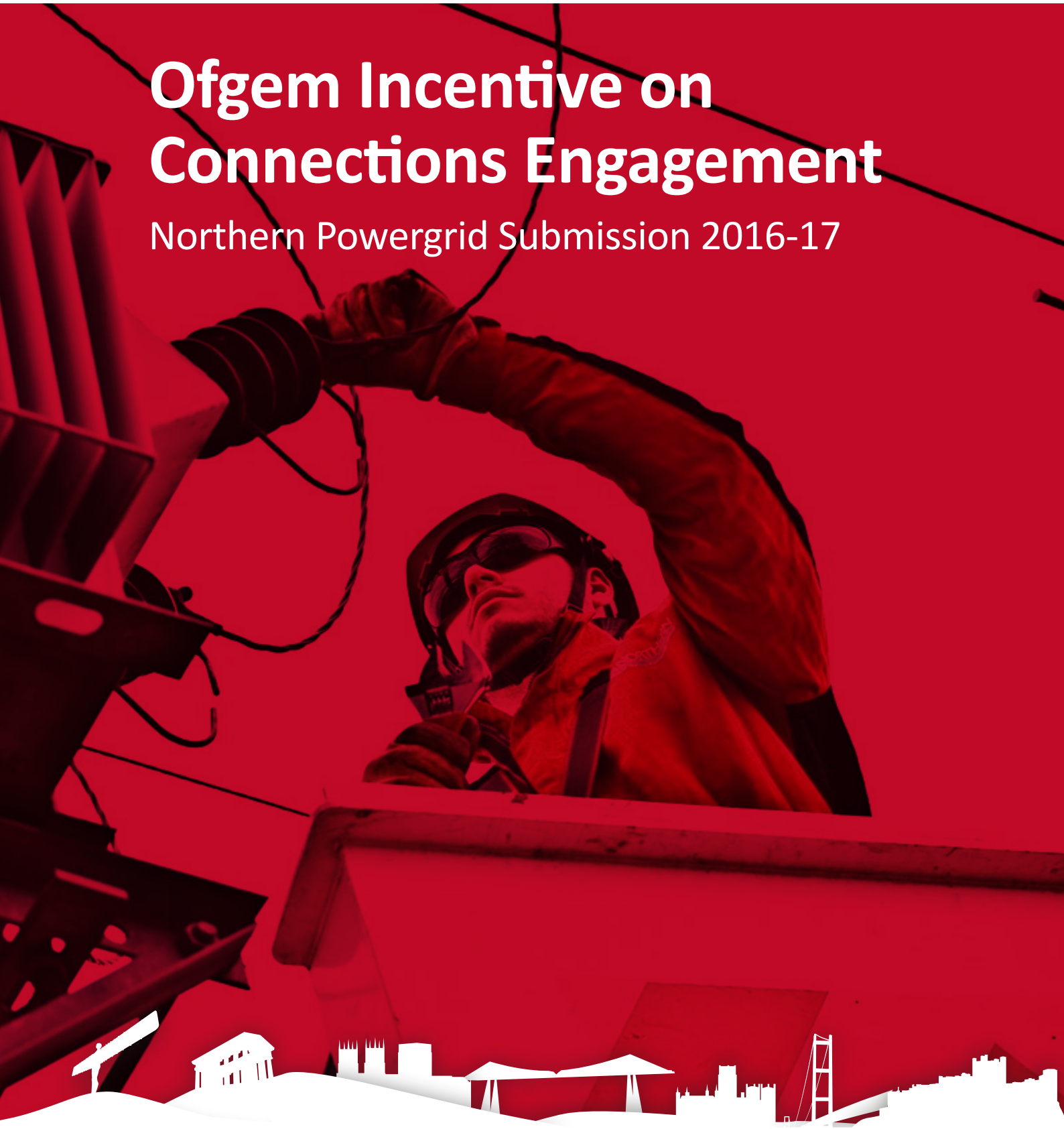
NORTHERN POWERGRID

Ofgem Incentive on Connections Engagement

Northern Powergrid Submission 2016-17



Welcome

Welcome to our Incentive on Connections Engagement (ICE) submission for 2016-17.

The ICE incentive drives distribution network operators (DNOs) to provide better customer service to major connections customers. In this submission we will demonstrate how, through a robust and comprehensive programme of stakeholder engagement, we are not only listening to the views of our connections customers but acting upon them, translating their feedback into meaningful service improvement actions.

This submission has been a year in the making. In it we describe our strategy for stakeholder engagement and the various methods and channels we have employed to deliver it. We report on delivery against the commitments we made in 2015-16 and set out our service improvement plans for the forthcoming regulatory year.

We work hard to understand the needs of our customers and to continually improve the connections service we provide. We are particularly pleased to be able to include a number of positive customer endorsements and validations in this submission which suggest we are moving in the right direction.

This submission covers the activities of both our licensees, Northern Powergrid (Northeast) and Northern Powergrid (Yorkshire).

Contents

Foreword

Andy MacLennan at our Connections Customer Forum

I am pleased to have this opportunity to showcase the changes we are making to our connections business, in this, our 2016-17 ICE submission.

This is the second year we have developed detailed connections service improvement plans that are based on our customers' suggestions and ideas. These work plans are specifically designed to address our customers' requirements and expectations.

This year the big themes have been about enabling customers to interpret our distribution network for initial planning purposes; releasing network capacity that had been sterilised and enabling more customers to be connected through flexible connections. We have done plenty of other things too – but these were the big wins in the last year.

Through our actions we have brought some exciting and innovative services to our customers. We are especially proud of the improvement we have made to our heat maps. These give our customers the information and tools to carry out their own initial assessment of available capacity and assist with early visibility of potentially viable projects.

We have played a very active role in connecting distributed generation (DG) to our network, with the result that we have 3.5GW of DG connected. Installed DG now equates to 890W per customer (per MPAN) and is almost equivalent to the total domestic maximum demand on our network.

We have done a lot to enable connections to be made, but to make more progress we needed a more proactive approach to releasing distribution network capacity. Actively working with customers, we have been able to release capacity that had been sterilised because it had been reserved in existing connection agreements, or on contracted but not constructed connections. Working with our customers to refine their real needs as their projects changed, we were able to release 196 MW of capacity from our approaches to 172 customers. This work is now continuing as a business-as-usual activity into the future.

The third area is all about the better management of capacity constraints. Following the development of an active network management (ANM) system to apply in the Driffield area we are now developing ANM offers, enabling more customers to be connected. We now have over 700MW of DG connected on flexible connections.

ICE is all about effective stakeholder engagement. I am extremely grateful to all those connections stakeholders who have taken time to assess our performance and provide us with their feedback. I believe that we have demonstrated in the Looking Forward section of this submission that we are listening to our customers and acting accordingly; and in the Looking Back section that we have delivered on the commitments we have made.

Although this is a formal report for submission to our regulator Ofgem, I hope that all our connections stakeholders will find it an informative and interesting read.

This is the first year I have been responsible for the delivery of our ICE programme and in that time I have been impressed by both the desire and commitment of our team to improve the connections service we provide and the levels of constructive feedback and ideas we receive. It is only through this continued and productive dialogue that we can ensure we are meeting the needs of our valued customers.

Andy MacLennan
Business Development Director
Northern Powergrid

"Thanks for being in touch. I am happy for you to quote me in this way. And, I am genuine in my thanks…it wasn't just a platitude. I was actually sceptical about responding at all because it was my first ICE event and I wasn't sure of whether it was just a paperwork exercise that NPg were doing to comply with industry requirements on consultation and cynically assumed the worst, that it wouldn't make a difference but gave it a go just in case. I think it is really encouraging to know that NPg are actually seeking customer insight for continual improvement in products and services and am grateful for the opportunity to take part. I provided feedback on a number of issues at the November forum and I can see that this has resulted in three actions in the new work plan. I am delighted that my comments contributed to some of the thinking about continual development within NPg"

Rachel Wood, Lark Energy Commercial, email May 2016

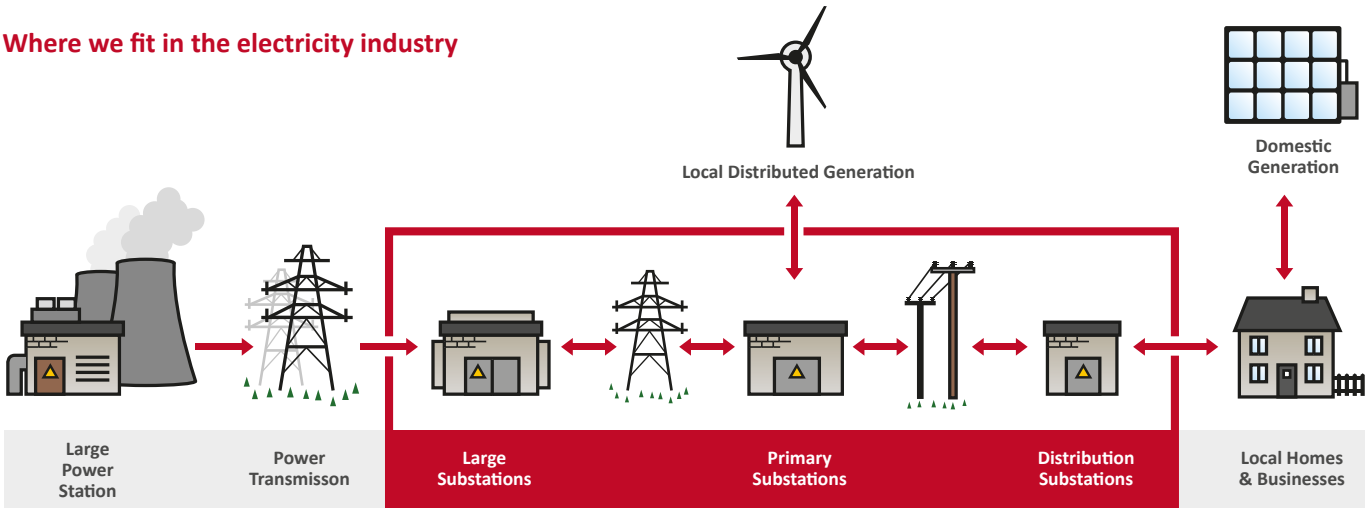
Who we are and what we do

Northern Powergrid delivers electricity to 3.9 million homes and businesses in the Northeast, Yorkshire and north Lincolnshire, taking power from the national transmission network and distributing it through our regional network, comprising more than 60,000 substations and 94,000 kilometres of overhead lines and underground cables, to 8 million customers throughout the region. We don't generate electricity, neither do we sell electricity.

Keeping our electricity network running safely, reliably and efficiently is our priority and we operate 24 hours a day, 365 days a year – no matter what the circumstances. We are responsible for the connection of customers' premises to our electricity network. We also facilitate the export of locally-generated electricity. We operate as one company but we are regulated by the energy regulator, Ofgem, as two licensed businesses; Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc.

The geographical areas we serve

Where we fit in the electricity industry



NORTHERN POWERGRID

Meeting the criteria set by our regulator

The purpose of the ICE mechanism

At the last price control review Ofgem introduced a new mechanism – the Incentive on Connections Engagement (ICE) – to encourage distribution network operators to provide better customer service to larger connection customers. This incentive complements other connection-related incentives in the new price control such as the Time to Connect incentive and the satisfaction surveys that cover the needs of smaller customers.

The ICE mechanism is a penalty only incentive. If a DNO fails to provide evidence that it has engaged with connection stakeholders and responded to their needs, it can incur a penalty where it has not met the prescribed assessment criteria.

The mechanism assesses performance in both contestable and non-contestable activities in the Relevant Market Segments of metered demand connections, unmetered connections and metered distributed generation connections.

The Looking Forward and Looking Back reports

In May 2015, following extensive stakeholder engagement, we published our first ICE Looking Forward report, where we set out the actions we would take during 2015-16 to improve the connections service that we provide. As that was our first ICE submission there was no Looking Back report.

This publication is our second ICE submission. It has two parts.

The first part presents our Looking Forward report for 2016-17. Here we set out what we are going to do in this regulatory year. We also describe (on pages 14 – 21) our approach to stakeholder engagement and how this has shaped our plans. A summary of the 2016-17 work plan can be found on page 22 and the full plan with forecast completion dates is in appendix 1.

The second part of this submission presents our first Looking Back report. In this part we explain what we did during 2015-16 to discharge the commitments that we made in our first Looking Forward report. A work plan summary is provided on page 35 and we provide a full description on each initiative on pages 36 to 49. Our full 2015-16 work plans by Relevant Market Segment are in appendix 2. We appreciate that we are providing a lot of information in this part of the submission, but we need to show that we have met the assessment criteria set out by Ofgem.

Our performance against Ofgem's assessment criteria

A penalty may be applied where a licensee is unable to demonstrate that it has met the assessment criteria published by Ofgem. We are confident that we have met all of these criteria as demonstrated in this submission and summarised here. (The passages in italicised text are the criteria specified by Ofgem).

> *The licensee published a Looking Forward section in its previous ICE submission, in accordance with paragraph 3.4[of the Ofgem guidance]*[1]

Our Looking Forward report for 2015-16 described our comprehensive and robust strategy for engaging with connection stakeholders and explained how we were facilitating discussions with a range of stakeholders to inform our plan.

We engaged with customers at connections-specific events and through our business-as-usual channels. We held regular customer surgeries, engaged over the web and through our contact centre, and made good use of market research. Founded upon the feedback and views of our stakeholders, our first Looking Forward report set out a comprehensive work plan of activities (with forecast delivery dates) to meet their requirements. We discussed that report with Ofgem and we acted on the feedback we received.

In the 2015-16 Looking Forward report we specified the outputs that we planned to deliver during the year (including the key performance indicators, and targets, for each output) and we explained how our engagement with a broad and inclusive range of connection stakeholders had informed our strategy, activities and outputs. We approached over 3,200 customers who had received a quotation from us in the previous year and solicited their views on our proposed plans to ensure that our consideration of stakeholders' views was broad and inclusive.

"As a consultant who advises clients in the sector I have found the Northern Powergrid heat maps very useful. They are easy to use and they really help me to identify the locations where new connections are likely to offer the most promising opportunities for my clients. This was definitely a worthwhile and sector-leading innovation from Northern Powergrid"

Kyran Hanks, Waters Wye Associates, email May 2016

- *The licensee has implemented its comprehensive and robust strategy for engaging with connection stakeholders. If not, then the reasons provided are reasonable and well justified* [1]

We demonstrate in both the Looking Back and Looking Forward parts of this submission how we have implemented a comprehensive and robust strategy for engaging with connection stakeholders. We have continued with the same engagement strategy to understand stakeholders' requirements in formulating our 2016-17 work plan and, importantly, we have always sought to close the loop on completed actions with the originating stakeholders to confirm that they have been satisfied with the outcomes we have achieved.

We have continued to use all of our channels of engagement to gain the views of the full range of stakeholders about our proposed 2016-17 work plan and also to ask them their views on what we have been delivering in 2015-16. We have therefore acted on stakeholders' comments not only in preparing our original Looking Forward report but also in the implementation of that plan.

- *The licensee has undertaken its comprehensive workplan of activities (with associated delivery dates) to meet the requirements of its connection stakeholders. If not, the reasons provided are reasonable and well justified* [1]

Our 2015-16 work plan was comprehensive and ambitious, comprising 72 separate actions in the following broad themes:

- provision of information
- improving our applications process
- improving communications
- technical and commercial developments
- enabling competition.

We always knew that this was an ambitious plan but we were encouraged by Ofgem to be ambitious and we saw no major downside to having a plan with stretching targets, even if this carried a risk that we might fail to deliver some actions by the forecast date or even by the year end.

By the end of the year we had completed all but five of the 72 actions that were in our plan. Some of these were easier to implement than we had expected and we delivered them earlier than forecast; others proved more difficult than we had anticipated and these came in later than we had originally forecast. But the important thing is that, by the year end, we had done everything we said we would do in the year.

