legislation, etc. If this is not enough regulation I'm not sure what would be.”

#### 4.2.1 Possible outputs

##### Number of safety incidents

This is an important output for many stakeholders, who feel that there should be a record of safety incidents involving both public and employees.

One stakeholder would like to know what will become of the statistics collected as a result of this output. There is concern that the complex monitoring system required to produce the statistics will result in cost being passed on to customers.

## Compliance with legislation

This is considered a beneficial output, especially if lessons are learned during investigations and these result in changes in working practice. It is thought by another stakeholder, however, that there should already be internal safety policies and that these should be sufficient. One stakeholder suggests that the risk-assessments and method statements are made more specific to a project rather than being generic.

### 4.2.2 New output suggestions for safety

There are many suggestions to implement an output which measures the occurrence of near-miss incidents. Stakeholders believe that a record of near-miss incidents and exposure to risk will help to reduce all accidents and provide valuable learning.

Reporting of potentially dangerous incidents is considered important by stakeholders. To measure this, it is suggested that the occurrence of site inspections revealing a potential hazard to the general public is recorded. This is considered important since it is seen as a preventative measure and a leading indicator. Stakeholders suggest that the aim should be to prevent an incident before it is too late.

“These preventative measures are better to track as they are a leading indicator. Once a member of the public is injured it is too late.”

Some respondents propose a measure of road traffic accidents related to work, suggesting that this should be broken down into how these accidents occur, such as low level of skill, lack of concentration or demanding timeframes.

One stakeholder highlights the effect that network age has in safety.

A few stakeholders would like to see a measure related to the level of safety attained during street works. A measure put forward is the number of street work complaints received relating to safety. One stakeholder states that UK Power Networks is better than some utilities at levels of safety achieved during street works, but the level of safety achieved does vary. It is noted that UK Power Networks responds differently to safety compared to some utilities.

“Provision of C2 records is exceptionally difficult & you offer no Plant Protection service (like BT, who will attend site & identify their assets), nor will you undertake a live or dead check like the gas industry.”

Other suggested measures are listed below

- Number of occasions where workers have been the victim of abuse either by property owners or road rage;
- Mean time between incidents;
- Ranking of incidents;
- Number of HSE investigations;
- Number of internal Safety inspections;
- Number of staff trained to National Examination Board in Occupational Safety and Health (NEBOSH).

## 4.3 Conditions for connections

### 4.3.1 Existing outputs

A number of respondents believe that the existing outputs should be retained, with the Guaranteed Standards of Performance being described as clear and easy to understand; however some stakeholders think they should be modified, with one stakeholder believing a Service Level Agreement would be more useful. One stakeholder highlights the importance of publishing these targets. One stakeholder suggests that there should be more cooperation between various providers, as some connections involve UK Power Networks as well as their competitors.

Some stakeholders suggest that whilst the Guaranteed Standards of Performance are suitable for domestic customers they are less effective in relation to large high value connections in London, as they are of relatively small value compared to the value of the project. Stakeholders feel that in complex connections requirements may change, leading to difficulty in assessing performance. One stakeholder states that connections in London are often fraught with challenges caused by cable congestion and other street works. One recommendation is disaggregation of output measures to reflect the needs of different customers. Another stakeholder points to investment incentives presented in the City Corporation's forthcoming Utilities Regulation and Urban Development study.

One stakeholder highlights concern that the distribution capacity in central London is highly constrained and may not meet future demand. They cite ongoing research commissioned by London First, the City of London and the City Property Association, which investigates this shortfall and whether it is being incorporated into investment programmes and incentives approved by the regulator. This research also looks at whether there is willingness to pay for higher standards of service and greater capacity.

#### Providing a connection

One stakeholder praises the Guaranteed Standards of Performance for success in reducing quotation times from 90 days, highlighting the importance of this for developers and suggesting this target be retained.

### 4.3.2 Possible outputs

A few stakeholders express general support for the possible outputs whereas others express more specific thoughts on individual outputs presented below. One stakeholder highlights the importance of good communication with customers and delivering on time.

One stakeholder recommends New Roads and Street Works Act requirements being included when planning works and advising customers, and believes that highway authorities should not be used as an excuse for not delivering to the customer.

## Competition

Some stakeholders support an output measure related to UK Power Networks' commitment to competition. One stakeholder suggests a simple rate comparison between DNOs, IDNOs and ICPs. One stakeholder questions whether a survey of UK Power Networks' competitors is likely to be objective, suggesting it would have to be carried out for all other District Networks Operators. This stakeholder also questions whether this is needed as it is under the jurisdiction of the Competition Commission, and that it is up to new providers to provide competitive offers.

One stakeholder highlights differences between the standards offered by UK Power Networks and the same site quotation from an IDNO or ICP, putting this down to differences in technical standards between UK Power Networks' three regions. They believe it is unfortunate that standards are moving towards that of the London region as they believe those in the East of England and South East England are better.

One stakeholder suggest that savings made by using alternative companies for connections are limited due to the complexity of the work, contestability and the need for interaction with UK Power Networks. They suggest that in Central London it would be better if UK Power Networks utilize a number of contractors, who would be subject to internal competition.

## Innovations

Whilst some stakeholders support incentivising innovations, they propose that it is the impact of these innovations that is important rather than the number of products. One stakeholder believes that customer satisfaction measures are sufficient. One stakeholder is unsure as to the exact meaning of the phrase "number of new products developed" and how it would be measured, but suggests that in terms of distributed generation, heat pumps and electric vehicle charging this could be measured against Greater London Authority targets, or the level of CO<sub>2</sub> reduction.

## Process time

A number of stakeholders support an output targeting processing time, with one stakeholder suggesting using the mean time to complete and order. Another supports using end to end processing because of its simplicity, stating that it gives customers much more clarity.

One stakeholder suggests outputs based on the "City Corporations proposals for improving the planning and management of connections in the Square Mile" including the duration of permit times per meter of plant installed reducing each year.

One stakeholder suggests that NTR quotations such as diversionary works should be included to ensure that all developer quotations are covered by a reasonable standard of service. They suggest that 25 working days for low voltage, and 35 for high voltage would be appropriate, and that this would put UK Power Networks in a good position should Ofgem enforce this measure in future.

One stakeholder suggests that major property developers in London would be willing to pay more for their connection if they could be provided more quickly. They also encourage UK Power Networks to invest in additional capacity on the network and spare ducts in anticipation of future use, suggesting that insufficient capacity is currently delaying developments.

## Value for money

Whilst some stakeholders support an output to incentivise value for money, they also question how it could be obtained in a meaningful way as people's definition of value will differ. One stakeholder is unclear as to whether these apply in all cases or would only relate to aspects where the customer has no choice of provider. This stakeholder also highlights that customers don't always have a proper understanding of the cost of the service and the pricing structure that UK Power Networks is working with, and that it would be more useful to have a pricing structure that is clearer so that comparison with other DNOs is easier for customers.

One stakeholder believes that the expense of a quotation is often problematic for developers, suggesting that there is feeling that UK Power Networks are held to ransom by their contractors once they have a contract in place. This stakeholder suggests that contractors pricing must be more transparent, and that all quotations come with a more detailed breakdown of the cost so that they can be more easily challenged.

## 4.4 Customer satisfaction

There are mixed feelings about the existing customer satisfaction outputs and generally positive comments regarding the possible outputs. Further suggestions for improvement are also given. The importance of customer satisfaction is expressed by stakeholders as it impacts on the consumers that they deal with on a day to day basis. Stakeholders feel that the telephone survey should be phased out and replaced with online mechanisms. There is a desire from stakeholders for UK Power Networks to consider differently the various types of customer that UK Power Networks serves.

### 4.4.1 Existing outputs

#### Telephone survey

Most stakeholders who comment on the telephone survey do not support it and believe that more modern solutions should be adopted. Stakeholders feel that the telephone survey, which relates to a whole year's performance, is difficult to answer wholly since it is not possible to remember individual events. In addition when called for a telephone survey, stakeholders with many connection projects find it difficult to know which connection is being discussed. An alternative online method is desired by stakeholders, which clearly states the project. One stakeholder recommends a prompt, quarterly or twice a year to update an online survey which is analysed yearly, suggesting it would provide a good indication of customer satisfaction.

One stakeholder feels that the telephone survey should be kept and asks whose decision it is to phase it out.

## Broad Measure of Customer Satisfaction (BMoCS)

Stakeholders generally feel that the BMoCS measure is useful and should be kept. A few stakeholders feel that some aspects need updating with some suggesting that the telephone section should be replaced. Consistency and comparability with other DNOs is important to one stakeholder.

### 4.4.2 Possible outputs

Stakeholders are generally positive about the inclusion of these possible outputs but there is further discussion as to the precise impact that these will have.

#### Updating of BMoCS

Stakeholders see this output positively and are keen that it is implemented. One stakeholder enquires as to what this would add and hopes that it isn't going to become an excuse for poorer service compared to other DNOs.

#### New customer services

A few stakeholders are concerned that the focus here is on the numbers rather than the advantage of the new services to the customer, and that too many slightly differentiated services could be counterproductive by confusing the customer.

“The risk would be lots of new, subtly differentiated services being introduced to get a good score against this measure, but leading to a complicated and confusing offer to customers. That would be counterproductive“.