In delivering these actions we have pushed the boundaries in terms of the information we provide through our heat maps so that they have become a really useful and accurate initial planning tool for DG customers. We have improved our application processes and introduced new processes to allow customers to carry out multiple optioneering within a quotation and for developers to reduce their initial financial outlay in calling off extensive housing developments in phases. We have also really helped Local Authorities manage their budgeting by introducing a regime of annual fixed charges.

Of the five actions we have yet to complete, two of these had forecast delivery dates of December 2016 (i.e. after the cut-off date for this report) and we are still on track to achieve these. The other three relate to the trial of new processes for independent connections providers (ICPs) to enable them to carry out metered disconnections and part-funded reinforcement, which will help broaden their market offerings.

We are keen to continue to support the development of competition in our region and therefore the outcomes of these trials are important. Through our collaboration with ICPs we have developed the necessary new processes and are now looking for suitable projects to trial them. We cannot regard these actions as completed until we have tested the customers' experience with some real examples that have progressed all the way through to connection. We are therefore carrying these initiatives into our 2016-17 work plan and will complete our account of them in our next Looking Back report.

- *The licensee has delivered its relevant outputs (eg key performance indicators, targets etc). If not, the reasons provided are reasonable and well justified* [1]

In our Looking Forward Report for 2015-16 we set out the outputs that we were committing to deliver during the year. We call these outputs 'outcomes for customers' as they capture the benefit that the customer can expect from each of the improvement actions that we are taking. We demonstrate in this submission that we have delivered each of the outputs in the 2015-16 Looking Forward report as a result of taking the actions in our work plan. A summary appears on page 35; the full work plan is in appendix 2.

- *The licensee's strategy, activities and outputs have taken into account ongoing feedback from a broad and inclusive range of connection stakeholders. If not, the reasons provided are reasonable and well justified* [1]

In this submission we demonstrate how our engagement with a diverse range of stakeholders shaped not only the content of our Looking Forward work plan for 2015-16 but also the way we went about implementing that plan.

Throughout the delivery of our work plan we have taken account of stakeholders' views and further suggestions for improvements. During the year one customer suggested that we add data to our heat maps about the number of outstanding applications in an area. Rather than wait to include this requirement in our next plan we made the improvement immediately. In closing out actions we have always sought validation of the outcomes from the originating stakeholders and also sought the views of a significant group of customers through market research.

The stakeholders who have helped us formulate our work plans include Local Authorities, house builders, independent distribution network operators (IDNOs), ICPs, providers of residential electrical storage devices, distributed generators and the national parks. We are grateful to all of them for helping us to shape our plans for 2015-16 and 2016-17 and for their continuing contributions as we put those plans into action.

1 Ofgem's Incentive on Connections Engagement (ICE) Guidance Document, 1 April 2015
https://www.ofgem.gov.uk/ofgem-publications/94371/iceguidancedoc010415-pdf

Introduction

Providing customers with connections to the electricity distribution network and making modifications to those connections is an important part of the work of a DNO. A new connection allows new businesses to open, new housing to be built and generators to export electricity. It is also an area where there is significant contact and interaction between the DNO and its customers.

In our region the DG sector continues to be a buoyant area of enquiries, with customers' interests now including the installation of energy storage devices. The continuing interest in DG and storage connections adds to the need for us to have innovative and flexible approaches. Therefore, we have continued to develop different options using active network management solutions, to enable us to offer as many connections as possible in areas where customers want to connect.

The evolving nature of connections is an area of growing complexity and one where an increasing number of stakeholders are involved, and we are keen to ensure that the needs and expectations of these customers are fully met.

Our regulator, Ofgem, has introduced a package of connections incentives aimed at encouraging DNOs to provide a better service for connections customers, including those connecting low-carbon technologies and DG.

For major-works customers, there is the Incentive on Connections Engagement (ICE) which is the subject of this submission. The aim of ICE, as outlined in Ofgem's guidance document, is to replicate the effects of competition and drive DNOs to understand and meet the needs of major connections customers. This may involve improving the timeliness of connections, extending the provision of information or enhancing the overall customer experience. This incentive recognises innovative connection solutions for customers which may include:

- improved coordination with other utility connection providers and between connection customers;
- innovative commercial arrangements with customers; or
- the introduction of new technologies that reduce connection charges for customers.

Ofgem explains that ICE is designed to drive improvements in the service DNOs provide to major connections customers in the Relevant Market Segments of the local connections market as outlined in the table 1. ICE assesses performance in relation to both contestable and non-contestable connection activities.

ICE does not capture performance in the Excluded Market Segments (broadly speaking, LV connections of up to four domestic premises) of the local connections market (which is measured and incentivised under the RIIO-ED1 Time to Connect incentive and the Broader Measure of Customer Satisfaction (BCMS) survey.

This ICE submission consists of a Looking Forward and Looking Back report. In the Looking Forward section we outline our Northern Powergrid stakeholder strategy, used to engage with customers and seek their feedback. We describe the connections-specific engagement activities we have undertaken to solicit our customers' views and how we have incorporated these into our Looking Forward plan of service improvement actions.

Our linesman working to maintain the connection at Spurn Point Lifeboat Station at the Humber Estuary

In describing the actions in our Looking Forward plan we are able to identify the stakeholder from whom the action originated, the action we will deliver and the target measure by which we will judge success. We also demonstrate how we have consulted our stakeholders to ensure the actions in our work plan are supported by, and useful to, a broad range of connections customers.

In the Looking Back section we report on the actions in our 2015-16 work plan and the outcome we achieved. Importantly, we also describe the process we went through to close the loop with customers and seek their endorsement of the outcomes we delivered. As evidence of our broad and inclusive approach to engagement, we include commentary from a range of different connections customers who told us what they think about the improvements we have made.

Table 1: Summary of Relevant Market Segments

Metered Demand Connections (M)	Low-voltage (LV) work: LV connection activities involving only LV work, other than in respect of an Excluded Market Segment
	High-voltage (HV) work: LV or HV connection activities involving HV work (including where that work is required in respect of connection activities within an Excluded Market Segment)
	HV and extra-high-voltage (EHV) work: LV or HV connection activities involving EHV work
	EHV work and above: extra-high-voltage and 132kV connection activities
Unmetered Connections (U)	Local Authority (LA) work: new connection activities in respect of Local Authority premises
	Private Finance Initiative (PFI) work: new connection activities under PFIs
	Other work: all other non-LA and non-PFI unmetered connections work
Metered Distributed Generation Connections (DG)	LV work: low-voltage connection activities involving only low-voltage work
	HV and EHV work: any connection activities involving work at HV or above

Market segments overview

We have chosen to write a single ICE submission for both Northern Powergrid licensees that covers all the Relevant Market Segments described here.

Metered demand

Metered demand connections continue to make up a significant proportion of our overall workload; we carried out approximately 9,500 connections in 2015. We also received the most feedback on our work plan from customers operating in this segment.

Our support for the development of competition in connections in this market segment remains strong, with ICPs delivering the majority of high-voltage and associated low-voltage connections. As a result, many of the actions in our 2016-17 work plan reflect the continuing drive to improve services to our ICP customers.

In response to their feedback, we have committed to work with ICPs to make our quotations and design-approvals processes quicker and more straightforward and aid them in making proposals to their clients.

We have two significant actions on part-funded reinforcement and metered disconnections that will continue to increase the breadth of contestable works and increase the scope of activities that ICPs can carry out.

Customers continue to raise the issue of lack of capacity on some areas of our network. We have actions in our work plan that acknowledge this and will continue to work to release unused capacity and connect as many customers to our network as possible.

We will work closely with other DNOs and Ofgem to resolve the issues of queue management and quotation assessment and design fees.

There are a number of actions in the work plan to address the provision of information to customers. The one with the most potential impact is our commitment to update our generation and demand heat maps on a monthly basis, and in doing so, improve the accuracy of this planning tool.

Overall, we believe the actions and associated outcomes included in our work plan address all the issues our metered demand customers have raised with us and will drive a significant improvement in the service we provide, and the ways in which we support ICPs to offer competitive alternatives to their clients.

Unmetered

Unmetered connections continue to be an important part of our business, particularly as Public Lighting Authorities (PLAs) continue with their extensive street lighting asset replacement and upgrade programmes. During 2015 we delivered approximately 15,000 connections to the unmetered market segment.

Unmetered connections make up a large proportion of our repeat business, and as such, we have established strong relationships with our PLAs and other unmetered customers. As a result, the actions in our 2016-17 work plan focus on how we can continue to build upon on these relationships through the provision of information and by improving our communications.

We have committed to an action to address an issue that arose during discussions at the unmetered customer workshop we held at our November 2015 Connections Customer Forum. We will conduct a pilot with a Local Authority in our region to improve the speed with which we reconnect knocked-down street lighting and in doing so, improve the service we offer to both our customers and members of the general public.

We will continue to meet with our unmetered and PLA customers and to build upon the strong relationships we have established. Whenever appropriate, we will look to include initiatives arising from their feedback into future revisions of our work plan.

Distributed generation

We received approximately 3,000 generation enquiries in 2015. DG continues to be the market segment where the most dynamic change and innovation is taking place, both nationally and within our region. If we are to take advantage of the efficiencies innovation can provide and respond to industry developments, we will need to be proactive about keeping our customers informed and responding to their changing needs.

Some of the actions in our Looking Forward work plan build upon the work we have done to provide better information to our DG customers, others relate to our support of Ofgem's Quicker and More Efficient Connections (QMEC) initiative and the promotion of competition in connections.

In all cases, our aim for this market segment is to react to our customers' needs by creating a technical and commercial environment that will allow as many generation projects to connect to the distribution network as possible.

Looking Forward report

Overview

This is the second year that we have produced a Looking Forward report and detailed work plan of service improvement actions. The process of consultation, consideration and translation of feedback into meaningful actions is now familiar to us and our customers. We have learnt from our experience developing last year's work plan and refined and improved our approach.

Importantly, we continue to operate a robust programme of connections stakeholder engagement that aligns with our overarching Northern Powergrid strategy. We employ a multi-channel, targeted approach that allows us to engage with a wide range of connections stakeholders and gives them plenty of opportunities to tell us how well we are performing and what we could do better.

The feedback from our numerous stakeholder interactions has shaped our 2016-17 work plan. We employed a rigorous process to ensure that every action, and associated outcome, will not only address the needs of the customer who raised the issue, but will also be beneficial to a wide range of our connections customers.

The process we have followed demonstrates the commitment from across our business to improve the service we provide. When a customer raises an issue specific to their own connections experience, we generally deal with this through our business-as-usual processes. Where the issue presents an opportunity to improve our service in a way that would benefit other customers, it is flagged to the ICE project team and considered as a future work plan action.

This process has been extremely important in ensuring our Looking Forward work plan is driven by our stakeholders. We want to ensure we are delivering what our stakeholders have asked us for and not what we think they want.

For each of the 22 actions in our work plan, we have contacted the customer or customers who raised the issue to acknowledge their feedback. Whenever possible, we have contacted that customer to ensure we have correctly understood their issue and that the outcome we are proposing will satisfy their expectations.

Having done our best to validate our response with the customer whose feedback generated the action, we produced a draft work plan and consulted with a broad and inclusive range of connections stakeholders on our proposals.

To ensure that everyone who wanted to comment on our work plan had the opportunity to do so, we sent emails to 3,500 connections customers who received a quotation from us in the past year and pointed them towards the draft work plan which was published on our website. We also used our Northern Powergrid online community to reach out to other interested stakeholders.

To further strengthen the results of our consultation, we commissioned independent market research company Explain to contact 300 metered, unmetered and distributed generation customers by telephone and take them through the actions in our draft work plan.

The robust consultation and validation process we employed has given us confidence that our 2016-17 Looking Forward work plan is truly stakeholder-driven. From the ways in which we have engaged with our stakeholders, both to understand opportunities for improvement and to allow them to comment on our plans, we believe that we have demonstrated a broad and inclusive approach.

We appreciate that this is an ambitious plan but as in 2015-16, we have taken care to understand the risks of underachievement and we see no compelling case to constrain our ambition just to give a greater certainty that we will achieve our plan.

Stakeholder engagement strategy

Mike Hammond talks to Chris Dooley and Richard Scott of Keepmoat Homes at our Connections Customer Forum

For our connections engagement to deliver meaningful outcomes, it is necessary to have in place a programme that is aligned to our overarching, company-wide stakeholder strategy.

Our company-wide approach to stakeholder engagement is to:

- embed stakeholder engagement in every aspect of the Northern Powergrid culture; aligning our employees and service providers to our stakeholders' experiences and needs
- take a holistic approach to engagement that is tailored, multi-layered and multi-channelled to meet the needs of our large and diverse range of stakeholders
- translate feedback from stakeholders into improved services and business performance research, benchmark and adopt best practice from other organisations
- keep pace with new and emerging markets and developments to ensure that our stakeholder mapping reflects current and potential future stakeholders
- listen to, communicate our response to, and most importantly act upon the feedback we receive

An integral part of this strategy is that we use it to:

- identify the aspects of our service that customers value and find beneficial
- identify and understand the issues where our service adversely affects customers
- translate feedback into service improvement actions that deliver improved outcomes for our customers
- research, benchmark and adopt best practice to support our continual improvement
- review our performance and planning in the light of customer feedback
- measure the impact and delivery of our service improvement plans

It is important for our diverse range of stakeholders to know that we are listening and responding to their views. We conduct open and informed discussions and have ongoing programmes of market research that allow us to gather and understand stakeholder feedback.

We interact with stakeholders through a range of appropriate channels in recognition of the fact that a one-size-fits-all approach will not deliver good engagement.

The effective delivery of our company-wide stakeholder strategy is supported by the following:

- our Stakeholder Panel which allows us to seek expert views
- our Stakeholder Engagement Management Group which drives or activities
- maintaining our AA1000 accreditation

Stakeholder Panel

Our Stakeholder Panel brings together members of our Executive team and key individuals and groups with an interest in our business. It meets quarterly and has a diverse membership drawn from the public, private and voluntary sectors including:

- two major energy suppliers
- three city councils
- a major home builder
- a large independent distribution network operator with an affiliated independent connections provider business
- a major supermarket and;
- a leading provider of residential electrical storage systems

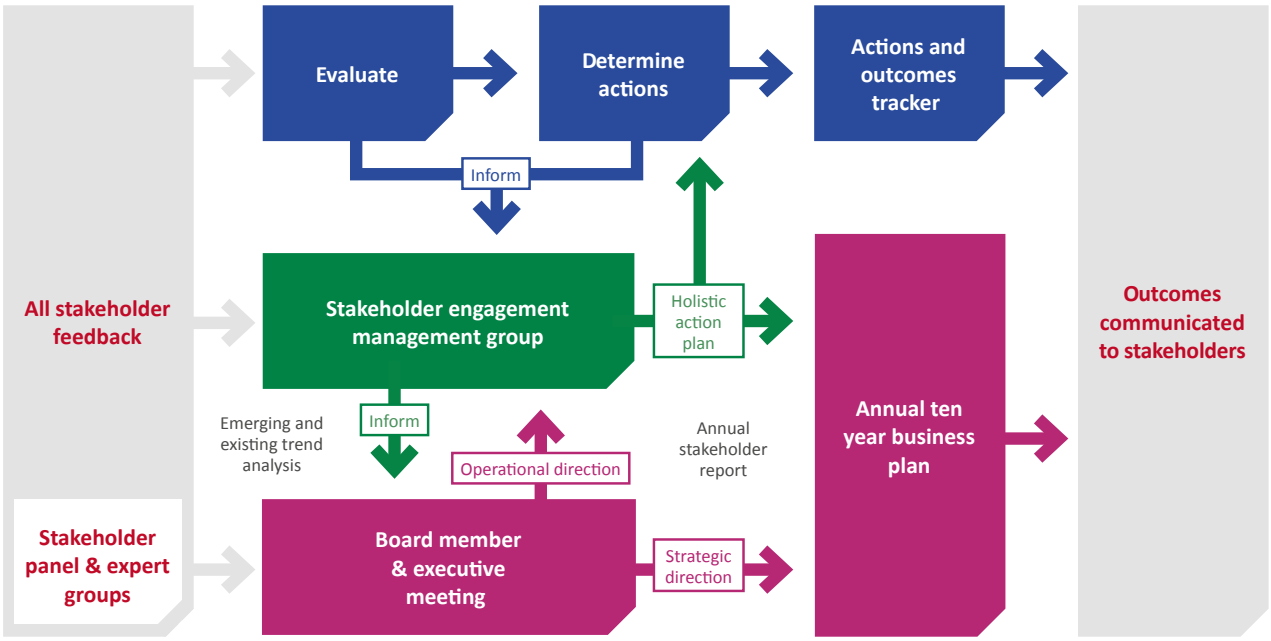
Many of our Stakeholder Panel members will have a strong interest in our connections business and the direction it is taking.

Our Stakeholder Panel enables us to build enduring relationships with key stakeholders who help shape our company-wide improvement initiatives. It helps us to better understand the issues that are important to our stakeholders through open and transparent discussions.

"Processes continue to be developed and improved, and stakeholder engagement is becoming part of business-as-usual. The ICE programme is a good example of engagement being effectively integrated to drive improvements in programme design and delivery"

AA1000 Stakeholder Audit Report, March 2016

How stakeholder feedback influences decision making



Strategic: Issue / Topic /Response

During our Stakeholder Panel meetings we update the members on important initiatives and projects happening across our business and take their feedback on where our priorities should lie. This year, we have changed the format of the meeting to include breakout sessions in the second half of the day to allow members with a particular interest to engage in more in-depth discussions with our people than the plenary sessions allow.

At our January 2016 Stakeholder Panel meeting, we held a breakout session on connections improvements. We gave an update on the status of our 2015-16 work plan and asked the members present for their feedback and any ideas for future improvement actions. As a result of this discussion, we included two actions in our 2016-17 work plan.

Our Stakeholder Panel brings together members of our Executive team and individuals and groups with an interest in our business

Stakeholder Engagement Management Group

Although we have a small central team who co-ordinate our strategic stakeholder engagement activities, the ownership of improvement actions that result from specific customer feedback lies firmly with the functional teams and their leadership.

The Stakeholder Engagement Management Group (SEMG) meets monthly. This is a group of senior managers, responsible for the coordination and delivery of stakeholder engagement across the business.

The SEMG produces a monthly report for the company Executive, which details stakeholder engagement activities undertaken in the month, the activities planned for the coming month and any recommendations for improvement actions that result from these interactions.

The report tracks all the actions that have resulted from stakeholder feedback and, for any suggestions we cannot support with a specific action, ensures the stakeholders concerned understand why that is the case and that we are looking at other ways of dealing with their concerns.

The process helps to embed prioritisation, professionalism, urgency and company-wide involvement. Members of the connections management team contribute to the monthly SEMG meetings and report on the progress and delivery of our ICE work plan.

AA1000 Stakeholder Audit

Northern Powergrid's approach to stakeholder engagement has been audited annually to AA1000 standards since 2012, adhering to the principles of inclusivity, materiality and responsiveness. We continually review and refine our approach and this sets the framework for our engagement.

In March 2016, an AA1000 audit of Northern Powergrid's stakeholder activities identified the ICE programme as a good example of how different channels can be utilised to drive effective engagement. It also stated that the ICE programme was effectively integrated into the wider business to drive improvements in programme design and delivery.

"The ICE programme has identified a variety of mechanisms used to engage with different categories of stakeholders depending on their level of engagement, from surveys and online engagement to face-to-face meetings and focus groups"

AA1000 Stakeholder Audit Report, March 2016

Translating stakeholder strategy into connections engagement

Channels of engagement

There is a wide range of stakeholders with an interest in our connections business, from large organisations such as Local Authorities and housing developers to smaller commercial customers and community energy groups. They include trade bodies, consultants, the DG community and service providers such as ICPs and IDNOs. Many of these stakeholders will have extensive knowledge of the connections process, but there are increasing numbers, individuals involved in community energy projects for example, who have complex needs but little experience of our connections process.

We work hard to support all our connections stakeholders, whoever they may be. We employ a multi-channel approach to ensure stakeholders have plenty of opportunities to tell us how well we are performing and what we can do to improve.

We also consider it important to reach out beyond those stakeholders who proactively engage with us, to those who do not interact on a regular basis but will still have a view on the quality of our service. We therefore commission our own major works customer satisfaction surveys and act on any feedback we receive.

Our main connections specific channels for engagement are:

- Connections Customer Forums
- technical surgeries
- 'Ask the Expert'
- national forums
- wider stakeholder events
- market research
- day to day operations

We use these channels of engagement to:

- seek stakeholder feedback on our connections service and how we can improve it
- assist our connections customers and ICPs with any technical issues and the planning of current or future projects
- inform our stakeholders about any significant developments in connections, both at a national level and specific to our business, and seek their views and feedback
- discuss ideas for future service improvement actions and understand whether the outcome fulfils their needs
- update stakeholders on the delivery of our ICE work plan and monitor their satisfaction with the outcomes

Our Connections Customer Forums are an opportunity to talk to our customers about the issues that concern them and how we can help

"I would like to take this opportunity to say a huge thank you for the event which in my opinion was most enjoyable and one of the best forums for some time. I thought the highlight of the day was the metered workshop, expertly hosted by Drew and Mark. This was a great opportunity for ICPs, developers and consultants to review the metered ICE plan and allowed us to challenge and/or exchange views"

Steve Woodthorpe-Evans, Keepmoat Homes, email about our November 2015 Connections Customer Forum

Connections Customer Forum

Every year in May and November, we hold our Connections Customer Forum at the National Railway Museum in York. We consider these events an invaluable opportunity to meet with our customers and talk to them about the issues they are facing and how we can help.

We use our Connections Customer Forums to:

- give customers the opportunity to meet and interact with our connections team
- enable us to understand and learn from our customers' experiences
- update customers on our service improvement plans and gain their feedback
- keep customers informed about any developments in the connections industry and how they could affect them

We consider it important to talk to our stakeholders about initiatives like the Competition in Connections Code of Practice, QMEC and dealing with network constraints at these events, so we can help them to understand the implications and get their viewpoints. We also discuss approaches being adopted elsewhere in the country to ensure that we are developing best practice in meeting our customers' needs.

Access to technical specialists

We operate a monthly connections surgery where customers can come to our offices and discuss current or future projects with our design and commercial engineers.

We launched this service in 2012 and it has proved popular with our customers, who continue to make use of access to our technical experts to discuss their connections projects and resolve issues before they materialise on the critical path of their projects. We write to customers on a monthly basis to remind them this service is available and eight companies made use of this service between 1 April 2015 and 31 March 2016.

We also operate a monthly competition in connections surgery which is well utilised with 28 ICPs using this service between 1 April 2015 and 31 March 2016.

'Ask the Expert'

Customers who prefer digital access can 'Ask the Expert' online. Customers can interact with our commercial and technical engineers via the web and get help with their connections projects. We responded to 151 enquiries between 1 April 2015 and 31 March 2016. The service is promoted on our website and via our stakeholder communications. We receive useful customer feedback and suggestions using this channel which has contributed to the development of our work plan.

National forums and sharing best practice

We recognise that however productive our dialogue is with our own stakeholders, there will be potential areas for improvement, and indeed different responses, provided by others in the country. We will therefore look for opportunities to work collaboratively and share ideas for improvement and best practice for implementation.

We play an active part in the DG-DNO steering group, where we look for common solutions to newly arising issues. Areas currently under discussion nationally include part-funded reinforcement and the reinstatement of assessment and design fees for quotations.

We have also played an active role in responding to Ofgem's challenge to DNOs in relation to QMEC. Ofgem's January 2016 QMEC update[2] contained a chapter that recognised the work that Northern Powergrid has been doing to provide customers with flexibility under the existing regulatory framework.

Wider stakeholder events

Whenever Northern Powergrid is involved in sponsoring or attending an event where questions on connections could arise, we ensure our connections team are in attendance to offer support. These include agricultural events like the Great Yorkshire Show and the community energy workshops we ran in 2015.

At the Great Yorkshire Show, July 2015

Market research

We consider it important to reach out beyond those stakeholders who proactively interact with us to gain the views of those who do not engage on a regular basis but will still have views on the service we provide. We make good use of market research, contacting a representative sample of major works customers who have received a connection quotation from us each month to seek their views on the quality of our service and how we can improve.

Day to day operations

During our day to day connections operations we receive feedback through our interactions with customers and this provides us with the opportunity to identify areas of improvement from any issues that arise.

2 Quicker and more efficient connections – an update on industry progress
https://www.ofgem.gov.uk/system/files/docs/2016/01/quicker_and_more_efficient_connections_jan_2016_-_final_29.01.2016_0.pdf

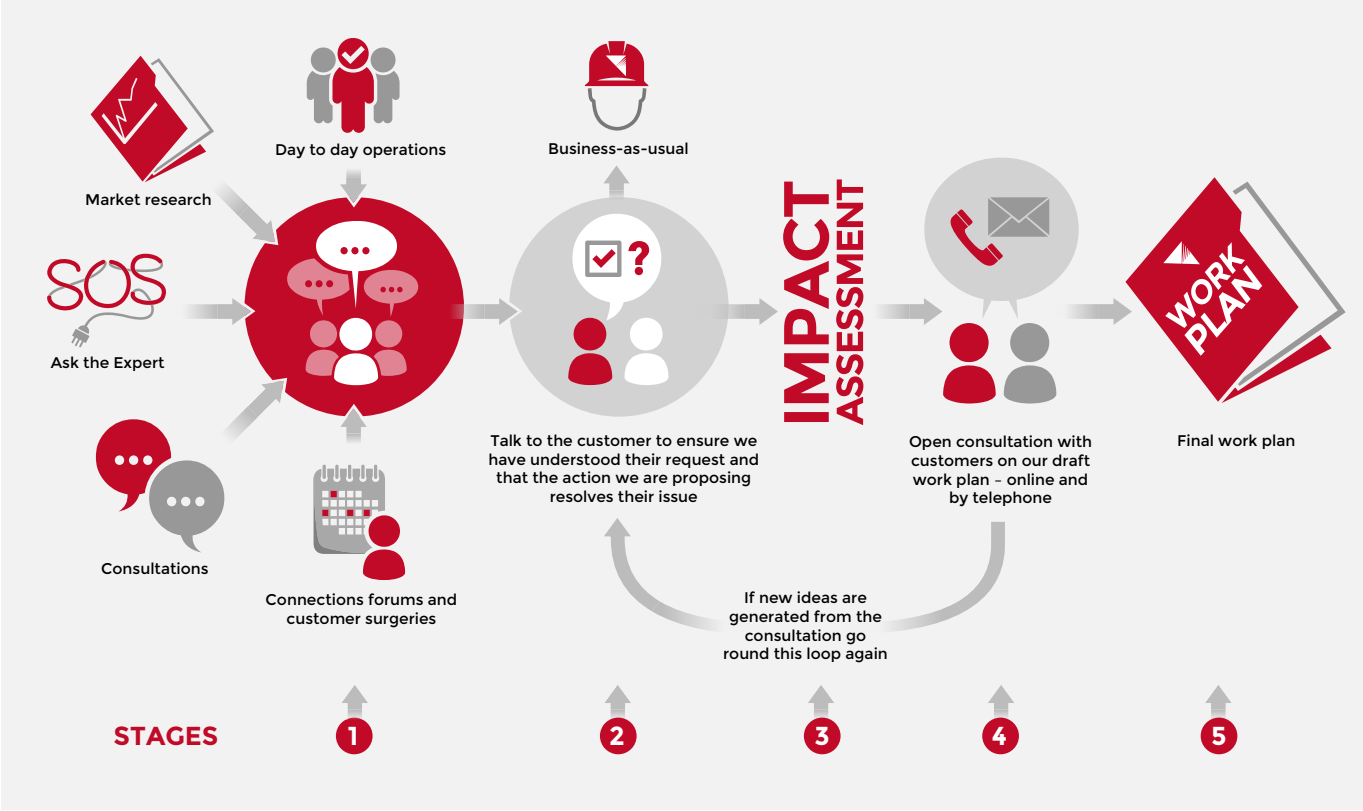
Developing our ICE work plan

Our 2016-17 ICE work plan has been a year in the making. During the course of the year we have gathered input from a range of different channels, activities and sources and translated that feedback into meaningful service improvement actions for our customers.

The diagram below illustrates the rigorous process we followed to generate our work plan. The process consists of five key stages:

1. collecting input from a wide range of stakeholders, from a number of different sources
2. interpreting the issue and formulating improvement actions
3. assessing the impact of the action in terms of costs, resource to deliver and the outcome for customers
4. consulting with a wide range of stakeholders of the proposed action
5. finalising and publishing our work plan

We collected input from a range of different sources to formulate our 2016-17 work plan. In the narrative that follows we describe where the actions originated from. Some actions are listed more than once as in some cases the same feedback came from a number of different sources.



Stakeholder Panel

At our January 2016 meeting we discussed our ICE programme with our Stakeholder Panel members and asked for their ideas for future connections-service improvements. As a result, two actions were incorporated in the 2016-17 work plan:

- improving the speed at which we issue point of connection quotations requested by multiple ICPs for the same location
- running a focussed stakeholder session on our innovation strategy

Connections Customer Forum

Our six-monthly stakeholder events have proved and important forum to discuss service improvements with our customers. At our November 2015 forum, we ran dedicated focus groups for our metered, unmetered and DG customers, where we discussed issues that were raised by customers and sought specific feedback on the service we were providing. As a result the following actions were incorporated into our 2016-17 work plan:

- producing case studies on different types of HV and EHV connection project
- reviewing our ICP design approval processes and making any necessary changes to ensure we provide clearer and more timely responses to ICP submissions
- publishing approved standard templates for 11kV, 20kV and 33kV connections for use by ICPs in their designs
- improving the speed at which we issue point of connection quotations that are requested by multiple ICPs for the same location
- running a pilot with a Local Authority to reconnect all knocked-down street lighting within 10 working days
- developing and implementing a policy on export-limiting devices
- reviewing our protection policy and confirming our position on witness testing
- actively engaging on the issue of assessment and design fees, keeping customers informed of developments, and implementing any changes
- providing a focussed session for stakeholders on active network management

Day to day operations

We believe that all feedback, whether positive or negative, is valuable in helping us to improve our connections services to customers. As a result of challenges from customers during our normal day-to-day connections operations we have included the following actions in the work plan:

- reviewing our ICP design-approval processes and making any necessary changes to ensure we provide clearer and more timely responses to ICP submissions
- publishing approved standard templates for 11kV, 20kV and 33kV connections for use by ICPs in their designs
- developing and implementing a policy on export-limiting devices

Connections contact centre

We have a dedicated connections contact centre where customers can speak to one of our team about any queries. As customers progress further into the connections process, they are more likely to engage with a single point of contact. However, the contact centre is always there to assist where necessary.

In talking to customers, our contact centre staff record issues that our customers have experienced and also react to suggestions and requests made by customers. From this, the vast majority of those issues are resolved in real time through business-as-usual operations. However, we have sought to resolve one of the issues raised by proposing the following improvement action within our ICE work plan:

- changing our application process to make it easier for a customer to apply for a separate temporary site supply

Ask the Expert

Customers who prefer digital access can use our Ask the Expert online service. They can interact with our technical and commercial engineers online. During 2015-16 we responded to 151 customer enquiries this way.

Whilst the majority of the questions raised via this channel are resolved during the exchange, the following action, which originated from an Ask the Expert conversation, has been included in our work plan. The issue was subsequently raised at industry forums.