### 4.4.3 New output suggestions for customer satisfaction

Some stakeholders suggest measuring the value for money of the service, with one stakeholder recommending linking the level of customer service to the price.

A few stakeholders feel that the outputs should recognise the variety of customers that UK Power Networks serves and that customer needs vary according to factors such as type, size and location. Some stakeholders suggest that local authorities, developers and homeowners should be targeted separately, stating that this will have the additional benefit of altering the precedence of service that different customers require.

Other suggested measures are standard of workmanship and asking whether customers are satisfied with the way UK Power Networks is leading the industry in the adoption of renewables.

## 4.5 Environmental performance - environmental impact of our operations

Stakeholders feel that these outputs should be retained but there are some suggestions to develop them further. The output related to undergrounding in Areas Of Natural Beauty is a particular concern since stakeholders feel that this measure should not be limited to designated areas. Some stakeholders

ask that measures of environmental performance are provided within the specific area of a customer and not just as a general UK-wide view. One stakeholder believes that environmental issues should be widened out to the whole sustainability agenda.

Other points raised relate to biodiversity and the impact on wildlife, and the carbon footprint required to produce the products in the operations.

#### 4.5.1 Existing outputs

##### Business carbon footprint

This output is considered to be too broad by stakeholders, who feel that within the business carbon footprint, all greenhouse gases and not just CO<sub>2</sub> need to be considered as these are often more harmful to the environment. Other suggestions of measure include documentation of the number of kilometres driven by company vehicles and the CO<sub>2</sub> reductions attained through connection of low-carbon technologies.

##### Overhead line removed from AONB

Stakeholders feel that this output needs to be updated. They feel that the removal of overhead lines should not be restricted to designated areas, but instead all areas of high visual amenity as there is blight to communities in many areas. Stakeholders specifically mention wide open areas and urban environments.

“The output should be modified to prioritise undergrounding where the impact is the highest.”

A few stakeholders raise the point that undergrounding transmission lines has its own environmental impacts, such as on archaeological deposits, and this should be included in decision making. According to one stakeholder the potential damage to the flora and fauna whilst undertaking groundwork also needs to be considered. There is a suggestion for engagement with environmental bodies such as English Heritage to assist with minimising the environmental impact associated with undergrounding.

#### 4.5.2 Possible outputs

##### Technical losses and non - technical losses

One stakeholder agrees that it is useful to split the losses into technical and non-technical losses. A few stakeholders support an output for technical losses suggesting it would promote investment in efficiency. One stakeholder does not support the implementation of the output relating to non-technical losses but no further information is provided.

##### Volume of oil lost and effectiveness of prevention of oil loss

Some stakeholders believe that the outputs relating to oil loss should be combined into one output.

One stakeholder believes that reduction in the volume of oil lost should be done anyway and there doesn't need to be an output relating to this. It is also believed by stakeholders that that there should be



a measure relating to the effectiveness of investment in reducing oil loss, since it will lead to an improvement in infrastructure.

One stakeholder highlights an innovative method of removing oil from oil-filled cables and cleaning cable voids in situ, believing it may be of interest to UK Power Networks.

One stakeholder is concerned over oil leakage because of the PCBs oil contains.

### **Volume of SF<sub>6</sub> lost**

There is mixed support for this output. Others see it as an important issue though there is desire for a more inclusive approach to greenhouse gases. One stakeholder wants to see this output implemented due to the high global warming potential of SF<sub>6</sub>. One stakeholder states that whilst they do not know the full extent of the SF<sub>6</sub> issue, they see the measures proposed on this as sensible.

### **Reduce waste**

There is a recommendation from one stakeholder that measures relating to the recycling of materials should be included and that this could also be extended to the procurement of natural resources locally where available.

There is concern from one stakeholder that only excavation and water use are mentioned in relation to natural resources and that there are many other examples. Instead, a broader measure is suggested such as working towards an accreditation such as ISO 14001, and a report on a wide range of these aspects as part of corporate social responsibility.

One stakeholder mentions that his company measures the percentage of soil taken to landfill:

“We also measure the percentage of spoil taken to landfill and our end target is to reduce this to zero (currently in the region of 5%) of spoil taken to landfill.”

### **Mitigate flooding**

The mitigation of flooding is considered important but there is desire to ensure that this is brought about in a sustainable manner. There is support for this measure by one stakeholder who reasons that it will bring about resilience of assets.

Further detail is given by one stakeholder who believes that it should not simply be a measure of the number of enhancements. Instead, the measure should be relative to the number of installations at risk. They recommend that it could be an annual measure of the percentage of infrastructure in a flood zone and the percentage of infrastructure which does not have flood protection measures in place. It is also suggested that this ought to be linked to climate change adaptation planning.

### **Reduce environmental incidents reportable to the Environmental Authority**

One stakeholder supports this output whilst another does not. No further details are provided.

## Development of existing output - overhead line removed from AONB

There is confusion for some stakeholders as to what this output adds over the existing output regarding overhead lines in AONB. Stakeholders raise issues regarding the limitation of the output to designated areas, with some wanting areas outside designated areas to be considered whilst accepting the subjective nature of this approach.

### 4.5.3 New output suggestions for environmental impact of our operations

One stakeholder recommends that cradle to the grave reporting of CO<sub>2</sub> emissions is be calculated. It is felt this will reflect the true environmental cost of the energy supply provision, transmission and distribution.

Other suggested measures are listed below

- The number of environmental complaints received;
- Carbon footprint of offices and project sites.

## 4.6 Environmental performance - the low carbon economy

There is strong overlap in many of these outputs, with stakeholders combining their points of view across a few outputs. For one stakeholder the outputs which link optimising and increasing network utilisation to low-carbon generation are welcomed, as is the output to reduce constraints on distributed generation. The need to reinforce the network capacity is seen by stakeholders as important so as not to undermine the success of these other outputs. One stakeholder suggests a new output regarding optimisation of operations and land, and is happy for this to take the form of regulatory changes.

### 4.6.1 Possible outputs

#### Reduction of CO<sub>2</sub> emitted through investment choices

Stakeholders agree that this is a good output measure. It is believed by some that measuring the amount of CO<sub>2</sub> saved by investment choices will assist customers in making low CO<sub>2</sub> decisions. There is however concern over how this CO<sub>2</sub> will be measured; one stakeholder feels that it would be difficult to measure the direct cause of CO<sub>2</sub> savings.

#### Enabling low-carbon connection e.g. number of electric vehicle charging points

Stakeholders generally feel that this output needs development, with one considering the current measure too simplistic. It is felt by one stakeholder that there are too many factors which may influence the number of charging points or distributed generation connections, for example the affluence of an area, government funding for a certain technology or the suitability of an area for certain renewable technologies. The measures regarding maximising capacity headroom are thought to be potentially more successful by one stakeholder.

## Maximise capacity headroom for cost effective connection of low-carbon technology

A number of stakeholders highlight the importance of this output. Out of the possible measures listed for this output it is thought that the final point (number of distribution generation enquiries subsequently provided by UK Power Networks) would be most suitable since it reflects the implementation of enquires. The measure involving the number of distribution generation enquires received is not considered a measure of performance by stakeholders but a measure of demand. The other possible measures are considered difficult to calculate consistently and fairly.

### Non-network solutions

There is a mixture of feelings about this output with one stakeholder agreeing to the proposed measures and another disagreeing, but no further information is given.

### Optimise network for CO<sub>2</sub> reduction

Stakeholders agree with this output but would like to know what this would mean to a layperson.

### Reduce constraints

There are mixed feelings regarding this output. A few stakeholders agree to the proposed measure whilst one disagrees, however no further information is given.

### Increase network for CO<sub>2</sub> reduction

A few stakeholders agree with this output though there is concern that this measure is too broad. One stakeholder feels that UK Power Networks should investigate whether there is a clear benefit for increasing incentives for switching off major loads at peak times. There is also confusion as to the difference between this output and the optimising network for CO<sub>2</sub> output.

## 4.6.2 Further issues

UK Power Networks' work in this area is appreciated by one stakeholder who believes that it will explore how new technology, operating and commercial arrangements will be explored to meet the demands of the low-carbon economy. This stakeholder offers to work with UK Power Networks to understand the demands that UK Power Networks will face and how they will be addressed in the future.

One stakeholder feels that land and buildings owned and operated by UK Power Networks should be fully exploited and that distributed generation or storage occurs under the same connection rules. This is to ensure that the processes for connection and operation are optimised.

## 4.7 Network availability and reliability

Network availability is an important issue for many stakeholders, with many of them expressing support for all of the existing and secondary outputs. Furthermore, one stakeholder suggests that they should be made more visible to stakeholders.

Some stakeholders also highlight the difference between regions; that outputs should reflect local constraints and also draw attention to different valuations that customers place on resilience, for example large financial institutions. One stakeholder suggests that major central London businesses are willing to pay for a higher standard of service, and UK Power Networks should be incentivised to provide products to meet various customer demands.

One stakeholder suggests that UK Power Networks needs more intelligent ways, other than calls made to call centres, of determining which customers are affected by major losses and that they should be proactive in contacting customers in these circumstances.