- developing and implementing a policy on export-limiting devices

DG-DNO steering group

We play an active role in the DG-DNO steering group, made up of DNOs and representatives from the DG sector, trade associations and significant industry professionals. This group engages with Ofgem on relevant electricity-market consultations and has worked together to bring forward significant changes in the way DNOs operate with ICPs and IDNOs to extend competition in the market place, and more recently on matters such as ensuring that distribution networks do not become sterilised by speculative developers or slow-moving projects. Northern Powergrid has played a very active part in the debate on assessment and design fees for generation quotations. An action relating to this is included in our 2016-17 work plan:

- actively engaging on the issue of assessment and design fees, keeping customers informed of developments and implementing any changes

Ofgem consultation on DNOs 2015-16 ICE submissions

We reviewed the responses to Ofgem's consultation on DNOs 2015-16 ICE submissions and in particular feedback specific to our own submission. The responses to this consultation and our interactions with the customers who gave that feedback led us to include the following four actions in our 2016-17 work plan:

- carrying out monthly refreshes of the generation and demand heat maps
- publishing wayleaves and easements performance statistics
- participating in the QMEC actions regarding the withdrawal of network capacity from slow-moving projects
- reviewing our protection policies, including protection scheme requirements

Morgan Donnelly of REG Power using our interactive heat map

Actions carried over from our 2015-16 work plan

Many of our connections customers have asked for a single point of contact within our organisation. In our 2015-16 work plan we said we would introduce key account managers for regular DG customers by the end of December 2016.

During 2015, we embarked upon a programme of transforming our connections business, reviewing our structure, processes, roles and responsibilities. The changes we are making are designed to drive an improvement in customer satisfaction – which we are seeing – but the nature of the changes involves the potential for quite a number of personnel changes, at which point we will assign single points of contact. As a result of this continuing transformation process, we remain on track to offer single points of contact to all our connections customers by the end of 2016. We have therefore carried this action forward into our 2016-17 work plan.

We also said we would run trials of part-funded reinforcement and metered disconnections with ICPs. During the course of the year we developed the commercial and process framework to allow these works to be carried out and worked with ICPs in our region to identify suitable schemes to conduct these trials.

We took the development of these trials as far as possible in the year but were unable to find suitable sites to conduct the trials by 31 March 2016. However, through our continuing engagement with ICPs, we have recently identified a suitable scheme for the metered disconnections trial and this will go ahead in June 2016. We continue to look for a suitable site for the part-funded reinforcement trial.

We consider both of these trials to be important in extending the scope of contestable works and want to realise the benefit of the work already done. We will therefore carry the following actions forward into our 2016-17 work plan.

- running an ICP part-funded reinforcement trial, communicating the progress and outcomes to customers and considering post-trial if we can make this a business-as-usual practice
- designing and running an ICP metered disconnections pilot
- implementing metered disconnections for ICPs

Consultation on our draft work plan

In March 2016, we ran an open consultation on our draft work plan. The purpose was to validate each of the actions in our 2016-17 plan with a broad and inclusive range of connections stakeholders and find out whether they would support the actions and outcomes we were proposing.

To ensure everyone who wanted to comment had the opportunity to do so, we sent emails to 3,500 customers who had received a connections quotation from us in the past 12 months, asking for their opinions. We also used the Northern Powergrid online community to cast the net wider and engage with other stakeholders.

Following comments we received about last year's consultation process, we gave stakeholders' two options to give us feedback – a questionnaire which they could complete and email back to us or a new online survey. The online survey proved popular, with the majority of respondents using this method.

To solicit the views of connections stakeholders who do not respond to consultations we engaged independent market research company Explain.

Explain contacted 300 customers from the metered, unmetered and DG market sectors to talk them through our draft work plan and ask if they would support the actions and outcomes we were proposing. Explain also talked to customers about the actions completed for our 2015-16 work plan and asked whether they had noticed any improvement in the quality of our connections service. The results are included in the Looking Back section of this submission.

The Explain market research exercise gave us confidence that our proposals were supported by a broad and representative range of connections stakeholders. As part of the exercise Explain also asked respondents if there was anything else they thought should be included in our 2016-17 work plan. Feedback from this question generated a further three actions.

The following actions were added to our final work plan;

- ensuring stakeholders are kept informed with regular updates and by developing the ICE section of our website
- developing a 'jargon buster' for customers and publishing it on our website
- improving how we issue estimates to make it quicker and easier for customers to proceed to quotation

Our 2016-17 work plan

We consolidated all the actions described previously into 22 new service improvement actions, grouped by five common themes. These actions form our 2016-17 work plan. A summary can be found on the next page (22) and the full work plan with forecast completion dates is in appendix 1 of this submission.

Stakeholders were given two ways to respond to our draft work plan consultation – via a questionnaire or new online survey

A summary of our 2016-17 work plan [3]

Key M metered demand | U unmetered | DG distributed generation

	Theme 1 – Provision of information	Status	Applicable to		
Area for improvement	**Heat maps –** We will refresh the data on our generation and demand heat maps on a monthly basis	OK to plan not started	M		DG
	Connections case studies – We will produce case studies on different HV and EHV connections projects to help customers understand the likely cost and resources required to deliver a specific job	OK to plan not started	M		DG
	Provision of wayleaves – We will publish quarterly wayleaves and easements performance statistics	OK to plan not started	M		DG
	Stakeholder updates – We will ensure customers are kept informed of the progress of our ICE work plan actions with regular stakeholder updates and by developing the ICE section of our website	OK to plan not started	M	U	DG
	Understanding of technical terminology – We will develop a jargon buster to help customers understand the technical terminology used in connections	OK to plan not started	M	U	DG
	Theme 2 – Improving our applications process	**Status**	**Applicable to**		
Area for improvement	**ICP design approval –** We will review of our ICP design approval process and make any necessary changes to ensure we can provide clearer and more timely responses to ICP submissions	OK to plan not started	M		DG
	ICP design approval – We will publish approved standard templates for 11kV, 20kV and 33kV connections for use by ICPs in their designs	OK to plan not started	M		DG
	ICP quotations – We will implement a new process where ICPs will benefit from faster quotes for sites where we have already issued a quotation	OK to plan not started	M		DG
	Applications – We will implement changes to our application process that make it easier for customers to apply for a separate temporary site supply	OK to plan not started	M		DG
	Public street lighting reconnection – We will run a pilot with a Local Authority to reconnect knocked down street lighting within a target of 10 working days, from receipt of notification that a new column has been erected. Post-pilot, we will consider how to roll this out to other Local Authorities in our region	OK to plan not started		U	
	Converting budget estimates into firm quotations – We will improve how we issue budget estimates to make it quicker and easier for customers to proceed to a firm quotation	OK to plan not started	M	U	DG
	Theme 3 – Improving communications	**Status**	**Applicable to**		
Area for improvement	**Single points of contact (key account management) –** We will provide single points of contact in quotation and delivery for all connections customers	OK to plan in progress	M	U	DG
	Theme 4 – Technical and commercial developments	**Status**	**Applicable to**		
Area for improvement	**Export-limiting devices –** We will develop and implement policy on the use of export limiting devices for Northern Powergrid connections and communicate the policy to customers	OK to plan in progress			DG
	Protection policy – We will review our protection policy and confirm our position on third party witness testing	OK to plan in progress			DG
	Assessment and design fees – We will continue to support and actively engage in DECC's consultation on assessment and design fees and keep our customers informed of the developments. We will implement any necessary changes to our policies and processes following the outcome of the consultation	OK to plan in progress	M		DG
	Release of unused capacity – We will continue to participate in the Ofgem QMEC actions being carried out by the DG-DNO steering group regarding the withdrawal of network capacity from slow moving projects. We will communicate the outcomes and implement any necessary policy and process changes resulting from these actions	OK to plan in progress	M		DG
	Protection policy – We will review our protection policy, including the protection scheme requirements compared to the size and cost of the connection solution and advise customers our new policy	OK to plan in progress			DG
	Sharing our smart grid strategy – We will run a focussed session for stakeholders on Northern Powergrid's innovation strategy, incorporating storage, demand side response and active network management	OK to plan not started	M		DG
	Active network management – We will run a focussed session for stakeholders on active network management	OK to plan not started			DG
	Theme 5 – Enabling competition	**Status**	**Applicable to**		
Area for improvement	**Part-funded reinforcement –** We will run a part-funded reinforcement trial, communicate the progress and outcome to customers and post-trial, consider if we can make this a business-as-usual practice	OK to plan in progress	M		DG
	Metered disconnections – We will design and run an ICP metered disconnections pilot	OK to plan in progress	M		
	Metered disconnections – We will implement metered disconnections for ICPs	OK to plan in progress	M		

3 The full 2016-17 work plan can be found in appendix 1

"Based on the plan you have just gone through, it is all music to my ears"

Lynda Hutchinson, Spectrum Energy Systems, Explain market research, March 2016

Stakeholder feedback supports our plans

Explain market research contacted 300 major works customers from the three market segments covered by ICE. Explain described the actions and associated outcomes in our draft work plan and asked customers whether they would support and endorse them. The results of the survey are presented here.

The views of the 242 metered customers surveyed

- 97% supported the actions in our plan on the provision of information
- 100% supported the actions in our plan to improve our applications and delivery processes
- 99% supported the action to improve communication by introducing single points of contact
- 99% supported the actions to improve our technical and commercial processes
- 99% supported the actions to enable competition

The views of the five unmetered customers surveyed

- 100% supported the actions in our plan on the provision of information
- 100% supported the actions in our plan to improve our applications and delivery processes
- 100% supported the action to improve communication by introducing single points of contact

The views of the 53 distributed generation customers surveyed

- 96% supported the actions in our plan on the provision of information
- 100% supported the actions in our plan to improve our applications and delivery processes
- 98% supported the action to improve communication by introducing single points of contact
- 100% supported the actions to improve our technical and commercial processes
- 98% supported the actions to enable competition

How we will continue to improve our connections services in 2016-17

"We tend to work with the design engineers and if necessary have a site meeting for larger and more complex jobs to enable understanding and ensure that the customer provides input, which will be valuable as part of the solution, but case studies would be very useful"

Karen Leeson, Renewable Energy 4 Business Limited, Explain market research, March 2016

Introduction

Our 2016-17 work plan is driven by stakeholders' feedback. It is clear that the issues raised and the improvement actions and outcomes we will deliver as a result, fall into five common themes:

1. **provision of information**
2. **improving our application and delivery processes**
3. **improving our communications**
4. **technical and commercial developments**
5. **enabling competition**

In the narrative that follows we describe the action we will undertake, where it originated from, the outcome for the customer and how we will measure success.

You said

"RWE Innogy are pleased to see NPg have since their draft ICE plan accelerated the launch of a contracted capacity register from Nov 2016 to Aug 2016. It is not mentioned in the plan what the commitment to refreshing this is"

Fruzsina Kemenes, RWE Innogy UK, Ofgem consultation on DNO 2015-16 ICE submissions, August 2016

We committed to

Starting in June 2016, we will perform monthly updates to our online generation and demand heat maps to ensure the information available is accurate and kept up to date.

1 Provision of information

1.1 Heat map updates M DG

RWE Innogy stated in response to Ofgem's consultation on DNOs 2015-16 ICE submissions that they would like to see a commitment from us to refresh the data on our generation heat map regularly so that the contracted capacity register is kept more up to date. The request was echoed by other customers during the course of the year.

In March 2016, we were the first DNO to launch a demand heat map. It was well received by customers, with 120 hits on the webpage in the first month alone.

We acknowledge and understand our customers' expectation that our heat map data will be accurate and up to date. Therefore, and after carrying out a thorough impact assessment, we have included a commitment in our work plan to update both our generation and demand heat maps on a monthly basis, starting in June 2016.

Customer outcome: Up-to-date generation and demand heat map data

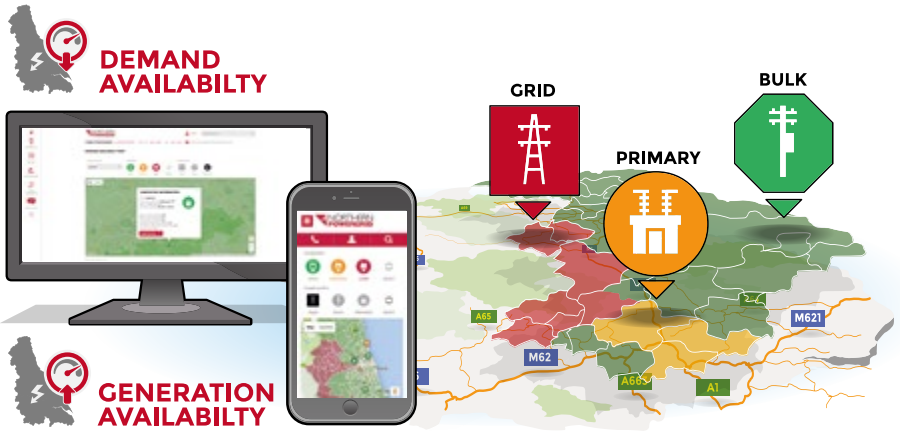
Target measure: % of monthly data updates achieved

1.2 Produce connections case studies M DG

Carter Jonas LLP, told us at our Connections Customer Forum that they use our generation heat map to estimate the likely cost of a connection. Our heat map may show a substation with spare capacity but that does not necessarily mean that the cost to connect will be low. We understand that this may be confusing and so, to help our customers understand the likely cost and resources required to deliver a particular connection, we will produce a series of case studies on different types of HV and EHV connections projects and make these available on our website by December 2016.

Customer outcome: Better understanding of what is required to deliver HV and EHV connections

Target measure: Case studies available to customers



Our online generation and demand heat maps are a useful planning tool for customers

"Any information that can give you an idea of what resources are available is good, just so you know what you can tap into. If it was on a website so you could just tap into it then that would be good. I think you've hit all the key issues that have come up in the past, just going forward it's important for us to be kept up to date and informed of all of this"

Sarah Whittaker, Barnsley MBC, Explain market research, March 2016

1.3 Publish quarterly wayleaves statistics M DG

Customers, including RES and Green Frog Connect, told us they wanted us to continue to improve our pre-construction activities. They asked for an improvement in our wayleaves delivery performance and in particular a reduction in the time it takes us to secure wayleaves.

In our 2015-16 work plan we introduced a 66-working-day service standard for wayleaves. During our draft work plan consultation we said we would publish monthly statistics showing our performance against this voluntary standard. Customers told us that, although visibility on our wayleaves performance would be useful, a monthly metric was not necessary. Therefore, starting in June 2016, we will include a quarterly metric on our wayleaves and easement performance in the data available on the 'how are we performing' section of our connections website.

Customer outcome: Better visibility of the time taken to obtain wayleaves and easements

Target measure: Publication of quarterly performance statistics

"Visibility of wayleave timescales is an improvement and we haven't seen any similar information being published by any other DNOs"

Anonymous, Explain market research, March 2016

1.4 ICE stakeholder updates M U DG

In February 2016 we introduced a dedicated ICE page on our website. The page explains more about the incentive and all the channels customers can use to give us feedback. It also features an up to date copy of our work plan so that customers can see the progress and status of each of our work plan actions.

In our 2016-17 draft work plan consultation, we proposed developing this page to include more resources and information, and the vast majority of customers said they would support this action. It was also clear from the feedback we received however, that many of the customers surveyed were not aware of what we had already delivered as part of our 2015-16 work plan (particularly the improvements we have made to our heat maps) and that we could be more proactive about keeping them informed.

We have therefore developed this action and committed to delivering a programme of targeted ICE stakeholder updates during the course of the year. In June 2016, we will also begin to improve the content, information and resources available on the ICE page on our website and ask customers for their feedback on how useful this is.

Customer outcome: Better information available to customers

Target measure: Web page usage and stakeholder surveys

"I am sure it would be useful; I personally favour a website where information is easy to find. Most DNO websites are a challenge to find the information you need"

Karen Leeson, Renewable Energy 4 Business Limited, Explain market research, March 2016

1.5 Develop a 'jargon buster' for our website M U DG

When customer, Daniel Elston of Green Yorkshire Solar was asked if there was anything else he wanted to tell us about our draft work plan, he commented that it contained a lot of technical jargon that could be confusing to anyone not familiar with the connection process. We want to ensure all our communications with customers are clear and understandable whatever their level of technical knowledge or experience and so, by September 2016, we will develop and introduce a 'jargon buster' on our website to help customers decipher common industry terminology.