One stakeholder highlights the fact that some business users with large electricity loads continue to reserve more capacity than they require, which can often go unused, and that UK Power Networks should research how to best maximise utilisation.

#### 4.7.1 Existing outputs

##### 18 hour restoration (ESG2)

A number of stakeholders support the existing 18 hour restoration output, with suggestion that with increased investment in remote technology and multi-fed networks, this should over time be reduced to eight, four and zero hours. One stakeholder highlights the importance of this output in relation to emergency planning, as it is useful to raise awareness of Business Continuity Management as well as in efforts to assist vulnerable people.

##### Customer interruptions

There is mixed support for the output relating to customer interruptions, with one stakeholder suggesting it is too broad and could be dropped. One stakeholder suggests that it should take into account the number of people affected by the incident. One stakeholder suggests an output measure to account for the number of short interruptions of less than three minutes, whilst another highlights the large impact that shortages of just a few seconds can have on a business.

##### Customer minutes lost

One stakeholder suggests that the 'Customer minutes lost' output is a clear and simple measure that is customer-focused and therefore should be retained. One stakeholder suggests that it should take into account the number of people affected by the incident.

##### Load index

One stakeholder suggests that the load index measure should be disaggregated as capacity has different values at different points of the network, expressing concern over the lack of capacity in the London Central Activities Zone.

##### Main fuse failures (ESG1) and restorations impacted by severe weather (ESG11)

One stakeholder highlights the importance of main fuse failures and restorations impacted by severe Weather in relation to emergency planning, as it is useful to raise awareness of Business Continuity Management and in efforts to assist vulnerable people.

#### 4.7.2 Possible outputs

There is support from stakeholders for output measures to minimize the effect of High Impact low Probability (HILP) events. One stakeholder suggests that this cost could be borne by the users of the network and that residential and business tariffs should be separated, especially in the City and Westminster where the main beneficiaries of this are located. This stakeholder also suggests that whilst there is support for businesses contributing to the cost of this, there is currently no equitable way of determining how much they should contribute.

#### 4.7.3 New output suggestions for network availability and reliability

- Number of recurring events;
- Percentage of network that is automated;
- Age profile of assets;
- Number of 'hot spots' on network and how long present;
- Number of customers at risk from 'hot spots';
- Number of un-repaired faults on network;
- Available equipment to repair major faults (e.g. cable supplies);
- Faults per primary substation.

#### 4.7.4 Further issues

There is wide support amongst stakeholders for increased investment in the network to accommodate localised generation and decentralised energy, with some highlighting Greater London Authority targets. Some stakeholders believe the use of CHP and biomass are both due to increase and that Ofgem's criteria should change to allow UK Power Networks to fund this. To incentivise this, some stakeholders recommend that the amount of capacity connected to the network should be measured. Other suggestions made by stakeholders are the number of installations or types of generating source, or the peak load requirement, whilst another suggests monitoring this via import/export metering. One stakeholder highlights the extra capacity and accessibility needed to service a higher number of small scale generators.

Also on the issue of connecting decentralised generation, concern is raised by one stakeholder of the difficulties for non-specialists in understanding which areas are likely to be easy to join generating capacity to, and more information on this should be published and made understandable to lay organisations. This stakeholder suggests a measure of satisfaction or the proportion of successful applications.

Demand management is an area discussed by a number of stakeholders, with suggestions for measuring the use of smart grid technologies, and the capacity to undertake large scale smart meter installation. One stakeholder suggests that domestic consumers are likely to retain very high standards of availability and reliability, resulting in a large amount of required network reinforcement and demand management, and that an output will be needed to measure this. This stakeholder also suggests that comparisons with other DNOs would be useful, and could allow for the varying take up of electric vehicles and electric heating in different regions. Also on the subject of electric vehicles and heating,

some stakeholders suggests measuring the availability of electric vehicle charging points, however another stakeholder highlights the uncertainty over the uptake of electric vehicles and electric heating .

One stakeholder highlights the vulnerability of communities in Essex who are served by electricity alone and lack access to services and support if they have no power. This stakeholder suggests that although enhancing the resilience of the network could be costly in these circumstances, they could be integrated as 'service' functions and absorbed partially through profits and partially through billing.

## 4.8 Social obligation

### 4.8.1 Existing outputs

All stakeholders agree that the existing outputs should be retained; however one stakeholder feels that, whilst the sentiment looks right, they should be updated to include a more proactive position.

### 4.8.2 Possible outputs

Whilst there is generally support for both of the possible outputs put forward, one stakeholder doesn't see them as being required.

Overall there was support for reducing the impact of street works and a number of suggestions for achieving this. One stakeholder suggests that the targets presented at the stakeholder workshop should be fully reflected in the outputs, whilst another suggests measuring the average time taken to complete fault repairs. Innovative working methods are encouraged by some stakeholders, with one suggesting measuring the length of cable installed using directional drilling.

Better liaison is important for some stakeholders, with development site managers, the Highway Authorities and other utilities, and also with councils in the area of information provision to local residents. One stakeholder expresses support for the City of London's Considerate Contractor Scheme.

Whilst some stakeholders express support for output measures related to vulnerable customers, some are unsure as to how this should be measured. One stakeholder suggests measuring the value of customer social interaction, or the value of impacts upon them. Another stakeholder cites community engagement and charitable giving, and also cites staff and supply chain as important stakeholders and asks how their "health" should be measured.

## 4.9 Company-specific outputs

There is support from stakeholders for both of the suggested outputs put forward under company-specific.

#### 4.9.1 Possible outputs

##### Working with others

One stakeholder suggests that there should be an incentive or duty to encourage working with others and that this duty could be used to contribute to the National Underground Assets Group, or as street works cumulatively weaken road surface, it should be used to compensate the Highway Authorities. Another stakeholder agrees with this sentiment, suggesting that UK Power Networks take responsibility for the standard of repairs to roads and paths.

One stakeholder expresses concern that any sharing of reinforcement costs between with developers must be transparent, as there is suspicion of UK Power Networks reinforcing its network at the expense of developers. This stakeholder suggests taking a developer representative to take capacity readings at substations.

A suggested output from one stakeholder is the number of projects delivered as a result of integrated planning with local authorities and other utilities. Another stakeholder suggests measuring the cost reduction through collaboration.

##### Stakeholder engagement

Although there was broad support for an output to measure stakeholder engagement, there were some concerns from stakeholders. One stakeholder suggests that a simple measure of the number of stakeholders consulted may result on merely paying lip service to stakeholder engagement, whilst another questions UK Power Networks' ability to maintain good stakeholder relations in the midst of large redundancies and retirements.

#### 4.9.2 New Output suggestions for network availability and reliability

One stakeholder suggests measuring the number of projects carried out in sensitive areas, suggesting Sites of Special Scientific Interest and Central London.

## 5 Summary of interviews

---

### 5.1 Introduction

Ten interviews were held with stakeholders who were unable to attend the workshop. Stakeholders across a range of sectors were contacted by phone and invited to take part. The aim of the interview was to discuss one or two categories of output of the interviewee's choice in depth.

The aim of the interview was to focus on one or two output categories; however the interviewer endeavoured to capture all that the interviewee was willing to discuss.

Subsequent questions followed the format of the workshops and website, being split into the following three sections:

- Existing outputs;
- Proposed outputs;
- Additional comments.

A facilitator from Dialogue by Design and the regulatory framework and engagement manager for UK Power Networks carried out the interviews. During the interview, questions were asked by the interviewer on the chosen categories and the responses recorded. The responses were then sent back to the interviewee for review to ensure that all comments were captured correctly. The transcripts were then amended accordingly.

A full list of the questions can be found in appendix 2. A list of participants can be found in appendix 1. The summary below lists only the questions to which interviewees responded

### 5.2 Regional issues

No stakeholders chose to answer the question on regional specific issues

### 5.3 Safety

#### 5.3.1 Question 1a: Please give us your views on possible output measures that should be included for Safety.

Two stakeholders answer this question and put forward suggestions for improvement. One stakeholder asks that the measures cover all aspects of UK Power Networks' activity explicitly, for example street works. The other stakeholder asks that there is more, detailed data provided from UK Power Networks regarding emissions from substations. This would be useful since it would assist in making decisions on



the inclusion of extra cladding to protect the customer. Provision of information regarding the location of assets is also requested.

### **5.3.2 Question 2: Do you have any additional comments on measures related to Health and Safety?**

Two stakeholders comment on this question with both highlighting UK Power Networks' good safety record. One stakeholder highlights a problem they have had delays in obtaining a disconnection due to a lack of communication, using an example of squatters in a large building. This stakeholder suggests that the system needs to be much more efficient as the developer is reliant on UK Power Networks.

## **5.4 Conditions for connection**

### **5.4.1 Question 1: Do you believe that Guaranteed Standards of Performance and Licence Condition 15 should be retained (subject to consultation on the precise definition of the various standards)?**

One stakeholder responded to this question. They suggest that it is too soon to judge whether the Guaranteed Standards of Performance have had a positive effect on DNOs performance. They also highlight that this information is not made public in a timely enough manner, and that it should be noted that local government are moving away from this kind of target driven approach.