Customer outcome: Better understanding of the technical terminology used in connections

Target measure: Jargon buster available to customers on our website

"The plans seem fairly thorough; it is just that there is a lot of technical jargon used that is not explained. Maybe you need an idiot's guide"

Daniel Elston, Green Yorkshire Solar Ltd, Explain market research exercise, March 2016

"We hope that Northern Powergrid can investigate streamlining design approval with a commitment to shorter timescales and availability of template designs as appropriate"

Graham Pannell, RES, Ofgem consultation on DNOs 2015-16 ICE submissions, August 2015

2 Improving our application and delivery processes

2.1 Review our ICP design-approval process M DG

Customers, including Lightsource and Green Frog Connect, told us that we could make our ICP design-approvals process quicker and more straightforward. We have therefore committed to review our current processes by October 2016 and find ways to provide ICPs with a clearer and more timely response that covers all aspects of the design including electrical, building and civil works and protection.

Customer outcome: Clear and timely approval of ICP designs

Target measure: % reduction in approval time under new process

2.2 Approved standard templates for 11kV, 20kV and 33kV connections M DG

Lightsource suggested that one way to help resolve the issue of slow-moving ICP design approvals would be for us to pre-approve-for any ICP that requires it-standard configuration templates for protection and civil designs. Once these are approved, the ICP needs only to confirm to us that the design consists of certain pre-approved elements, speeding up the overall process and enabling us to grant design approvals more quickly. Therefore, we will work with ICPs to produce an approved set of standard templates for 11kV, 20kV and 33kV connections and deliver these by December 2016.

Customer outcome: Quicker approval of schemes designed by ICPs

Target measure: % of ICPs using new standard templates

"Different substation requirements for 11kV, 20kV and 33kV, if that is more readily available it would be helpful"

Mr David Warner, SINE consulting, Explain market research, March 2016

2.3 Faster ICP quotations M DG

We know that a number of ICPs will quote for the same work, a connection for a new housing development for instance. Redrow Homes and Lark Energy Commercial told us it would be quicker and more efficient to make the quotation for the non-contestable part of the job available to any ICP who requests it. We agreed that this made good sense and so, by August 2016, where the initial quotation remains valid, the point of connection is still available and the capacity requested is consistent with the initial quotation, we will reissue our quotation to any ICP who requests it.

Customer outcome: Quicker ICP quotations

Target measure: % reduction in time taken to quote under the new process

"If I have a development, lots of ICPs might quote for the work. Can you make your quote for the non-contestable part of the work available to any ICP who wants it instead of re-doing it? This would make the whole process of Redrow getting quotes more efficient"

Andrew Calvert, Redrow Homes, January 2016 Stakeholder Panel

"I am pleased that Northern Powergrid has proposed an initiative that aims to significantly reduce the time taken to re-service a knocked down street lamp. If successful it will produce savings in time and effort, be cheaper and easier to organise and result in less disruption for highway users which will be welcomed by the public at large"

Andrew Bullen, Kirklees Council, email, May 2016

SSE (working for Leeds and Newcastle City Councils) told us we could improve the speed at which we reconnect knocked-down street lighting

2.4 Applying for a separate temporary site supply M DG

Construction services company ISG contacted our call centre to ask how to apply for a temporary site supply. Whilst the majority of requests that come via our call centre are dealt with by our team as part of our day to day business operations, we considered this particular enquiry could be translated into a straightforward service-improvement action that would benefit customers.

A temporary site supply can currently be applied for as part of a full connection application. By August 2016, we will implement changes to our application process that make it quicker and easier for customers to apply for a temporary site connection without having to complete the full application.

Customer outcome: Making it easier to apply for a temporary site connection

Target measure: % of temporary connections applied for using the new process

2.5 Public street lighting U

At the unmetered customer workshop we held at our November 2015 Connections Customer Forum, SSE (working for Leeds and Newcastle City Councils) told us we could improve the speed at which we reconnect knocked-down street lighting. This was echoed by the Local Authority and PLA contacts present, who told us we could work together to improve the 4-6 week average timescale for reconnection and in doing so, improve safety and reduce complaints from members of the public. As a result of this discussion, by December 2016, we have committed to:

- run a pilot with a Local Authority to reconnect knocked-down street lighting within a target of 10 working days from receipt of the notification that a new column has been erected; and
- following completion of the pilot, consider how we can roll out the 10-day standard for all Local Authorities in our region

Customer outcome: Faster reconnection of knocked-down street lighting and a better service delivered to Local Authorities and members of the public

Target measure: % decrease in the time taken to reconnect knocked-down street lighting

2.6 Converting budget estimates into firm quotations M U DG

During the consultation on our draft work plan, AK Services told us that when they seek a budget estimate and then decide to proceed to a firm quotation, they will often experience a time delay and are required to repeat some information that they have already supplied. We have taken on board this feedback and will look at how we can improve our processes to make it quicker and easier for customers to proceed from a budget estimate to a firm quotation.

Customer outcome: Making it quicker and easier to proceed from budget estimate to firm quotation

Target measure: Implementation of a new process

You said

"Just have one point of contact instead of customers being bounced from department to department"

Kevin Guy, Middlesbrough Council, Explain market research, March 2016

We committed to

We will introduce single points of contact for all connections customers by December 2016. Where customers already have a designated point of contact, we will work to strengthen these relationships.

3 Improving our communications

3.1 Single points of contact M U DG

In our 2015-16 work plan we committed to provide single points of contact for Local Authority and PLA contacts in quotations and delivery and this action was completed in July 2015.

We also said we would train and deploy key account managers for regular DG customers by December 2016. This action has been carried forward into our 2016-17 work plan as during 2015 we embarked upon a programme of transforming our connections business, reviewing our structure, processes, roles and responsibilities. This process is ongoing and we remain on track to introduce single points of contact in quotations and delivery for all our connections customers by December 2016.

Customer outcome: Single points of contact in quotations and delivery for all connections customers

Target measure: % of customers issued with single points of contact

"This is something we have been pushing for a while. Other DNOs provide this service and it's proved to be very useful"

Anonymous, Explain market research, March 2016

"A single point of contact is really good as otherwise you have to explain the situation five times over, which can get very frustrating"

Mr H Crick, Explain market research, March 2016

4 Technical and commercial developments

4.1 Export-limiting devices DG

Boston Renewables, Lark Energy Commercial and Peak Power Systems asked us to review our current policy on the use of export-limiting devices on our network. They told us that not permitting these devices on our network limits their ability to offer renewable energy solutions to their clients. Therefore, by July 2016, we will develop and implement a revised policy on the use of export-limiting devices for Northern Powergrid network connections and communicate this policy to customers.

Customer outcome: Ability to propose the use of export-limiting devices

Target measure: Policy implementation and information shared

"We need this as soon as possible. It would be a very valued and positive move by you to support the renewable industry"

Ian Reynolds, Boston Renewables, draft work plan consultation, March 2016

Customers told us that the ability to use export-limiting devices would be a positive move to support the renewable industry in our region

4.2 Protection policy and witness testing DG

Lark Energy Commercial asked us whether we could be more flexible in our approach to witness testing for small scale generation projects and permit third parties to act on behalf of the DNO to carry out the witness testing. As a result, we have committed to review our protection policy and confirm our position on where and when witness testing is required. We will communicate any revisions to our current position and policy by November 2016.

Customer outcome: A policy review on protection and witness testing

Target measure: Policy review completed and position on witness testing confirmed

4.3 Assessment and design fees M DG

We recognise that assessment and design fees continue to be an important issue for our customers. Northern Powergrid has played a significant role in the ongoing national debate on assessment and design fees, in respect of which Department of Energy and Climate Change (DECC) launched a call for evidence on 24 March 2016. Our customers, and in particular Power On Connections, told us that we should continue to contribute to the national debate and keep customers informed of any significant developments and outcomes. Therefore, we have committed to:

- continue to support and engage with DECC on its consultation on assessment and design fees, encourage our stakeholders to participate and keep customers informed of any significant developments or outcomes
- implement any necessary changes to our policies or procedures following the outcome of the DECC consultation

Customer outcome: A revised approach to assessment and design fees

Target outcome: Progress reported, new policy and processes implemented

"That is very useful to be kept updated. We do enquire for clients who used to pay design fees. If they come back it is sometimes difficult to get those design fees from the client"

David Peart, Desco Ltd, Explain market research, March 2016

4.4 Unused capacity M DG

Customers, in particular RES, told us they support the commitment we made in our 2015-16 plan to identify and unlock underutilised capacity from connected customers. They want us to continue to push for any unused capacity held within slow-moving contracts (capacity not yet connected) to be released for utilisation by the wider market. This is a national initiative being carried forward as part of the Ofgem QMEC initiative by the DG-DNO steering group. Once this steering group reports back, probably in the summer of 2016, we will press forward and implement any appropriate process changes within our connections business. We therefore expect this action to be ongoing until the end of March 2017.

Customer outcome: Better management of slow-moving contracts to release unused capacity

Target measure: Progress reported, new policy and processes implemented

"Opening up unused capacity is very helpful"

Neil Hunter, Hemswell Biogas Ltd, Explain market research, March 2016

"The future of electricity distribution systems will be built on innovation, such as dynamic network operation and effective use of flexibility services, in order to extract efficiencies that will benefit consumers. It is therefore most welcome that NPg have taken the initiative in this area by setting up this event"

Patrick Smart, RES, via email April 2016

4.5 Protection policy and small-scale connections DG

Our customer RES has queried the complexity of our protection schemes in relation to small-scale connections; they are concerned that the cost of compliance can make such schemes unviable. They asked us to ensure our protection requirements remain proportionate with the size and cost of the proposed connection solution. We consider this feedback valuable and therefore, by the end of November 2016, we will review our protection policies, including our protection scheme requirements compared to the size and cost of the connection solution, and advise customers of our any revised policy on this matter.

Customer outcome: A revised policy on protection scheme requirements

Target measure: Policy review and information shared

"It should depend on size of solution"

Karen Leeson, Renewable Energy 4 Business Limited, Explain market research, March 2016

4.6 Sharing our smart-grid strategy M DG

At our Stakeholder Panel in January 2016, Patrick Smart of RES told us he would like to know more about our innovation strategy, particularly regarding storage and demand-side response. As a result of this feedback, we committed to run a focussed stakeholder session on our innovation strategy at our Connections Customer Forum in May 2016.

Customer outcome: Better understanding of Northern Powergrid's innovation strategy and smart-grid development plan

Target measure: Information shared

"We have attended events run by Scottish Power and Electricity North West. We are always interested in innovation and finding ways to work smarter"

Karen Leeson, Renewable Energy 4 Business Limited, Explain market research, March 2016

"It is good to have sessions to go to. It is OK on the website but if you don't read it you don't know. It would be useful to get people that work with them every day in a room so you can talk to them"

Peter Urwin, Gleeson Developments Ltd, Explain market research, March 2016

At our Connections Customer Forum, Patrick Smart of RES (left) told us he would like to understand more about Northern Powergrid's innovation strategy

"RWE Innogy welcomes all measures to improve the competitiveness of the connections market. We endorse the proposals and are very interested in the part-funded connection trial outcomes. This seems like an excellent initiative to deliver the benefits of competition on cost to customers"

Fruszina Kemenes, RWE Innogy, Ofgem Consultation on DNO 2015-16 ICE submissions, August 2015

4.7 Active network management DG

ANM is a relatively new and fast-moving aspect of network management. We successfully trialled ANM as part of our Low Carbon Networks Fund Customer-Led Network Revolution project and, in line with the commitments we made in our 2015-16 work plan, have been offering ANM connections on our network in Driffield since end of March 2016.

At our Connections Customer Forum in November 2015, our customer Gunther Woltron of Bio4Gas told us he wanted to know more about our plans to roll out ANM on our network. As a result of this feedback, we committed to run a focused stakeholder session on ANM at our May 2016 Connections Customer Forum. We will invite Mr Woltron to attend and promote the session to other interested stakeholders via our website.

Customer outcome: Better informed about our deployment plans for active network management

Target measure: Information shared

5 Enabling competition

5.1 Implement a part-funded reinforcement trial M DG

In our 2015-16 work plan we said we would develop and run a trial of part-funded reinforcement with an ICP. If successfully piloted and implemented as a business-as-usual practice, this would allow ICPs to quote for and carry out the reinforcement work on our network required to deliver a new connection and enable them to offer a wider turnkey package to their customers.

Throughout the course of the year we worked with ICPs to identify suitable schemes to conduct the trial and developed all the technical and commercial principles and processes required to make this a business-as-usual practice. We were unable to identify a site to conduct this trial by end of March 2016, we have therefore carried the action forward into our 2016-17 work plan and will continue to look for a suitable pilot scheme.

Customers including RWE have expressed interest in the trial, its progress and outcomes. We will keep customers informed about the status and progress of this trial as we continue to look for suitable conditions to conduct the pilot.

Customer outcome: Enable ICPs to participate in part-funded reinforcement trials

Target measure: Information shared and next steps considered

5.2 Design and run an ICP metered disconnection pilot M

and

5.3 Implement metered disconnections for ICPs M

In our 2015-16 work plan we also said we would design and run a metered disconnection trial with an ICP. This action was again dependent on identifying a suitable scheme to trial the disconnection. Although we developed all the technical and commercial principles and processes necessary to make this a business-as-usual practice, we were unable to identify a suitable site by 31 March 2016 to conduct the pilot. We have carried the action forward into our 2016-17 work plan and due to our ongoing engagement with ICPs, have recently identified a suitable site to conduct the trial. If the trial is successful and the outcome supported by our stakeholders, we will consider making metered disconnections a business-as-usual practice by end of March 2017.

Customer outcome: Allow ICPs to carry out metered disconnections on brownfield sites

Target measure(s): Pilot scheme completed and outcome reviewed

Process and policy developed and information shared

"If there is competition there it keeps everyone on their toes"

David Lowes, South Tyneside Metropolitan Borough Council, Explain market research, March 2016

Looking Back report

Overview

The Looking Back section of our submission reports on the delivery of our 2015-16 ICE work plan. It describes the actions we completed and those that we continue to work towards. We describe how we have continued to support these actions by implementing our comprehensive stakeholder strategy, seeking out customers' feedback and opinions in order to validate the outcome we achieved.

The spirit in which we devised our 2015-16 work plan was guided by Ofgem's encouragement to DNOs to be ambitious in the service improvements actions they were proposing and on the understanding that DNOs who were ambitious in the number and nature of their actions would not be penalised for failing to deliver stretching targets, as long as the risk of underachievement was understood at the outset and the reasons for failing to meet the target are reasonable and well justified.[4]

We always knew that we had set ourselves a very ambitious target. Our work plan contained a total of 72 specific actions, spanning 31 areas for improvement which were wide ranging in their nature and impact and had varying degrees of complexity and resource requirements.

We are pleased to report that we successfully completed 67 of the 72 actions in our work plan. Because of the work involved, we did not manage to deliver all of them exactly in line with our original forecast dates, but we did deliver them within the planned year.

Of the five actions which were not fully completed by March 2016, two of these related to the introduction of key account managers for DG customers. These were forecast for completion by the end of 2016 (i.e. after the cut-off date for this submission) and we took the other three (which involved the developing new ICP processes) as far as possible in the year.

These three actions involved us collaborating with ICPs to deliver trials of metered disconnections and part-funded reinforcement and, although we were able to develop all the necessary processes, we were not able to find suitable sites to conduct the trials. Therefore, as we were not able to trial the customer experience, we are carrying these actions forward into our work plan for 2016-17.

The results of our Explain market research exercise shows that our stakeholders have acknowledged our efforts. Support for our 2015-16 work plan was high, with the majority of respondents agreeing that the changes we have made had improved our overall connections services.

Whenever we completed an action in our work plan, we went back to the customer whose feedback generated that specific action to close the loop and confirm we had achieved the expected outcome.

We understand that our customers have other pressing demands on their time and in a few cases we did not managed to gain the originating customer's endorsement that the action we completed, delivered the outcome they were seeking. But in every case we did our best to talk to the customer because we want to ensure what we have done resolves their original issue or concern, and, if not, we want to learn what we else we can reasonably do. And we don't stop there. We use market research to close the loop with a wider group of affected customers and check that they support the change we have made. It is only through this ongoing dialogue and interactions that we can be sure we are fully satisfying our customer's expectations.