### **5.4.2 Question 2b: Do you believe that an Output measure based on value for money would be useful? If so, how might value for money be assessed?**

Five stakeholders responded to this question. They are all of the view that an output measure based on value for money would be useful, however some suggest that creating a meaningful measure would not be easy, and that whilst money is an important consideration, quality and timeliness of service are also important and that they would be prepared to pay more for an improvement in these areas.

Two stakeholders state that they would like more transparency in how a quotation is arrived at, one of them highlighting an annual price rise in street lighting being explained by increased cost in civil works, when in their experience the cost of civil works had fallen. One stakeholder wants to see competition in achieving a price. Another puts forward comparisons between DNOs.

One stakeholder suggests measuring how many people go with independent connections providers, and questions whether this matters to UK Power Networks as they still have involvement, and also obtain the network and assets. Another suggestion put forward is a measure based on payment terms, as they believe the current terms are unacceptable.

One stakeholder criticises the quality of street works carried out by UK Power Networks and also a lack of communication with local authorities, citing a and example of a pavement relayed to local authority specifications which UK Power Networks would not work on it as it would take too long to cut through.

#### **5.4.3 Question 2c: Do you believe that Networks Companies should be measured on their commitment to the introduction of competition? Can you suggest suitable measures that could be applied?**

Five stakeholders responded to this question. Two stakeholders suggest automatically showing contestable and non-contestable elements on a quote. One stakeholder questions measuring UK Power Networks' commitment to competition, suggesting that evidence of real competition is more important, they suggest that market share could be used a measure, and that in terms of progress to full competition, progress should be measured on the introduction of competition to specific activities or services. This stakeholder also believes the existing arrangements between UK Power Networks, the Local Authority and Independent Connections Providers, should be replaced by agreements between just UK Power Networks and the Independent Connections Providers, moving forward to a London wide framework agreement between them.

The ability to compare companies like for like is important for one stakeholder, whilst another suggests league tables showing how many times independent companies have been used. One stakeholder suggests measuring the occurrences where customers carry out the work themselves.

#### **5.4.4 Question 3: It might be possible to improve the timescales for delivery of some Connections if there was additional investment in the underlying infrastructure to create greater spare capacity. Would you be in favour of such an investment policy in areas where there is particular pressure on the delivery of Connections due to capacity constraints?**

Three stakeholders responded to this question. One stakeholder suggests installing smart meters in substations to monitor the network and see where spare capacity is. They also suggest measuring the number of connection enquiries that are completed, and whether it is with UK Power Networks or an independent provider. One stakeholder suggests renewing the cable infrastructure in Central London as it is often in poor condition, and that this leads to faults. One stakeholder was not aware of any examples of constraints in capacity resulting in difficulties delivering connections.

#### **5.4.5 Question 4: Do you have any additional comments on measures related to the delivery of Connections?**

Six stakeholders responded to this question, a number of which highlight the importance of giving customers more certainty over the length of time to deliver part of a connection. One stakeholder particularly highlights the amount of time it takes to get their money back if the initial estimate proves to have been too high. One stakeholder criticises the amount of time taken for UK Power Networks to gather relevant information, before passing the project on to an engineer. A number of stakeholders comment on their difficulty in getting through to the right contact, whether to discuss quotes, or enquires where they need to speak to an engineer. A number of stakeholders suggest that having an account manager would help with this problem.

One stakeholder highlights the importance of cooperation and the mutual benefits available to both Local Authorities and DNOs, attributing this to similar timeframes and a dependency between spatial planning and infrastructure planning.

One stakeholder highlights street works and lane rental, suggesting this is a bigger issue at the mayoral/Transport for London level than at local authority level, and that there is conflict between the encouragement of working out of hours, and residents' desire for quiet evenings and weekends.

One stakeholder suggests that UK Power Networks takes more responsibility for the actions of its predecessors, pointing to the example of cables being laid too close to the road surface which had to be resolved at the expense of the stakeholder.

One stakeholder cites that because their local grid infrastructure is very constrained and often needs new substations or bespoke solutions, they are exposed to greater costs. This stakeholder believes that local authorities and developers should not bear the cost of an ageing network.

## 5.5 Customer satisfaction

### 5.5.1 Question 2a: Please give us your views on possible output measures that should be included for customer satisfaction.

The two stakeholders who respond to this question are generally dissatisfied with the current level of customer service and they both provide suggestions of outputs and improvements to customer service. The lack of control over connections is mentioned by one stakeholder who believes it impacts on their reputation with customers. It is felt that communication needs to be improved and UK Power Networks should meet the agreed connection times as this has resulted in a loss of confidence in UK Power Networks. Street works are listed as an area which needs to have increased and better communication, with one stakeholder suggesting that UK Power Networks often focus too much on the contractor and not the client. One stakeholder also feels that UK Power Networks are not proactive enough, suggesting that rather than looking for creative solutions they instead provides reasons not to carry out tasks.

### 5.5.2 Question 2b: What elements do you believe should be included in any Measure of customer satisfaction? What weighting should be given to the different elements?

One stakeholder comments on this question stating that to be comparable with other suppliers UK Power Networks should be liable for damages for non-performance in a contract.

### 5.5.3 Question 2c: Do you believe that Networks Companies should be measured against other companies offering comparable services e.g. other utilities?

There is agreement from two stakeholders that this approach should be taken. One stakeholder finds the monopoly approach that utilities adopt problematic, and believes that the comparison should be with other similar contractors and suppliers not just the other utilities.

### 5.5.4 Question 2d: Do you believe customer satisfaction measures should take account of the specific priorities of customers in the region, or do you favour a generic UK-wide survey?

There is a mixed response regarding this as one stakeholder feels that customers are reasonably generic and it should therefore be UK-wide. Another stakeholder feels that a survey should include

some geographic-specific questions as London has specific issues due to the sheer amount of power that it consumes per square metre.

#### **5.5.5 Question 2e: Do you believe that there should be a specific output measure related to the introduction of new services to customers?**

One stakeholder responds to this question. They suggest that there should be a measure regarding communication with new connections customers and the highways authority. They also state that there should be stronger communication between utilities and local authorities so that road surfacing can be done after new connections are put in. They suggest that this could be achieved by letters being delivered to a street and asking customers for intentions over the next 12 months.

#### **5.5.6 Question 3: Do you have any additional comments on measures related to customer satisfaction?**

Two stakeholders responded to this question. One stakeholder has found that UK Power Networks has a much more positive attitude than EDF. They find it refreshing that there is engagement in this way and hope that even if it doesn't always translate on the ground it will get the message through to frontline staff. The other stakeholder feels that UK Power Networks can be responsive but there is a lack of resources for bespoke solutions, and that it is difficult to speak to the correct people on the phone. They would also like to see UK Power Networks being more responsive to customers needs and being flexible with solutions.

### **5.6 Environmental performance - impact of our operations**

#### **5.6.1 Question 1: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.**

The two stakeholders who responded to this question were both keen for the retention of the output involving removal of the overhead infrastructure in Areas of Natural Beauty.

#### **5.6.2 Question 2a: Which of the possible alternative output measures would you like to see included as measures of the environmental impact of Networks Companies?**

Three stakeholders commented on the possible outputs. Of these, two were focused on the removal or overhead infrastructure suggesting that other classes of landscape are also included. One stakeholder feels that undergrounding should be the default for new infrastructure and would be supportive of undergrounding existing overhead infrastructure where the opportunity arises. One stakeholder highlighted the quality of engagement that EDF took on overhead lines and asks that this approach is taken again with the inclusion of Ofgem and Natural England.

One stakeholder states their support for the output relating to the number of incidents reported to the Environmental authority.

### 5.6.3 Question 2b: Would you suggest any modifications, or additions, to the possible outputs?

Two stakeholders responded to this question. Within the technical losses output it is suggested that a measure which improves the use of energy and reduces losses is added. It is hoped that this is implemented before adding capacity to the network.

One stakeholder suggests that the outputs relating to oil loss are modified to be a more environmentally friendly solution, suggesting the impact on the area be taken into account.

One stakeholder feels that the output measuring reduction of the use of natural resources should be included.

It is felt by one stakeholder that the outputs relating to the removal of the overhead infrastructure in AONB is retrospective and there should be outputs relating to new overhead lines suggesting a measure of the percentage of the overhead infrastructure to be buried.

### 5.6.4 Question 3: Do you have any additional comments on measures related to environmental impact?

Two stakeholders responded to this question. Issues that are raised again are street works and overhead infrastructure in AONB. It is felt that no overhead infrastructure should be present in AONB instead it should all be underground. One stakeholder feels that UK Power Networks should take the initiative and start having quarterly meetings with local authorities and other utilities to discuss minimising street works disruption and trench sharing. They state that this already occurs in some areas.

## 5.7 Environmental performance – low-carbon economy

### 5.7.1 Question 1a: Which of the possible output measures would you like to see included as measures of the effectiveness of Networks Companies in facilitating the low-carbon economy?

Four stakeholders answer this question. There are conflicting opinions regarding the implementation of electric vehicle charging projects with one stakeholder believing that their introduction would stimulate the uptake of electric vehicles, with another unsure that electric vehicles in their current form would take off. Both of these stakeholders are supportive of UK Power Networks taking the lead in rolling out the charging points but according to one stakeholder it is not considered appropriate to incorporate charging points in town centre developments.