4 Ofgem Incentive on Connections Engagement (ICE) Guidance Document, 1 April 2015, paragraph 3.9

Engaging with our connection stakeholders

The successful delivery of our work plan actions and outputs necessitated regular dialogue with our customers. In line with our overall stakeholder strategy, we engaged with customers using a number of appropriate and targeted channels including:

- Ask the Expert online service
- Connections Customer Forums
- connections surgeries
- connections call centre
- consultations and market research

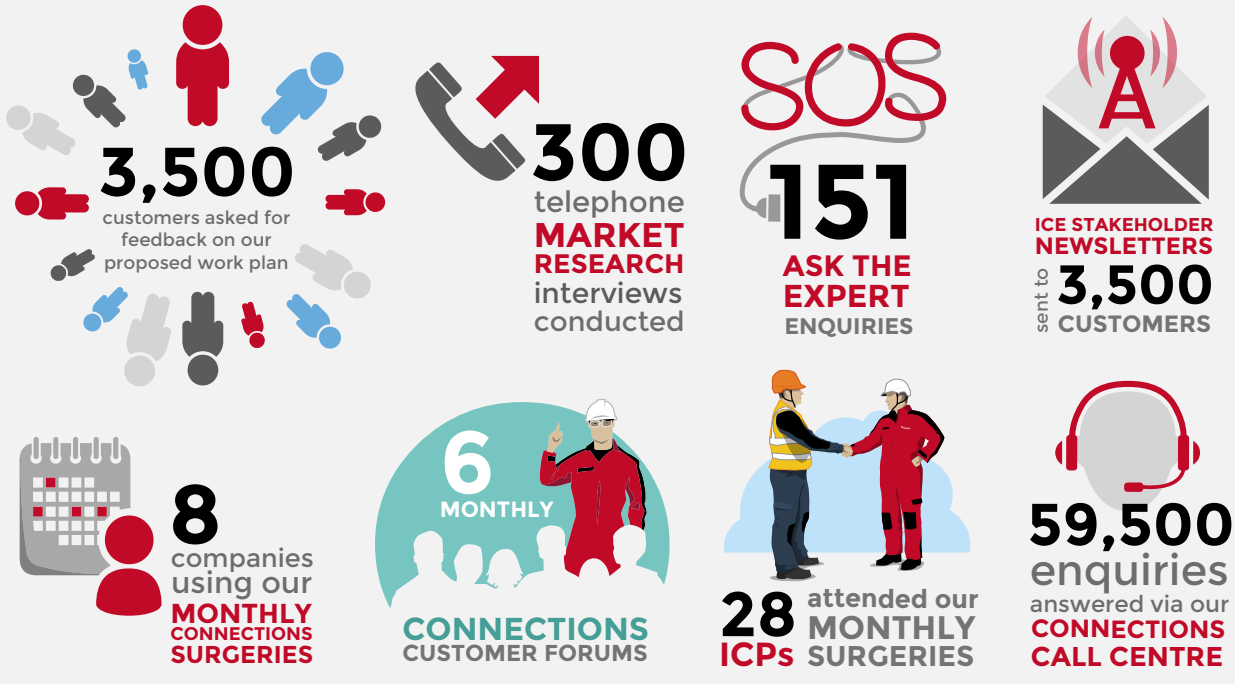
We commissioned market research company Explain to survey the views of 242 metered demand customers, five unmetered customers and 53 distributed generation customers.

Explain asked customers what they thought about the actions and outcomes we had achieved and if they thought we had improved our connections service as a result.

- 76% of metered customers, 85% of DG customers and 100% of unmetered customers agreed that changes to the provision of information have improved the connections service Northern Powergrid provides
- 87% of metered customers, 72% of DG customers and 67%[5] of unmetered customers agreed that changes to the application process have improved the connections service Northern Powergrid provides
- 88% of metered customers, 84% of DG customers and 67%[5] of unmetered customers thought changes to communication have improved the connections service Northern Powergrid provides
- 80% of metered customers, 76% of DG customers and 100% of unmetered customers agreed that changes to technical and commercial developments have improved the connections service Northern Powergrid provides
- 79% of metered customers, 82% of DG customers and 100% of unmetered customers agreed that changes to the way information about competition is provided have improved the connections service Northern Powergrid provides

We have engaged with our customers throughout the course of the year, using a range of appropriate and targeted channels shown below.

Stakeholder Engagement Activities
1 April 2015-31 March 2016



5 Three of the five unmetered customers surveyed answered these questions, the percentage is based on a sample size of three (with two out of three agreeing)

A summary of our 2015-16 work plan [6]

Key M metered demand | U unmetered | DG distributed generation

Theme 1 – Provision of information	Status	Applicable to
Area for improvement	**Provision of heat maps –** Expand the information provided to include: ▸ Bulk supply points ▸ Distribution Substations above 200kW ▸ EHV/HV underground and overhead networks and share base data	Complete	DG
	Substation information – Publish substation address information	Complete	DG
	Contracted capacity – Publish a contracted capacity register for primary substations within our heat map	Complete	DG
	Wayleaves guidance – Provide better guidance for customers about wayleaves and consents	Complete	M, DG
	Demand heat maps – Publication of demand heat map with primary substation information	Complete	M
	Community Energy – Provide community energy groups with advice on how to get connected	Complete	M, DG
	Performance metrics – Availability of current performance metrics	Complete	M, U, DG
	Access to mains records – Access online to safe dig plans	Complete	M, U, DG

Theme 2 – Improving our applications process	Status	Applicable to
Area for improvement	**Plot call off process –** Have a flexible quotation process for phased housing developments	Complete	M, DG
	Budget estimates and optioneering – Provide customers with the range of technical options available in a budget estimate	Complete	M, DG
	Online self-service process – Customers will be able to apply for unmetered connections/disconnections online	Complete	U
	Interactivity – To provide an industry best practice interactivity process	Complete	DG
	Generator application process – Making generation applications more understandable	Complete	DG
	Quotation feasibility service – Implement a quote plus feasibility service	Complete	DG
	Electronic G59 application forms – Provide electronic G59 application forms ▸ up to 50kW ▸ up to 200kW ▸ above 200kW	Complete	DG
	G83 application to connect notifications – Expand our online service to include G83/2 multiple premises application/notification and introduce an online account for all SSEG installers.	Complete	DG
	Statement of works – Streamline working with national grid to reduce waiting times	Complete	DG

Theme 3 – Improving communications	Status	Applicable to
Area for improvement	**Written communication improvements –** Quotations written in understandable plain English including all the required technical information	Complete	M, U, DG
	Key timescales for contact – Communicate effectively with our customers	Complete	M, U, DG
	Key account management – Unmetered customers will have access to a single point of contact for quotations and for delivery	Complete	U
	Key account management – Establish key account management for regular DG customers	In progress	DG

Theme 4 – Technical and commercial developments	Status	Applicable to
Area for improvement	**Progress the release of unused capacity –** Reduce connection charges in line with a customer's capacity	Complete	M, DG
	Wayleaves timescales – Introduce a service level standard to complete legal consents	Complete	M, DG
	Public lighting authorities (PLAs) – PLAs will receive a fixed annual price	Complete	U
	Active network management (ANM) – Develop ANM connection service offers	Complete	DG

Theme 5 – Enabling competition	Status	Applicable to
Area for improvement	**ICP self-determination POC –** Enable self-determination POC by ICPs	Complete	M, U, DG
	ICP design approval – Enable design approval by ICPs	Complete	M, U, DG
	Competition information – Provide customers with information about available ICPs and Competition in Connections	Complete	M, U, DG
	Metered disconnections – Allow ICPs to carry out metered disconnections on brownfield sites	In progress	M
	Dual quotations – Provide dual quotations for all major works applications	Complete	M, DG
	Part-funded reinforcement – Enable ICPs to carry out part-funded reinforcement	In progress	M, DG

6 Appendix 2 sets out the work plan actions by Relevant Market Segment comprising a total of 110 actions. Some actions apply to more than one market segment meaning that there are 72 specific actions

How we improved our connections services in 2015-16

"It's been a good improvement and the capacity maps are of great help. They're the best in the UK as far as I know"

Anonymous, Explain market research, March 2016

Introduction

The remainder of this Looking Back report provides further information about the actions in our 2015-16 work plan. We describe the action, the issue that generated it and the outcome for customers.

Where possible we have sought to close the loop with customers and have them confirm that the outcome we achieved satisfies their expectation. As well as talking to the customer who originated the action, we have also sought endorsement from a broad and inclusive range of stakeholders.

Provision of information

Provision of heat map DG

Our online generation heat map was developed in response to requests by customers for access to readily available information that would allow them to identify potential connection sites and assess the viability of projects, without the need to enter into formal discussions or a full quotation process at an early stage.

In 2012 we published our first generation heat map, and then, in 2014, we replaced it with an interactive online version. We were the first DNO to introduce this. Our customers told us they liked our interactive heat map and found it a useful first-pass planning tool; although some customers including Fulcrum, Kyoob Ltd and Lark Energy, told us it could be improved with the addition of further data and information.

In response to these customers' specific requests, in March 2016 we developed and launched an enhanced version of our generation heat map that includes grid and bulk supply points with a red, amber, green status and the available capacity at bulk supply points. By including this information, customers are now able to identify the level of constraint at a glance.

We also committed to include EHV / HV underground and overhead networks and to show the areas served by distribution substations above 200kW. We had originally intended to deliver this data using our enterprise asset management system. However, due to delays in the deployment of this IT system, we took the alternative approach of providing this network information from our existing systems and publishing guidance on our website about the data available and how to access it.

Our customer Spec Real Estates asked us to make the base geographical data from our heat maps available for inclusion in their own third-party GIS systems. We provided the data to Spec Real Estates and notified other customers that this data was available through our ICE stakeholder newsletter which is sent to 3,500 subscribers.

During the course of the year, our customer Lightsource asked us if we could add data to our heat map to show the number of outstanding applications in any one area. This would help address their concern that the heat map did not give an accurate picture of the capacity available on the network, due to the time lag between an application being made and the quote being issued (at which point it is taken into account on the heat map).

We agreed this was achievable and that it would provide an immediate benefit to our customers, and so, rather than wait to include this as an action in a future ICE work plan, we included it as part of the package of heat map enhancements we delivered in March 2016. This was an additional action that did not feature in our original work plan. The outcome is that our generation heat map now shows the MVA total for jobs quoted but not accepted at any one location, and also the number of quotations making up this total.

In addition to the improvements detailed above, we also added an explanation for each of the technical terms used on our heat map to help customers understand what is available.

In the first quarter of 2016, and before the enhanced version of our generation heat map went live, the number of hits on the webpage averaged around 250 per week. We expect to see a significant increase in the number of hits as customers come to understand the improvements we have made and the new information available. We will communicate this, alongside the launch of our new demand heat map, to customers via our regular ICE stakeholder newsletters and at our May 2016 Connections Customer Forum.

"I think the heat map is really useful. I use that every day. Now they update it more regularly, but they need to keep it current and up to date for it to be useful"

Barry Hellewell, GMI Energy Group Limited, Explain market research, March 2016

"The level of quantitative information immediately available in the new Northern Powergrid heat map is pretty good. On the basis of this information I can make a decent start at a reasoned commercial decision, without needing to chase DNO engineers to spend time explaining each and every circuit issue individually"

Graham Pannell, RES, email May 2016

Substation information DG

REG Windpower asked us to publish our substation addresses by longitude and latitude on our heat maps. They told us this would help them and other customers understand what would be involved in connecting a generator to the nearest primary substation with available capacity.

We have provided this information in two ways – embedded within the heat maps by substation and also via a single file that contains the information on all substations, with the file available to customers on request. The outcome of this is that customers and other stakeholders can gain a clearer view of the work that might be involved in connecting a generator to our nearest primary substation with available capacity.

Contracted capacity DG

TCI Renewables and Urban Wind asked us to include within our heat maps the quoted, contracted, and connected capacities for each of our primary substations, and this information is now available on a 'per substation' basis by accessing the interactive heat map tool and selecting the primary substation closest to their site location.

We also undertook to publish the cumulative connected capacity for each bulk supply point. We have developed and published a capacity register that includes not just the connected capacity at each bulk supply point, but also the contracted capacity. The register also includes contracted and connected capacity at primary substation level.

Wayleaves guidance M DG

Banks Group asked us for more guidance on our wayleaves process. We said we would develop and publish a wayleaves guidance document that explains more about our third-party wayleave agreements and consents and the rights we have to connect onto existing assets within wayleave areas.

We produced two guidance documents and published them on our website – one for landowners about our rights and obligations to them where a wayleave exists on their property, and one providing specialist advice for ICPs and IDNOs about the issues that might affect them concerning wayleaves and other land rights.

On completion of this action we contacted Banks Group to close the loop and ensure the outcome met their requirements.

"It is helpful to see a wayleaves guidance document detailing Northern Powergrid's process for obtaining wayleaves and the expected timescales involved. This continues to be a challenging area for our projects"

Dan Thomas, Banks Group, email April 2016

In focus

Wayleaves guidance

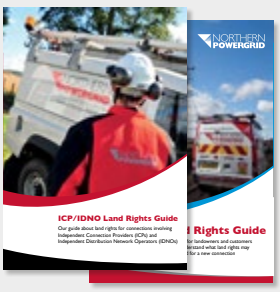
"Through my active involvement in the Metered Connections Customer Group (MCCG) and experience with Power On Connections, customers and competitors have often experienced delays to the energisation of their connections due to a failure to secure the land rights that were required by NPg in a timely manner.

We believe that the reasons for this were two-fold: a lack of understanding of the process by stakeholders and an absence of any agreed service level for the activities undertaken by the DNO's land rights teams and solicitors throughout the process.

The MCCG highlighted these issues. NPg listened to our concerns and consulted the MCCG before publishing a really helpful fact sheet which included a set of voluntary standards that NPg would commit to adhering for those milestone where they are in control of during the process.

Whilst we could debate the actual service levels I warmly welcome the principle of NPg committing to a service level and publishing such helpful factsheet that explains the process in layman's terms."

Neil Fitzsimons, Power On Connections, May 2016



"I wasn't aware they were in place at all and that could benefit us massively, all of it. The business about the heat maps, publishing demand and your drawings would be very useful"

Arun Sahni, Highways England, Explain market research, March 2016

Demand heat maps M

Our DG customers told us that our interactive generation heat map is a useful tool to help them identify potential connection sites and assess the viability of projects without the need to enter into a formal discussion or a full quotation process at an early stage.

Our demand customers told us that they wanted a similar resource, and so, in March 2016, we became the first DNO to develop and launch an interactive demand heat map with primary substation information. Our demand heat map went live in March 2016 and within the first two weeks hits on the website page averaged 30 per week. This was in advance of any real communications to customers and we expect the level of usage to increase significantly as we promote the demand heat map to our customers through our ICE stakeholder update and at our Connections Customer Forum.

"It's very useful and beneficial that your heat maps are published on your website"

Daniel Sandbrook, Energy Commercial Services, Customer Connections Forum, November 2015

Community energy M DG

We held workshops for groups and individuals involved in community energy projects in in Newcastle and Wakefield in February 2015. It was clear from the feedback from these events that community energy groups need more support to guide them through the connections process. As a result of the feedback from stakeholders we committed to:

- consult with local community energy groups and produce a draft guide on how to get connected
- review the guide with stakeholders to ensure it was understandable and useful, and then;
- publish a guide for use by community energy groups that explained what is involved and how to apply for a new connection

We looked at what guidance was already available and then produced a draft version of the guide. We consulted on the content of the document with key community energy stakeholders in our region, comments were received from Involve, Hartlepower, Leeds Community Energy and the National Renewable Energy Centre (Narec DE).

Having modified the document in response to this stakeholder feedback, we launched the guide entitled 'Community energy – our guide to getting connected' at the Community Energy England Conference in September 2015, where Northern Powergrid were a sponsor. The launch coincided with the Community Energy Fortnight[7], an annual event for the sector and so for maximum impact we also sent copies of the guide to the organisers of events in our regions.

"Our community project used the guide issued by Northern Powergrid on how to connect. It made the process easier and the school's roof top solar PV is now generating"

Paul Hewitson, Hartlepower, email May 2016

Pictured: Mike Hammond, Head of Connections Services, led a workshop on grid connections at the Community Energy Awards.

Performance metrics M U DG

We committed to publishing regular performance metrics in order to share more information. These are now available on our website. For each of the 14 market sectors, they include monthly statistics on the average time to quote, average time to deliver, the volume of quotations and the volume of completions.

By publishing this information monthly, we ensure that a view of Northern Powergrid's current performance metrics is available to customers.

7 http://www.ukcec.org/events/community-fortnight-2015.

Access to mains records M U DG

Keepmoat Homes and Power On Connections asked us to make our mains records and network information available to customers so that they had access to safe dig plans. As a result, we have now enabled customers to login to our mains records systems either at our premises or remotely, and we will also despatch a data disk to customers who request it. We added a page on our website to tell customers about the information available and how to access it, and, when our new enterprise asset management system with spatial functionality goes live later in 2016, we will utilise this to enhance the way we provide this information.

"It seems to be more on the ball now as far as there's that much information you can get. It's easier to get that now"

C. Garnham, Gentoo, Explain market research, March 2016

Improving our application process

Plot call-off process M

Consultants Kyoob Ltd asked us if we could be more flexible in our offers for connecting new housing estates. Developers do not want to tie up significant capital by having to pay up front for all of the works for electrical connections. We have now changed our process so that developers can obtain a view of the price of the entire works but only need commit to the cost of the works that match the phases of their building schedule.

As a result of our implementation of this process, customers now have a flexible quotation process for phased housing developments.

We are confident that the new process we have put in place will meet our customers needs. This action was completed in March 2016 and the first projects are still going through the process. We will continue to monitor our customers satisfaction with the process and check that it meets their requirements.

We have added a page on our website to tell customers about the information available and how to access it

In focus

Community energy

Community energy is emerging as an important part of the UK's energy mix and Northern Powergrid have been working with local projects for a number of years to understand how we, as a network operator, can support them.

As well as working with key national partners (Northern Powergrid were the only network operator to be mentioned in DECC's community energy update)[8] we have forged strong links with community energy groups in our region.

Bringing energy production and efficiency to communities is a growing feature of the low-carbon economy. Our community energy seed fund offers valuable support, funding and advice for community energy projects in our region. It is awarded by a panel of community energy, voluntary section and industry experts and is supported by our own Northern Powergrid people.

Since 2014, we have provided grants to community energy groups across Yorkshire and the North East including the Seaton Valley Energy Storage Initiative which will investigate the possibility of making use of a local asset ('The Cut' in Seaton Sluice harbour) as an energy storage and generation unit, and a feasibility study for small-scale hydropower by Allen Valleys Enterprise Ltd which will explore the potential for a number of potential hydro sites on the Rivers East and West Allen.

Pictured: George Arnott, Chair of Seaton Valley Community Partnership.

8 https://www.gov.uk/government/publications/community-energy-strategy-update

Budget estimates and optioneering M DG

Feedback from our customer consultation indicated that our budget process could be more flexible in providing customers with an appropriate view of the feasible options for their proposed connection. As a result, in April 2015, we introduced a new process that offered all customers considering a connection at EHV a range of technical options available to them at an early stage in the process.

During the course of the year, we extended this service to HV and LV customers. Our budget estimates have been modified so that, as standard, they include cost details of technical options discussed with, or requested by, the customer. This improvement offers a range of budget prices by varying the requested connected capacity where appropriate.

By implementing the process, we have ensured that customers are provided with the range of technical options in a budget estimate.

"It is very good now as it is online and it allows us to see what's feasible on a budget cost"

Jonathan Fisher, AMEC Environmental and Infrastructure UK Ltd, Explain market research, March 2016

Online application process U

We have extended the scope of our online service offering to include applications for unmetered connections and disconnections and to enable unmetered customers to track the preparation of their quotation via their online account.

As a result of our implementation of this process as an online service, customers are able to apply online for unmetered connections and disconnections. 21 customers have used this service between February and April 2016.

"It was good. I found it easy to use. I had used paper forms loads of times before so this was very easy to fill in"

Anonymous, Explain market research, March 2016

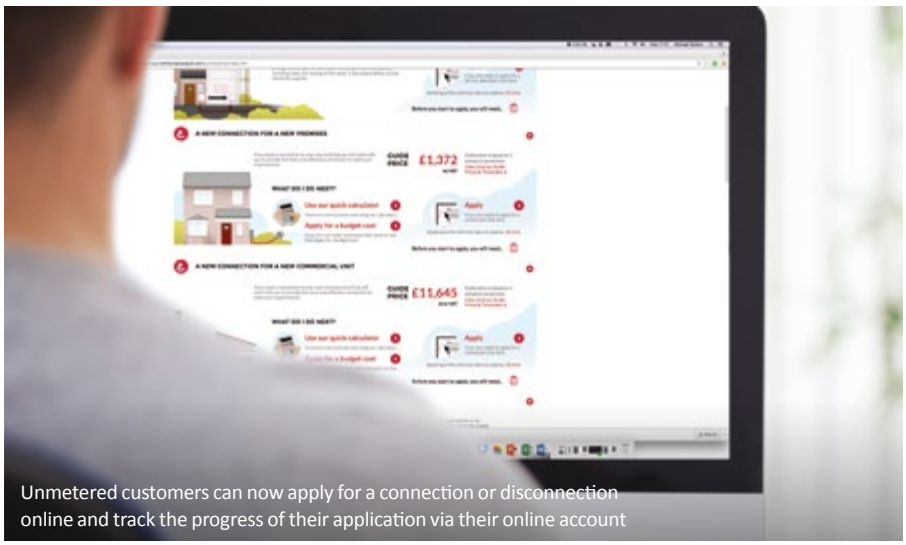
Interactivity DG

Customers, including Lightsource and RWE, asked us to review our approach to interactivity, the process we use to deal with any new connection applications where the connection solution is affected by other projects already in the pipeline that have been quoted for but not accepted. As a result, we committed to:

- consult with our customers on their experience of interactivity
- review the feedback from our customers and make any necessary changes to our processes

In December 2015 we launched an open consultation on our interactivity process. We received 18 responses, which may seem a small number but reflects the fact that interactivity is an issue for a relatively small number of connections customers. Having carefully considered the feedback received, we published our decision document in January 2016.

The broad message from our customers was that they preferred to retain the existing process for consistency with other DNOs. We have therefore followed their wishes, but have introduced some minor clarifications in relation to how we deal with some complicated issues, such as multiple queues, and have removed some of the delay that can adversely affect customers trying to develop projects quickly. We wrote to every customer who had responded to the consultation to thank them for their involvement and advise them of the outcome of the consultation. We also published our decision document on our website.



Unmetered customers can now apply for a connection or disconnection online and track the progress of their application via their online account

"It's certainly moving in the right direction in terms of information sharing and it helps us to do our job as well. I have just been in a web chat with them this morning, so they are trying lots of different things"

Martin Bleasby, Discover Renewables,
Explain market research (about our ANM webinar), March 2016

Generation application process DG

Boston Renewables asked us to make the DG connections application process clearer. As a result, we committed to developing materials to guide customers through the process and to running a technical webinar.

Feedback from our DG customers at our Connections Customer Forums indicated that the ENA guidance was already good and that developing further Northern Powergrid specific guidance was unnecessary. We understand that customers prefer to access a single source of guidance where this works for them and so we added links to our website that directed users to the ENA guidance documents.

In March 2016 we ran a webinar to guide customers through the commercial and technical principles of making DG applications. The session focused on ANM connections to support its roll-out on our network in Driffield. The webinar included a Q&A session at the end to allow participants to get maximum value and learning from the session.

The webinar was promoted via our website and in our ICE stakeholder update sent to 3,500 customers in February 2016. We contacted over 40 customers who had applied for a connection in Driffield to inform them that ANM connections were now available on that part of the network and to invite them to take part in the webinar. Customers including Belectric, Discover Renewables and RWE took part in the webinar. It was recorded and published on our website for any customers who were unable to join the live webinar.

Quotation feasibility service DG

The concept of a 'Quote Plus' service originated from customers approaching DNOs with multiple applications for DG connections at the same site, in an attempt to secure the available capacity and a place in the capacity queue. As we work through a process of optioneering multiple applications customers should be assured that their place in the application queue is secured based on the date of their original application.

We referred in our 2015-16 ICE submission to SSE's 'Quote Plus' service and noted that at that time, there appeared to have been little take-up from the industry. Nevertheless, due to the interest expressed by customers including Banks Group, Lark Energy and Lightsource and the continuing support from our customers for our work optioneering designs with them, we committed to introduce our own version of a multiple optioneering process.

We developed the process and worked through it with two of our customers, Lightsource and CleanEarth Energy, to resolve any issues. As we were able to do so to the satisfaction of the customers involved, we wrote to all those customers who have made an HV or EHV application in the past 12 months (over 300 in total) to explain the new process and make them aware that the service is available.

The key attributes of the new service are:

- The customer's position in the application queue is secured against his/her original application date
- There is no ambiguity concerning the customer's queue position should the final quotation become interactive with any other application
- The process can accommodate multiple applications for a single site or multiple applications for the same capacity across different sites – the latter generally is driven by the customer and what he has secured in terms of land access etc
- The process can reduce the resource effort required to design and quote multiple applications
- The optioneering process gives the customer the ability to optimise his connection based on the detailed discussions and review of his proposals and network availability
- The process will apply equally to section 16 and SLC15 customers seeking multiple applications

By designing and implementing a multiple optioneering feasibility service, we have ensured that our customers can work through a process of optioneering with us while their place in the application queue is secured based on the date of their original application.

On completion of this action we contacted the customers who expressed interest in the service to close the loop.

"We have not yet used the service, but recognise it is an improvement to allow multiple applications for single sites to be reviewed at a speculative level before formalising the application"

Dan Thomas, Banks Group, email 2016

Electronic G59 application forms DG

To make generation connections applications easier, we said that we would replace our current G59 application form by a suite of three forms split by capacity – below 50kW, 50kW-200kW, and above 200kW.

Before designing the forms, we assessed how the required information depends on the capacity of the connection, and considered that this could be covered in just two forms rather than three. We amended our form for large scale DG connections so that customers requesting connections below the 200kW threshold need to provide less information that for a connection above the threshold. We made the amended form available online as part of our electronic application process.

By implementing this new application process we have provided electronic G59 application forms that are appropriate to the capacity that the customer is applying for.

Bosch Thermotechnology commented on the lack of consistency in the information required by different DNOs on their G59 application forms. We therefore committed to raise the issue via the Energy Networks Association (ENA) with the aim of achieving consistency on electronic G59 forms across the industry. We have now raised the issue within the ENA and the DG-DNO steering group and continue to work further to achieve consistency.

"I am glad that I have received some feedback, and the issue has been raised at a higher level"

Pete Mills, Bosch Thermotechnology Ltd, email April 2016

G83 application to connect notifications DG

Following the April 2015 decision by Ofgem that multiple G83 installations need only be notified to the DNO and after further discussion with stakeholders at our customer events, we committed to creating an online account for all small-scale embedded generation (SSEG) installers and to provide an online facility to handle G83/2 notifications for multiple premises.

We delivered this by creating an online account for SSEG installers with a separate webpage for multiple G83 installations and by providing additional guidance, making it quicker and easier for these customers to notify us of their installations.

"There has been a noticeable difference. For example, the use of Northern Powergrid's website. You just login and it is a straight forward application. That has been a good thing"

Colin Burdon, Northumbrian Water Ltd, Explain market research, March 2016

Statement of works DG

RWE had suggested that, as the interaction with transmission systems becomes more frequent, Northern Powergrid should aim to make the DNO side of the statement of works (SoW) process more efficient.

The SoW process occurs when a connection may have an effect on the transmission network and National Grid Electricity Transmission (NGET) needs to be advised. We therefore committed to introduce the ability to shortcut the statement of work process and move straight to the modification application (Mod App) stage, where necessary, following the acceptance of a quotation.

We have made appropriate changes to our own post-acceptance process and this will enable us to enter discussions with NGET earlier, potentially reducing project timescales by three months, which is the minimum time it used to take for the statement of works process. This may also reduce costs for customers.

"I did notice the process ran a lot smoother in a more timely manner than I have experienced in the past so it's definitely a positive"

Andy Downer, Northumbrian Water Ltd, Explain market research, March 2016

Improving communications

Improving our written communications

M U DG

We want to ensure all our customer communications are clear and easy to understand. Following feedback from our connections customers, we committed to review the quotation letters we send to customers to ensure they are written in plain English and contain all the relevant information. As a result, we redesigned our quotation letters to include a simple explanation and breakdown of costs and the next steps to get connected. We included all the information the customer would need in the letter so that a separate information pack was not necessary.

"The quotes are in more plain English these days"

Peter Urwin, Gleeson Developments Ltd, Explain market research, March 2016

Key timescales for contact

M U DG

We are keen to ensure our customers have all the support they need to guide them through the connections process. We therefore committed to implementing key communication timescales during the quotation phase. As a result we now:

- contact customers within five working days of receipt of application if it does not contain all the essential information
- contact customers within five working days of their acceptance of a quotation

Performance against these voluntary service level standards will be published as part of our monthly performance metrics on our website.

"Certainly I have noticed an improvement in the last 12 months and that may be due to a change of personnel but we have had a better response from yourselves"

Arun Sahni, Highways England, Explain market research, March 2016

We publish performance metrics on our website

"All the solar parks have been successfully connected and are generating!! This has been an amazing effort from everyone involved, but wanted to say on a personal level a very big thank you for your support. You have carried the whole portfolio and have been amazing in driving and overcoming obstacles for the parks to get connected. This is an amazing achievement one we should all be very proud of"

Leandros Andrikopoulos, Lightsource Renewable Energy Holdings Ltd, email December 2015

Gary Mitchell, Commercial Engineer at Northern Powergrid, talks to customers at our Connections Customer Forum

Key account management U

Rotherham Local Authority and their service providers asked us for a single point of contact in our organisation. We considered this an achievable action that would benefit our unmetered customers and so we committed to appoint and train designated key account managers.

We trained and deployed members of staff to act as designated contacts for our largest unmetered and Public Lighting Authority connections customers; they hold regular meetings and oversee the connections process from start to finish.

Key account management DG

Following requests from customers, we said we would appoint key account managers for all regular DG customers by December 2016. In 2015, we embarked upon a significant transformation of our connections business, reviewing our structure, processes, roles and responsibilities. As a result, we shall now be able to introduce single points of contact for all our connections customers.

"We have weekly meetings with the Street Lighting Co-ordinator and the Services Manager attends on a quarterly basis. If there are any ad-hoc issues we will call a meeting and meet within a day or so"

Allan Lewis, Rotherham MBC, email March 2016

"It is easier now. It has speeded up. You have a person to contact now. You can email them rather than going through three hundred numbers like before"

Carmel O, R. N. Wooler & Co Ltd, Explain market research, March 2016

"It is a lot easier dealing with them now. We can login online and check up a on a regular basis, instead of just ringing through to a 0800 number and being passed all around the country. Now you get a contact name and number"

Paul Baumber, North Lincolnshire Council, Explain market research, March 2016

Dave Murray and Andrew Conner of Northern Powergrid at our Connections Customer Forum

"For all DNOs we have looked for proactive work in relation to releasing unused capacity, we strongly welcome Northern Powergrid's recognition of this issue"

Graham Pannell, RES, Ofgem consultation on DNO ICE submissions, August 2015

Technical and commercial developments

Progressing the release of unused capacity M DG

On some occasions, customer connection offers that have been contractually agreed do not progress, and in other cases a connection does not end up using the full electrical capacity originally envisaged. The amount of contracted but unused capacity can affect the cost for other customers to connect locally and sometimes making a new connection appears to be uneconomic. We call this sterilisation of capacity.

Following discussion at the September 2014 national DG-DNO Forum, we committed to consulting customers and then to implementing a process to identify not only DG but also demand customers who may have unused capacity.

We have established a regular monthly process to identify existing customers who may have spare capacity. We identified 97 DG customers at EHV & 11kV with potentially underutilised capacity and have contacted them about modifying their connection agreements to release capacity. We have also contacted EHV demand customers with underutilised capacity where there is potential to recover up to 428MW of capacity. As a result, by the end of April 2016 we had successfully recovered 3 MW of generation capacity and 26 MW of demand capacity.