Reduction of CO<sub>2</sub> emitted through investment choices is considered an important output and one stakeholder feels that any organisation should be transparent on this point.

One stakeholder states their support for all outputs except the output to reduce constraints.

### 5.7.2 Question 1b: Would you suggest any modifications, or additions, to the possible outputs?

One stakeholder responds to this question. They express concern that the output which aims to reduce constraints on the distributed network will place constraints on generation and that if there is going to be constraints on generation, UK Power Networks should minimise these and work with embedded generators. They would also like specific solutions rather than a general approach to maximising low-carbon generation.

### 5.7.3 Question 2: Do you have any additional comments on measures related to the low-carbon economy?

Four stakeholders chose to answer this question. There is a concern from one stakeholder that the infrastructure for charging electric vehicles would increase clutter on the streets.

There are suggestions from one stakeholder to incentivise low-carbon generation through faster connections and lower connection charges, they also suggest that less green schemes could be penalised. It is felt by a few stakeholders that UK Power Networks could have a greater role in educating small and medium enterprises on the implications of low-carbon technologies. One stakeholder highlights one local authority which now encourages and sometimes requires low-carbon development, and they feel this is a concern for small and medium enterprises since they have a lack of knowledge on the technologies.

Problems involving the connections are highlighted by one stakeholder who is currently part of two projects involving the connection of low-carbon generation. One of the problems is that as their CHP is connected to the network, if it is stopped there needs to be a call to UK Power Networks to authorise the connection, but as the energy centre will be unmanned, this will prove problematic. A new measure which involves UK Power Networks working more creatively with people on developing solutions to non-standard situations is put forward. It is felt that there is this same need for a more creative approach in the Connections outputs.

Timing is another new suggested output. One stakeholder feels that UK Power Networks does not respond until very close to their standard deadline. It is suggested that UK Power Networks could adopt a mechanism to flag up distributed generation projects, so that they are treated differently, rather than problems slowly emerging in lengthy communications. This suggestion comes as a result of prior experience when a quote was received for a project and this was then revised to four times the initial cost.

## 5.8 Network reliability and availability

### 5.8.1 Question 1a: Which of the existing outputs do you believe should be retained for the next regulatory period?

One stakeholder answered this question stating that whilst happy with the existing outputs they do not know enough to comment further.

### **5.8.2 Question 1b: Do you believe that any of the existing outputs should be modified in some way? If so, how?**

One stakeholder responded to this question. They state that if they are disconnected, it is up to them to contact UK Power Networks to find out when reconnection can happen, resulting in repeated phone calls, and that they would like UK Power Networks to take responsibility for informing them of when they can reconnect.

### **5.8.3 Question 1c: Do you consider that the target of 18 hours for restoration (EGS2) should be retained? If not, what should it be changed to?**

Three stakeholders responded to this question, with all three agreeing that 18 hours is far too long. One stakeholder highlights vulnerable customers suggesting that the time of year is relevant and could be included, they put forward 6 hours as more reasonable in winter. One stakeholder suggests that standard business hours could be factored into the measure, although they accept that there are many 24 hour businesses.

### **5.8.4 Question 1d: Do you consider that three interruptions in a year is the appropriate threshold for a failure under EGS2a?**

Two stakeholders answered this, both agreeing that three interruptions are too many and that the threshold should be two.

### **5.8.5 Question 2b: Are there any additional outputs that you would like to suggest?**

Two stakeholders responded to this question. One stakeholder suggests that UK Power Networks takes responsibility for building and locating substations, rather than waiting for a developer to approach them. One stakeholder suggests an output to target planned interruptions, highlighting good communication, reliable estimates for reconnection, and planned downtime to be out of hours as far as possible.

### **5.8.6 Question 4: Do you believe that additional outputs should be included which reflect the availability of the Network and specifically its ability to accept electricity generated by small-scale generators?**

One stakeholder responded to this question. They agree with question proposition and suggest that to facilitate this process UK Power Networks need closer relations with their customers, they suggest annual workshops on small scale generation, provision of information and who to contact at UK Power Networks. They also suggest that they should also work closely with developers on where extra availability will be needed; suggesting that account managers are best placed to do this.

### **5.8.7 Question 6: Do you have any other comments on measures related to network reliability and availability?**

Two stakeholders responded to this question. One highlights CHP, and how it is used to help UK Power Networks when there is an outage, they suggest connections should be more available. This stakeholder also mentions G59 panels, and the length of time it takes to get them approved. One stakeholder suggests the measures should include reliability of embedded generation as well as supply.

## **5.9 Social obligation**

No stakeholders chose to answer questions on Social Obligation

## 5.10 Company-specific outputs

### 5.10.1 Question 1a: What are your views on our proposal to develop an Output which incentivises us to work more closely with others, as a means to deliver more cost-effective investment?

Two stakeholders answer this question. Both are in favour of shared infrastructure, including shared utility ducts in the pavements of new developments. One stakeholder also suggests that the development of decentralised energy networks over the coming years should provide opportunity for this. This stakeholder also favoured greater collaborations with local authorities including a total cost approach to street works that factored in subsequent road deterioration, and undertaking work in advance where opportunities arise, such as junction widening.

One stakeholder suggests that utilities issue joint ground works contracts, with the incentive then falling on the contractor to co-ordinate opportunities for joint excavation.



## Appendix

---

### A.1 List of participants

#### Workshop participants

In total 62 stakeholders attended the workshop.

Name	Organisation
Steven Bage	City of London
Trevor Bassett	Hertfordshire Fire & Rescue Service
Clive Bassindale	Power Efficiency
Chris Beadsworth	Siemens Transmission and Distribution Ltd
Rob Bell	Royal Borough of Kingston Upon Thames
Andrew Bowden	Total Environmental Management
Rodney Brook	Sohn Associates
Steve Burr	Kent Police
Neil Campbell	King's Lynn & West Norfolk Borough
Andy Chatfield	Cambridgeshire County
Stephen Childs	Hilson Moran
Alan Clark	London Borough of Havering
Phillip Dickens	Taylor Wimpey (North Thames)
Tony Dodds	KWD Connect
Hayley Dunlop	GE Energy
Paul Fidler	Energy Networks Association
Mark Fitch	PA Consulting Group
Kim Hambly	London Borough of Harrow
Fred Harrington	David Webster Ltd
Samantha Heath	London Sustainability Exchange
Leigh Herington	London Borough of Croydon
Gary Hubbard	Walter Lilly & Co Ltd
Jerry Hutton	British Sugar
David Leam	London First
Glyn Lee	East of England Co-operative
Tracy Lewis	Total Environmental Management
Martin Lewis	GDM Partnership Ltd
Steve Mason	Kent Police

Kevin Matthews	Siemens Transmission and Distribution Ltd
Heather McCusker	Logica
Simon McGinn	City of London
Janet Meehan	British Red Cross
Philip Mellor	Telford Homes plc
Joanne Merry	Total Environmental Management
Robert Murdoch	Buckinghamshire County
Dennis Murdock	London Borough of Southwark
Neil Pennell	Land Securities Group PLC
David Pitcher	Power Plus Communications
Allan Ponsonby	Atkins
Trevor Pritchard	Mace
Jason Raymond	Premier Energy Services
Mark Redgewell	Essex County Council
Nigel Rice	London Borough of Southwark
Brian Robinson	Logica
Robert Rotbart	Derwent London
David Rousseau	London Borough of Barnet
Ian Rule	Anglian Water Services
James Russill	Energy Saving Trust
Muhammad Short	The Expanded Metal Company
Steve Sinclair	Kier Construction
Gareth Spinner	KWD Connect
Gary Swandells	Flexitricity
Bob Theobald	Power On Connections
Stephen Thompson	Barratt East London
Chris Trew	Davis Langdon
Prashant Vaze	Consumer Focus
Cliff Walton	PPA Energy
Peter Whiffin	Utility Partnership Limited
Graham Beardwell	Arup
Davy Thielens	PA Consulting
Amie McGror	
Lawrence Smith	Barratt

## Online Participants

21 stakeholders responded to the engagement process online.

Name	Organisation
Steven Bage	City of London Corporation
Paul Chandler	Westminster City Council

Ben Findlay	LCH.Clearnet Limited
Andrew Fisher	Countryside Properties (UK) Ltd
Drew Ford	Sir Robert McAlpine
Chris Gee	Network Rail
Anthony Higgs	Premier Energy Services Ltd
Neil Hilkene	Kent County Council
Paul Houston	City Property Association
Roger Howard	WSCC
Rachel Hutchinson	Essex County Council
Mike Ingram	RBSGroup
David Leam	London First
Jenny Line	
Owain Lloyd-James	English Heritage
Mike Moseley	Morrison Utility Services
Steven Mullins	Siemens
Michael Peasland	Balfour Beatty
David Rousseau	London Borough of Barnet
Althea Taylor-Salmon	Fortune Public Relations
Cliff Walton	PPA Energy

## Interview Participants

10 stakeholders took part in the interview discussions over the phone.

Name	Organisation
John Comont	Bedfordshire Wildlife Trust,
Guy Davies	Reigate & Banstead Borough Council
Adam Driscoll	London Borough of Barnet
Nigel Hughes	Grosvner
Arthur Hughes	Galliard Construction Ltd
Trevor Rawson	London Borough of Hackney
Jeremy Taylor	Gatwick Diamond Business Association
Ashley Thomas	The National Association for AONB
Roger Williams	East Sussex County Council
	Local Authority

## A.2 The engagement questions

### Online Engagement Questions

Respondents who responded online were asked to answer the following set of questions. Not all questions were answered by each stakeholder.

#### Safety

Question 1: Please give us your views on possible output measures that should be included for Safety.

#### Condition for Connections

Question 2: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 3: Please give us your views on possible output measures that should be included for Connections.

#### Customer Satisfaction

Question 4: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 5: Please give us your views on possible output measures that should be included for Customer Satisfaction.

#### Environmental Impact of Our Operations

Question 6: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 7: Please give us your views on possible output measures that should be included for Environmental Impact.

#### Environmental Performance - Facilitation of the Low-Carbon Economy

Question 8: Please give us your views on possible output measures that should be included for Environmental Impact.

#### Network Reliability and Availability

Question 9: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 10: Please give us your views on possible output measures that should be included for Network Reliability

Question 11. Please give us your views on Network Reliability and the transition to a Low-Carbon Economy.

## Social Obligations

Question 12: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 13: Please give us your views on possible output measures that should be included for Social Obligation

## Company-specific Outputs

Question 14: Please give us your views on possible output measures that could be included as Company-specific Outputs

## Interview Questions

Stakeholders who took part in the phone discussions answered questions in output categories of their choice. Usually two or three categories were talked about by each stakeholder. The full list of questions or each output are listed below.

### Safety

Question 1a: Please give us your views on possible output measures that should be included for Safety.

Question 1b: Are there any other aspects of Health and Safety that you believe we should be targeting?

Question 2: Do you have any additional comments on measures related to Health and Safety?

### Conditions for Connections

Question 1: Do you believe that Guaranteed Standards of Performance and Licence Condition 15 should be retained (subject to consultation on the precise definition of the various standards)?

Question 1: Do you believe that Guaranteed Standards of Performance and Licence Condition 15 should be retained (subject to consultation on the precise definition of the various standards)?

Question 2b: Do you believe that an Output measure based on value for money would be useful? If so, how might value for money be assessed?

Question 2c: Do you believe that Networks Companies should be measured on their commitment to the introduction of competition? Can you suggest suitable measures that could be applied?

Question 3: It might be possible to improve the timescales for delivery of some Connections if there was additional investment in the underlying infrastructure to create greater spare capacity. Would you be in favour of such an investment policy in areas where there is particular pressure on the delivery of Connections due to capacity constraints?

Question 4: Do you have any additional comments on measures related to the delivery of Connections?

## **Customer Satisfaction**

Question 1: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 2a: Please give us your views on possible output measures that should be included for Customer Satisfaction.

Question 2b: What elements do you believe should be included in any Measure of Customer Satisfaction? What weighting should be given to the different elements?

Question 2c: Do you believe that Networks Companies should be measured against other companies offering comparable services e.g. other utilities?

Question 2d: Do you believe customer satisfaction measures should take account of the specific priorities of customers in the region, or do you favour a generic UK-wide survey?

Question 2e: Do you believe that there should be a specific Output Measure related to the introduction of new services to customers?

Question 3: Do you have any additional comments on measures related to customer Satisfaction?

## **Environmental Performance: Environmental Impact of Our Operations - View groups**

Question 1: Do you believe any of the existing outputs should be retained, modified or dropped for the next regulatory period? Please tell us which ones and why.

Question 2a: Which of the possible alternative Output Measures would you like to see included as measures of the environmental impact of Networks Companies?

Question 2b: Would you suggest any modifications, or additions, to the possible Outputs?

Question 3: Do you have any additional comments on measures related to Environmental Impact?

## **Environmental Performance: Facilitation of the Low-Carbon Economy**

Question 1a: Which of the possible Output Measures would you like to see included as measures of the effectiveness of Networks Companies in facilitating the Low-Carbon economy?

Question 1b: Would you suggest any modifications, or additions, to the possible Outputs?

Question 2: Do you have any additional comments on measures related to the Low-Carbon economy?

## **Network Reliability and Availability**

Question 1a: Which of the existing Outputs do you believe should be retained for the next regulatory period?

Question 1b: Do you believe that any of the existing outputs should be modified in some way? If so, how?

Question 1c: Do you consider that the target of 18 hours for restoration (EGS2) should be retained? If not, what should it be changed to?

Question 1d: Do you consider that three interruptions in a year is the appropriate threshold for a failure under EGS2a?

Question 2a: Which, if any, of the possible Outputs identified would you like to see introduced? Please provide any specific feedback, for or against, the possible outputs.

Question 2b: Are there any additional Outputs that you would like to suggest?

Question 3: Do you believe that the introduction of electric vehicles or greater use of electricity in domestic heating requires us to change any existing Outputs, or introduce additional/alternative Outputs?

Question 4: Do you believe that additional Outputs should be included which reflect the availability of the Network and specifically its ability to accept electricity generated by small-scale generators?

Question 5: Do you have any additional comments on Network Reliability and the transition to a Low-Carbon Economy.

Question 6: Do you have any other comments on measures related to Network Reliability and availability?

## Social Obligations

Question 1a: Which of the existing Outputs do you believe should be retained for the next regulatory period?

Question 1b: Do you believe that any of the existing outputs should be modified in some way? If so, how?

Question 2: Which, if any, of the possible Outputs identified would you like to see introduced? Please provide any specific feedback, for or against, the possible outputs.

Question 3: Do you have any additional comments on measures related to social obligations?

## Company-specific Outputs - View groups

Question 1a: What are your views on our proposal to develop an Output which incentivises us to work more closely with others, as a means to deliver more cost-effective investment?

Question 1b: Can you suggest additional measures that we might use to assess our performance against such an Output?

Question 1c: What are your views on our proposal to develop an Output which incentivises us to engage with our stakeholders on an on-going and continual basis?

Question 1d: Can you suggest additional measures that we might use to assess our performance against such an Output?

Question 2: Do you have any additional comments regarding Outputs that you believe might be appropriate, but do not fit neatly within the six categories defined by Ofgem?

**Regional Issues**

Are you aware of any issues that are specific to one or more of the three regions (London, South East England, East of England) in which UK Power Networks operate?

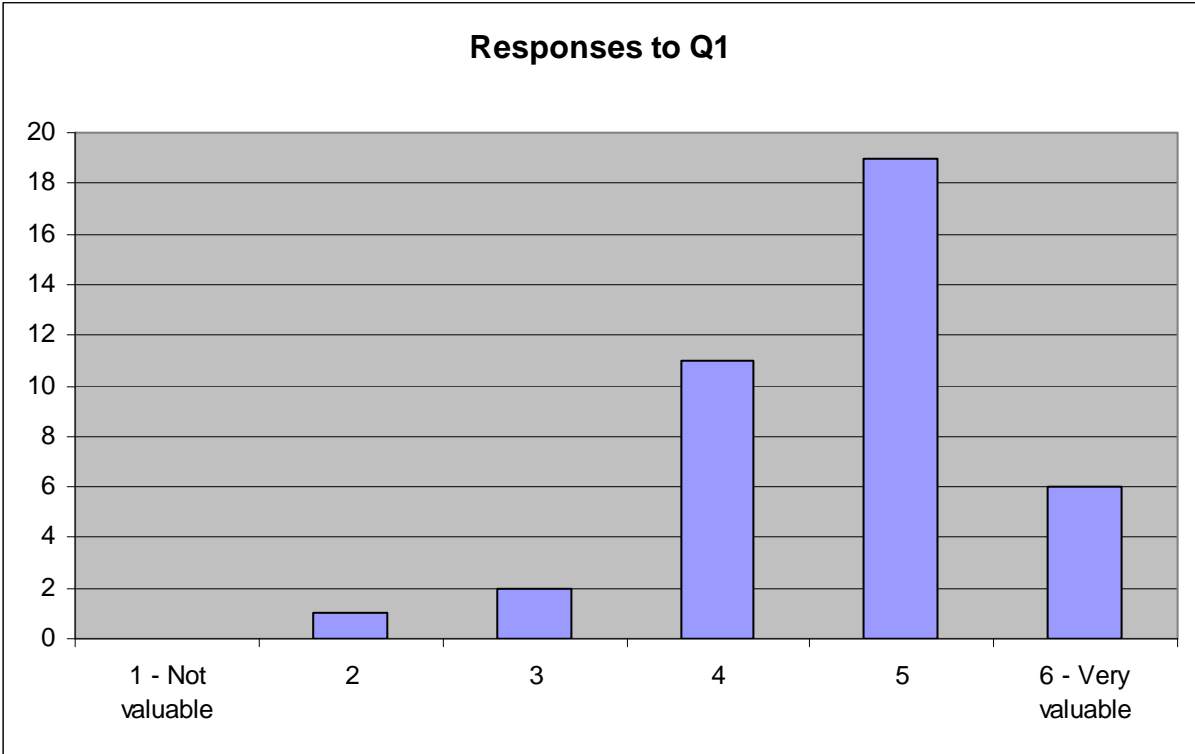
**A.3 Workshop evaluation report**

**Overview**

62 people attended the event, 39 evaluation forms were received back. This document gives a summary of the evaluation results.

For questions 1-4, numbers in parenthesis at the beginning of each comment indicate the accompanying score on a scale of 1-6 given by the respondent.

**5.10.2 1. How valuable overall did you find this event?**

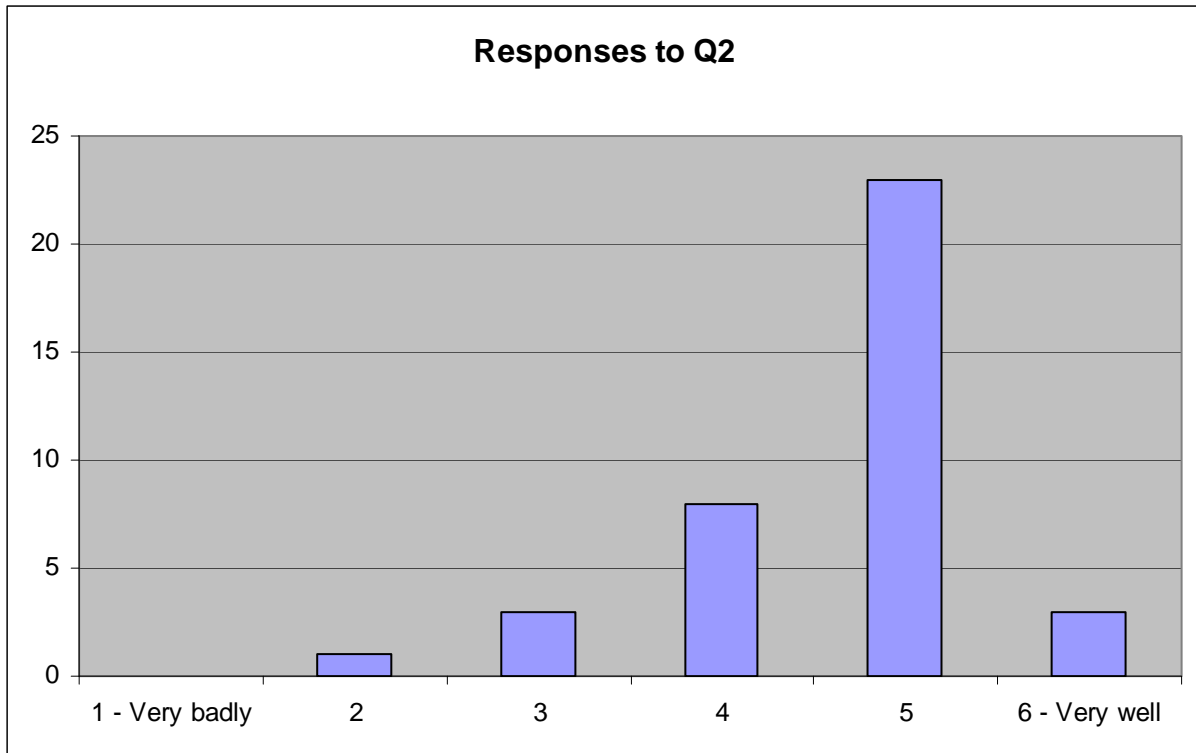




## Comments

- 16 comments
  
- (6) Good forum to understand your plans and become more involved with your views.
- (6) Very useful and informative.
- (5) The most transparent, customer centric business planning process by any UK DNO.
- (5) Insufficient time but ability to add further comments on online consultation.
- (5) Not just for content - also valuable for networking.
- (5) The opportunity to speak to UKPN is worthwhile, the test as always will be in demonstrating that their customers have been heard and that something happens.
- (5) It is an excellent platform for engaging with the same key customers. I consider my views have been listened to.
- (5) A good insight into many aspects UKPN are involved with and a chance to contribute your thoughts.
- (5) More valuable than I had expected.
- (4) Valuable if suggestions are implemented.
- (4) Not amazingly relevant to emergency planners, however 'reliability' and 'safety' workshops were useful.
- (4) Thought provoking but how much innovation will it make to the outputs?
- (4) Very insightful
- (4) Useful event overall. Good venue.
- (3) I was able to raise all of the points I felt I needed to. However in the big scheme of things they probably only accounted for 20% of the pods.
- (2) Not particularly probing of customers views.

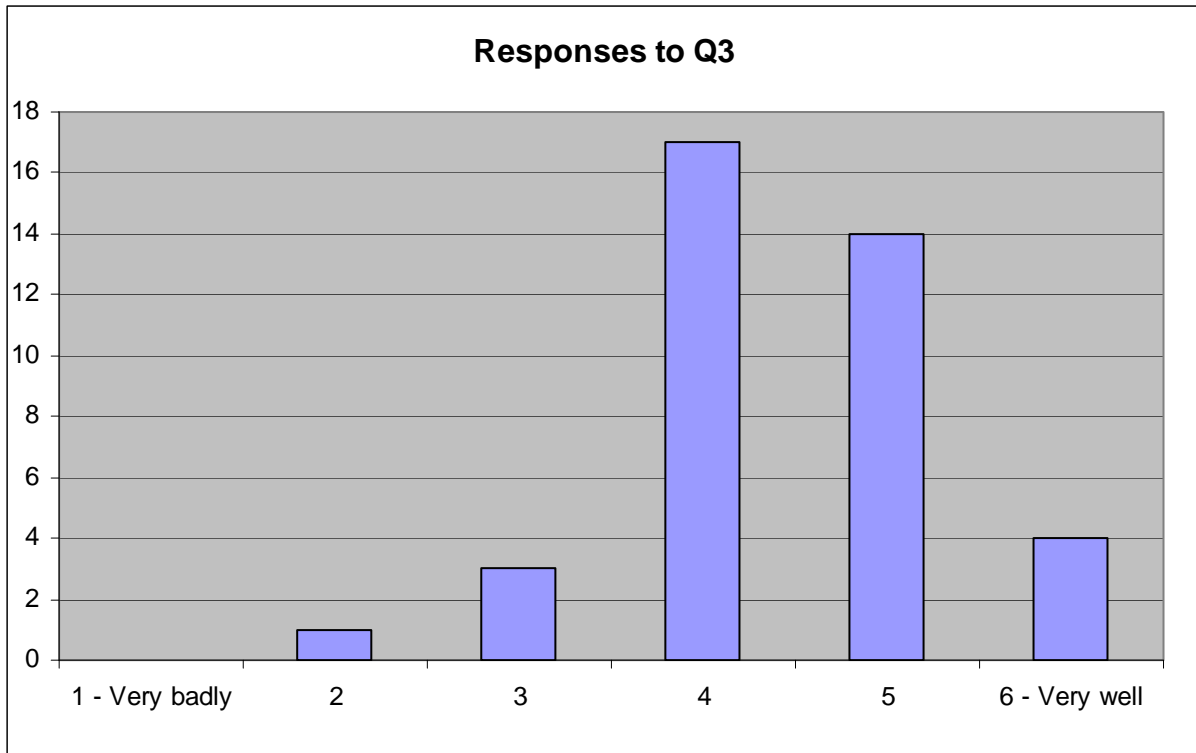
### 5.10.3 2. If you had questions during the workshop, how well were they answered?



#### Comments

- 10 comments
- (5) Certainly very open and not defensive.
- (5) Yes generally good, perhaps things were more rushed in the afternoon.
- (5) I didn't really have any questions.
- (5) Open, honest and constructive.
- (5) Very well.
- (4) End sessions tended to talks about previous groups and not as much opportunity to ask questions.
- (3) Some issues were swerved, especially around connections.
- (3) Some questions not answered but listed for review.
- (2) Some of the answers e.g. environmental (from a vehicles, officer) very weak.
- (-) N/A

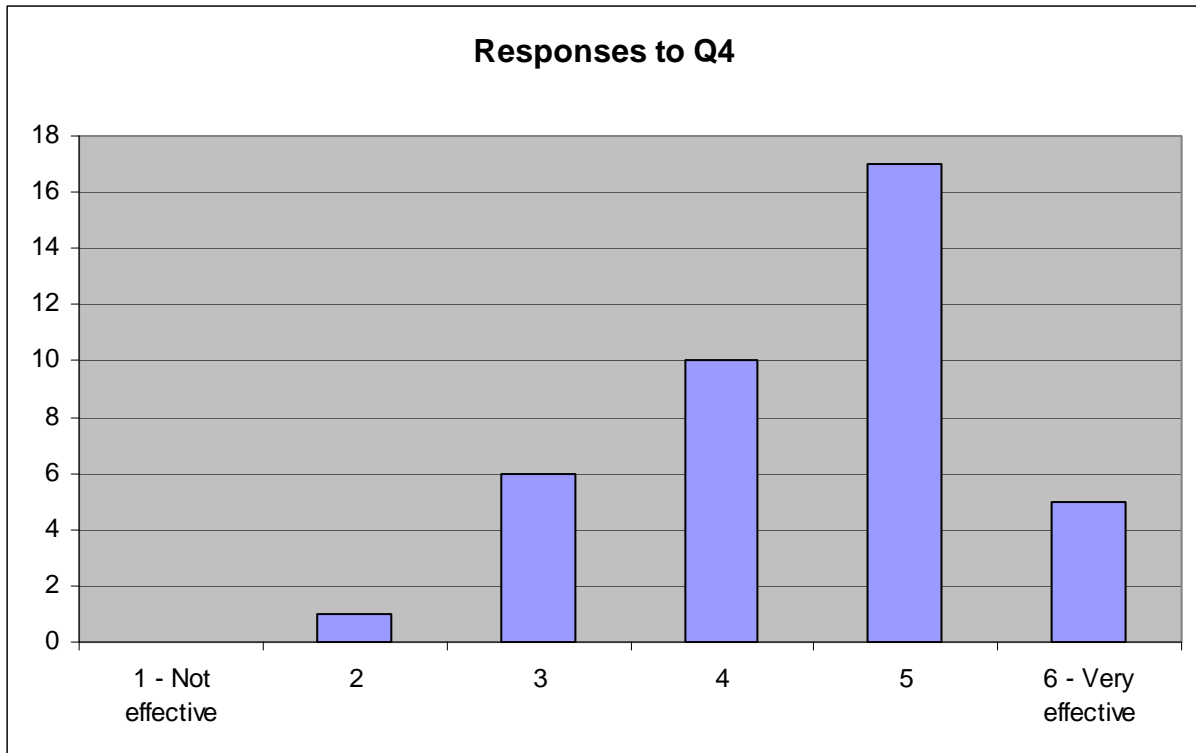
### 5.10.4 3. How well did the workshop format enable you to address the issues?



#### Comments

- 9 comments
- (6) The workshop format enabled and encouraged a good level of discussion.
- (5) Small groups worked fine.
- (5) Good process.
- (5) Created very good discussion and 'multi-agency' views could be expressed.
- (4) OK - But I think it was more for your benefit than ours.
- (4) Was very aware that this was a customer/stakeholder event.
- (4) Time was too constrained in some sessions.
- (3) My field is emergency planning. I feel a particular event for this would have been better as I didn't understand a lot of what was being talked about.
- (2) Too little time on our views; questions not focused enough.

#### 5.10.5 4. How effective were the facilitators?



#### Comments

- 14 comments
- (6) Very confident, good communicators, diplomatic and willing to take all views on board.
- (6) So good that you did not know that they were facilitating.
- (6) Very good.
- (5) I think that generally they did well.
- (5) Facilitation worked well, but after the third station there was a lot of repetition.
- (5) Summarised very well and drew out issues.
- (5) The mix of participants was good.
- (4) Some better than others. Difficulty with some of the acoustics in the building.
- (4) I believe the time spent on each and all was about right. If any thing on all the coverage could have been 5 minutes longer.
- (4) Whilst facilitated to a good standard it was nice to interface with UKPN senior management.
- (3) Too much time listening to UKPN and not listening to consultees.
- (3) The UKPN people were good, the consultants didn't really add very much.
- (3) More people on the ground required rather than managers.
- (2) Very low tech. Used to more voting deliberation; groups too big not convinced much data was captured.

### 5.10.6 What would you have liked more time for?

#### Comments

- 22 comments
- No Comment
- Look and feel of UKPN in 10+ years.
- Opportunity to discuss with UKPN team - perhaps more members.
- Connections
- Environmental performance - the low-carbon economy.
- My own focus areas - ie. Network reliability, customer service.
- Connection issues
- One to one discussions on other UKPN issues of a more minor level.
- One to one time with UKPN employees.
- Back up capacity fed from 2 different substations for commercial buildings.
- You had timing about right .
- A summary of the overall feedback collected by each pod would have been interesting.
- Discussion
- 5 minutes more on each session.
- Pity about fire drill
- More discussion on connections.
- Delivery of new connections/diversions/disconnections that shape the business plan and allocation of resources.
- Discussion booths
- Timing was good
- Agreement of way forward.
- Individual questions on specific site issues.
- Fuel poverty and affordability.

### 5.10.7 6. What would you have liked to spend less time on?

#### Comments

- 12 comments
- Initial presentation. Lunch Break.

- Safety, environment.
- Areas with less focus for myself/organisation (however these were useful nonetheless).
- Environmental performance.
- First address by CEO.
- Presentations
- Facilitators talking more than UKPN.
- Fire Alarm!
- Fire Drill
- High Voltage connections in London.
- N/A
- No Comment

#### 5.10.8 7. Any other comments?

##### Comments

- 21 comments
- I applaud you in engaging with your customer's stakeholders - very difficult to do in this environment.
- Excellent format and discussion. It will be great if some of the discussed outcomes are adopted.
- No
- I would have liked more time for the pod sessions, 20 minutes elapsed very quickly.
- Thank-you - very constructive
- Very useful day. Pro-active discussions. Picked up lots of learning information myself. Thank-you
- Towards the end of the working sessions there was little to comment upon as most issues had been covered by others.
- All subjects covered were good but could have covered more about the network.
- Enjoyable and informative.
- First three sessions were most useful as topics had already been discussed in detail for last 3 sessions.
- Well organised.
- Would have liked to hear about the innovations UK Power Networks is thinking about.
- Well run event - I found this useful and informative.
- Excellent initiative. Well done!
- Well run event in good surrounding.
- Well run - pity about the alarms but hardly UKPN's fault.

- Ofgem has historically shaped UKPN business and disregarded the customer. There is a disconnect between regulation and business as usual aims/objectives.
- There appeared to be an acceptance by the UKPN staff that we all know what they are talking about. Too much jargon and TLAs.
- Would appreciate a feedback session.
- A good process.
- This was a big investment in time and effort but too broad a set of delegates. Need more segmentation.

#### A.4 Raw data from other strands of engagement

Three other responses have been received which did not fit the engagement structure. These are listed below.

##### Non fitting response 1

Dear Sir,

You already have the online comments of the (personal details removed). I understand that (despite the on line closing date having passed), you are willing to accept further comments by email.

The Association (which represents the major developers in the City) has seen the comments of Corporation of the City of London and would like to add its support to the views outlined there.

Regards

##### Non fitting response 2

Substation energisation is often held up by the fact that the legals are not in place. Often the client is very naïve in these matters; have UKPN ever thought about providing a pre-construction consultancy service to help the client design and plan through the difficult early stages? UKPN would benefit from this in that you could steer clients in directions that would benefit you; i.e. non basement subs

The Guaranteed standards you work to are not always transparent and will often be held up by UKPN not having sufficient information. Could a copy of your guaranteed standards be sent out to us, your customers during the application process? Plus be told precisely when we are due to receive a quote, so that we don't have to chase.

I think that I mentioned already your prices need more breakdown; we can't carry out an accurate commercial review/ value for money exercise without more detail. UKPN will not release design drawings until quote is paid; I can understand that you don't want ICP's to steal your drawings, however it does make the customers' life very difficult.

You lose work to ICP's due to cost and programme restraints; if you want more business and greater respect, you need to address these issues. Indeed I have never received a programme of work from UKPN. You don't even communicate what your processes are, apart from verbally if we ask?

These are not meant as criticisms, just helpful suggestions,

### Non fitting response 3

RE: UK Power Networks Outputs Consultation

We write to contribute our views on the Output Measures to be used by Ofgem for monitoring your performance. Having read your consultation documents and web-pages, we note that the questions assume a detailed technical understanding of your industry. We therefore feel it more appropriate to reply by letter setting out our strategic policy interests. These include:

- resilience to weather and a changing climate;
- grid access for renewable energy and embedded generation;
- supporting the transition to a low carbon economy;
- reducing carbon emissions;
- planning and delivery of infrastructure.

#### Resilience to weather and a changing climate

Reliability of supply is a high priority for all users in the County, particularly for essential users and for the vulnerable. We would expect the output measures to capture the proportion of assets at risk from critical incidents, such as flooding or severe storms, and to monitor progress in reducing the proportion at risk.

#### Grid access for renewable energy and embedded generation

The Council is aware of significant numbers of community groups who have plans to develop local renewable energy schemes. It is also pursuing installations for its own properties when and where these meet internal objectives. Your output measures will no doubt capture in some way those who do connect successfully to the grid. It would be useful to capture the length of time taken to connect and the numbers of those who are unable to connect because of grid issues, so that these can both be reported and managed with the overall aim of making it easier to connect.

#### Supporting the transition to a low carbon economy

The transition towards a low carbon economy has the potential to generate significant new employment opportunities. These will include jobs in distributed generation as well as new uses such as electric vehicles and heat pumps. Whilst we realise that you cannot actually create the jobs, we would prefer the measures to capture the numbers of jobs or the economic value that you have facilitated

#### Reducing carbon emissions

Lastly, Oxford 2030, a strategy produced by the Oxfordshire Partnership, commits the county to a 50% reduction in CO<sub>2</sub>, on 2008 levels by 2030 – equivalent to an annual rate of 3%. We would expect the output measures to capture the reductions in carbon emissions from your own activities.

#### Planning and delivery of infrastructure

Ensuring that the strategic infrastructure (including energy supply) needed to support economic growth is identified and secured is a key part of our work. We are working with partners to develop a strategic



infrastructure framework to provide clarity on investment priorities and improve alignment of investment streams /funding mechanisms. We look forward to working with you as we both develop our plans.

We thank you for the opportunity to comment on your proposals.