Furthermore, we have recovered 167 MW generation capacity from connection offers that have been recovered because the projects are not proceeding. This process is now a business-as-usual activity that will be repeated monthly and we shall also extend it to 11kV demand customers and LV generation customers.

By identifying customers with spare capacity and seeking their agreement for its release, we have reduced customers' connection charges in line with their capacity, with the wider benefit that other customers will be able to utilise this capacity without the need to pay for expensive reinforcement.

Wayleaves timescales M DG

Following discussions with the MCCG, who asked if we could work together to improve the response times when dealing with land rights, we committed to implementing a service-level target to complete legal documents within 66-working days. This has been implemented and has been publicised in our Land Rights Guides available on our website. Performance against this voluntary target will be published from June 2016 onwards, on the performance metrics page on our website.

"I thought your guys at Northern Powergrid did a fantastic job looking into wayleaves agreements from 100 years ago and finding a way round the neighbours who wouldn't sign the agreements. Peter Goodwin and Malcolm Cathie were absolutely brilliant and kept us informed. If it wasn't for them we wouldn't have had the connection to the barn"

H. Crick, Explain market research, March 2016

"I wasn't aware of any of those changes but if it's moving quicker on wayleaves would be a big thing"

Andy Downer, Northumbrian Water Ltd, Explain market research, March 2016

"I think the service has improved and I think it will continue to improve. I think the single point of contact which you've talked about is important"

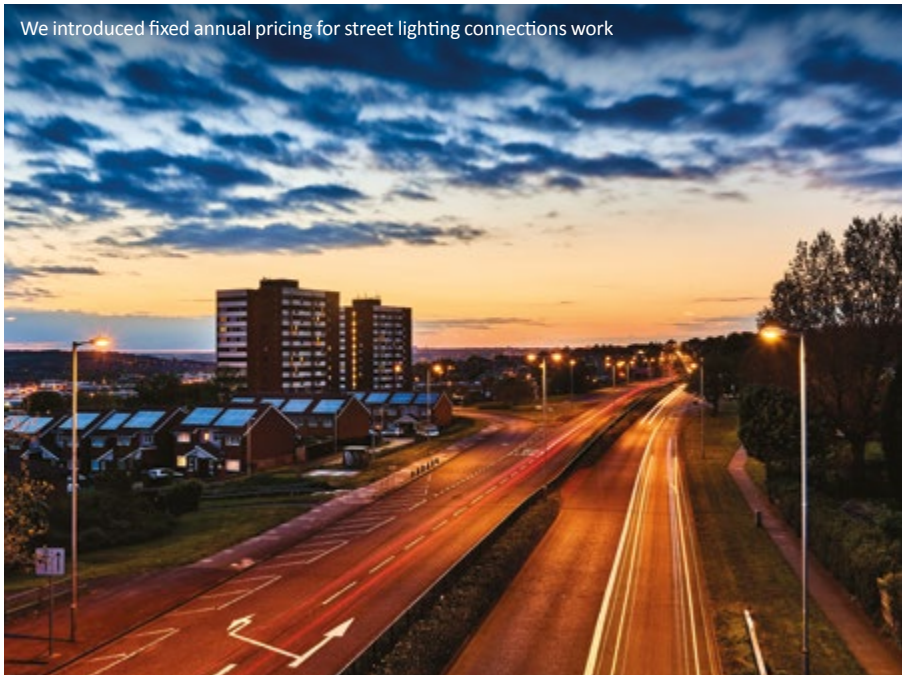
Andrew Murfin, Futureserv Ltd, Explain market research, March 2016

Public lighting charging regimes U

Public lighting authorities were keen that we should work with them to find a charging regime that works for our major unmetered customer groups. We therefore introduced fixed annual prices for street lighting connections work in April 2015 and committed to reviewing the process with PLA customers in September 2015 to provide them with indicative prices for 2016-17.

At a meeting in September 2015, we proposed to delay issuing the 2016-17 pricing until after we had renewed a contract for cable engineering services since this would affect the pricing for PLA customers. However, we did provide indicative prices for 2016-17 at that stage. The PLA personnel who were present, representing Leeds, Kirklees, Bradford, Doncaster, Calderdale and York Local Authorities and Amey Wakefield, confirmed that they welcomed the new approach and the information we provided. We subsequently confirmed the process in writing to the PLAs who were not present at the meeting.

We held prices at 2015-16 levels until the end of June 2016 when we knew the full implications of the contract award and in April 2016 we advised PLAs of the new charges that would take effect from 1 July 2016.



We introduced fixed annual pricing for street lighting connections work

Active network management DG

ANM was initially introduced to parts of our network under smart-grid trials for our Customer-Led Network Revolution project. Our intention was that ANM offers would be a business-as-usual choice by end of March 2016. This was supported by our customer Banks Group.

We committed to developing ANM connections offers and implementing them (where possible) by the end of March 2016.

We informed customers of the technical and commercial principles behind our ANM offers and as a result, customers have been able to apply for ANM connections on our Driffield network since 1 April 2016. We promoted the availability of ANM offers on our website and via a technical webinar. We wrote to all customers who had previously applied for a generation connection in the Driffield area to tell them that ANM connections offers were now available.

"We have been made aware from ongoing stakeholder engagement about the progress of the trial in the Driffield area, we aren't intending on making use of it at this time but are pleased to see this type of offer progress towards business-as-usual"

Dan Thomas, Banks Group, email April 2016

"Design approval process for unmetered works is as efficient as it can be following working with NPg. Any issues we have, we simply pick up the phone, have a meeting with NPg and sort the issue out in a quick manner"

Paul McKalroy, Linbrooke Total Network Solutions, email March 2016

Enabling competition

ICP self-determination of point of connection M U DG

We had previously allowed ICPs and IDNOs to self-determine a point of connection at LV up to 60kVA. Martin Design Associates and those ICPs who had been engaging with DNOs on the development of the Competition in Connections Code of Practice supported our proposal to expand this to include HV work between 250kVA and 315kVA. We therefore said that we would provide access to all the relevant data and standards that ICPs would need to do this.

We have provided access to the relevant data and standards online and in doing so we have enabled self-determination of the point of connection by ICPs.

ICP design approval M U DG

Alongside enabling ICPs and IDNOs to self-determine the point of connection, we undertook to develop and implement a design-approval process to assess and maintain standards for ICP and IDNO-derived point of connection and design approval.

We have developed and implemented this process, with all the relevant information available on our website, with the result that we have enabled design approval by ICPs and IDNOs.

In focus

PLA charging regimes

Ian Moore heads up the street lighting department at Leeds City Council, looking after more than 105,000 pieces of equipment from streetlights and signs to illuminated bollards.

In May 2008, changes were introduced to the connections and disconnections pricing structure applied to the regions Public Lighting Authorities that had made it difficult for Ian and other PLA Managers to manage their department's annual budgets effectively. Early last year, he approached Northern Powergrid in the hope of finding a solution.

"A few years ago, the Cost Reflectivity pricing structure we had in place for street lighting was on a flexible rate and that meant we could often see it change three or four times a year," said Ian. "This made it difficult for us to forecast what level of budget we would need to cover our costs for the year, and it had become challenging to commit to larger scale lighting projects or new developments in the region.

"We needed some level of price certainty to help us forecast more efficiently and after engaging with Northern Powergrid, we were pleased to agree a new fixed price contract for PLAs throughout the region. This was significant step forward for us as a department and we now get an indication from Northern Powergrid in September of what the connection and disconnection charges will be like from the following April for 12 months, which enables us to manage our finances more effectively.

"It's reassuring to have such an open and two-way dialogue with our Distribution Network Operator and our relationship is better for it. We hope this continues for many years to come."

Ian Moore, Street Lighting Private Finance Initiative (PFI) Manager, Leeds City Council

"This metered disconnections improvement action once completed will enable us to offer electrical site clearance services to our clients. We have met with some difficulty trying to gain customer agreement for a trial site to go ahead, due to its trial status, but are hopeful that we will have a suitable site shortly."

Paul McKalroy, Linbrooke Total Network Solutions, email March 2016

Competition information M U DG

Feedback from the MCCG and our own interactions suggested that many of our customers were not aware they had a choice about who delivers their connection. We had already published a guide on our website but in the interest of promoting fair and open competition we committed the following actions:

- we implemented an online register of ICPs operating in our region, so that customers who wish to can find details of alternative connections providers
- we updated our guide to competition in connections and produced a step by step guide to the process; both documents are available on our website
- we inform customers that they have a choice of who delivers their connection when they apply for a quotation from us
- we include a message promoting our connections services and alternative service providers in the welcome and on-hold messages customers hear when they call our connections call centre
- we sent a targeted email with information on competition in connections to 3,500 customers in February 2016

As a result, we believe we have played our part in promoting fair and healthy competition, raising awareness and helping customers get the best possible service.

"The register is a good move forward and we will work with NPg to ensure that all relevant competitors are listed"

David Overman, GTC, email May 2016

Metered disconnections M

Metered disconnections are currently categorised as a non-contestable activity, meaning that only the DNO can do the work. In response to a challenge categorised as from Ofgem to open up other connections activities to competition, we committed to run a pilot with an ICP to build a best practice process. We engaged directly with multiple ICPs, and published an expression of interest on our website inviting ICPs to bring forward a suitable project.

We worked with ICPs and have established all the contractual and operational arrangements for the trial. We have also made all the changes necessary to implement ICP disconnection as a business-as-usual service.

We were originally unable to find a suitable site from those that were suggested because in each case they were disconnections within a wider project that involved a new connection. This would have introduced issues for the end customers that meant that they were unwilling to proceed with the disconnection under the trial.

We have recently identified a suitable scheme and the trial is now able to proceed. If the trial is successful and the outcome is supported by stakeholders, we shall look to make this activity contestable where it impinges on new connection work.

In continuing our support for the development of competition in connections throughout our region we have taken the opportunity to include another action in the year which was not in our original work plan. We have engaged the services of Lloyds Register Energy to carry out independent audits of the onsite activities of both Northern Powergrid staff and contractors and activities carried out by ICPs in equal inspection proportions. Via this initiative, we are able to take an independent view of the quality of site installation works and can work closely with ICPs to resolve issues that arise and work together to deliver real benefits to end customers.

Dual quotations M DG

In order to promote competition in connections and make customers more aware that there are other options than the local DNO for getting a connection, we committed to introduce a dual quotations process for all the demand and distributed generation market segments. We had been issuing dual quotations to HV metered demand customers since 2012, with the addition of EHV demand and EHV DG dual quotations being offered from September 2014.

We now offer dual quotations as standard for all section 16 quotations in the Relevant Market Segments, in line with the Competition in Connections Code of Practice. Every customer who requests a quotation from us, now receives a full quotation from Northern Powergrid to do all the connection work and an alternative offer for Northern Powergrid to complete only the non-contestable part of the work.

By implementing dual quotations at LV, HV and EHV, we are providing dual quotations for all major-works applications with the benefit for customers that they can obtain alternative price offers from ICPs for the contestable element of the works.

"The dual quote is the big one. It gives us an overall quote we can take to customers. It also gives us the opportunity to go elsewhere and see if there is a better deal"

Paul Hastie, Kelly Taylor & Associates, Explain market research, March 2016

Part-funded reinforcement M DG

We said we would implement and run a part-funded reinforcement trial with interested ICPs, with the aim of developing a process that could be integrated into business-as-usual. This would enable ICPs to quote for and carry out certain part-funded reinforcement work associated with providing a new connection on our existing network, thus offering a wider turnkey package to customers.

We contacted ICPs and held a workshop for those who had expressed an interest where we discussed and agreed in detail the financial, contractual and operational aspects of the trial. It was agreed that the part-funded work that would form part of the trial would be LV and HV cable overlays. Any project that we receive from a qualifying ICP will be assessed by our design team to see if qualifying work is required.

All other elements of the work would follow the Competition in Connections Code of Practice and the Common Connections Charging Methodology. The trial needs suitable projects to be proposed where participating ICPs have been appointed by the developer.

No such scheme was brought forward before 31 March 2016, and we plan to continue with the trial in 2016-17.

"It is definitely more visible that the option is there for competition and other providers"

Colin Burdon, Northumbrian Water, Explain market research, March 2016

"We receive very useful emails and links to assist our operations with the NPg area. This is a good step forward and we would be keen to assist in making it more targeted and useful going forward"

David Overman, GTC, email May 2016

Conclusion

We set ourselves a very ambitious improvement plan for 2015-16, both in terms of the number of actions and the work involved. We have delivered on the commitments we gave and we have developed a comprehensive forward work plan for 2016-17. We believe we have met the criteria set by Ofgem for both the Looking Forward and the Looking Back parts of this submission.

Our success would not have been possible without effective engagement with our customers. We have used our stakeholder engagement strategy effectively to ensure that we take every opportunity to seek the views of customers and to really understand their issues. Customers have told us what really matters to them and the outcomes they require from us to make their businesses successful.

Our approach to stakeholder engagement is holistic. We have not only engaged with customers to decide what actions we include in our forward work plans but we have engaged with them throughout the delivery process. Wherever possible we have closed the loop with customers to ensure the outcome of an action that they proposed has met their expectation.

But we have not stopped there. We need to make sure that the actions that we have delivered work for a wider group of customers if they are to be considered truly successful. Therefore, in every case, we have also engaged as broad a range of customers as possible through market research to test whether all customers – not just the originator of the idea - agree that the outcome we have achieved is beneficial to them.

Those customers with whom we have been able to discuss the outcomes of our actions agreed we have met their expectations.

The broader group of customers also gave a very positive response when asked about their experience of the outcomes we delivered.

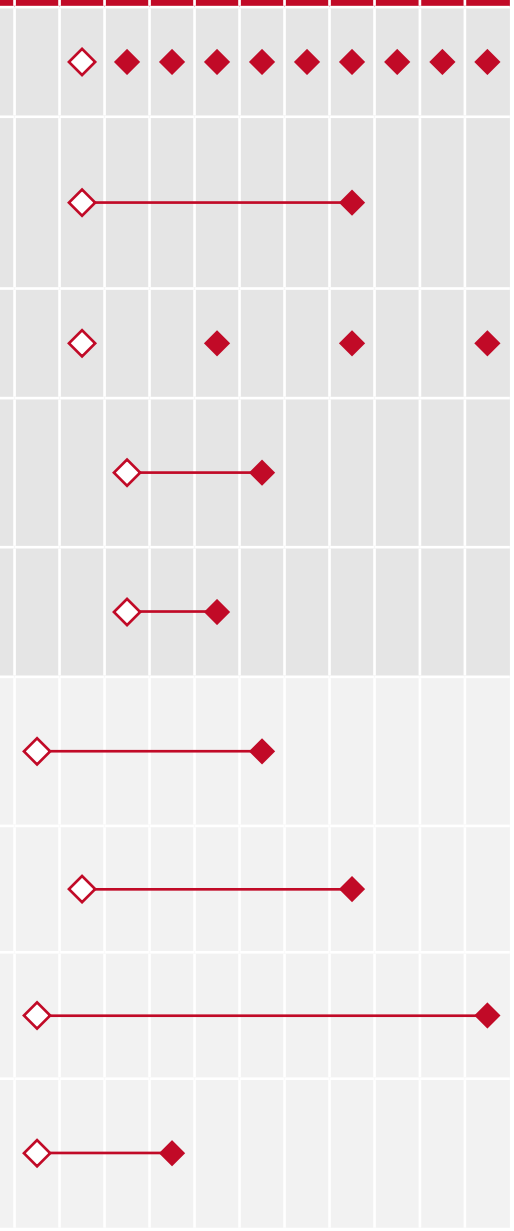
It is only through this broad and inclusive approach to engagement that we have been able to understand the issues faced by our customers, and what we can do to make the job of providing an electricity connection quicker, easier and more efficient.

In formulating and delivering our plans we have taken significant steps forward in improving the service we provide. Our job now is to build on what has been achieved this year and to continue the process of improvement, striving always to meet the needs of our customers.

Appendix 1
2016-17 work plan

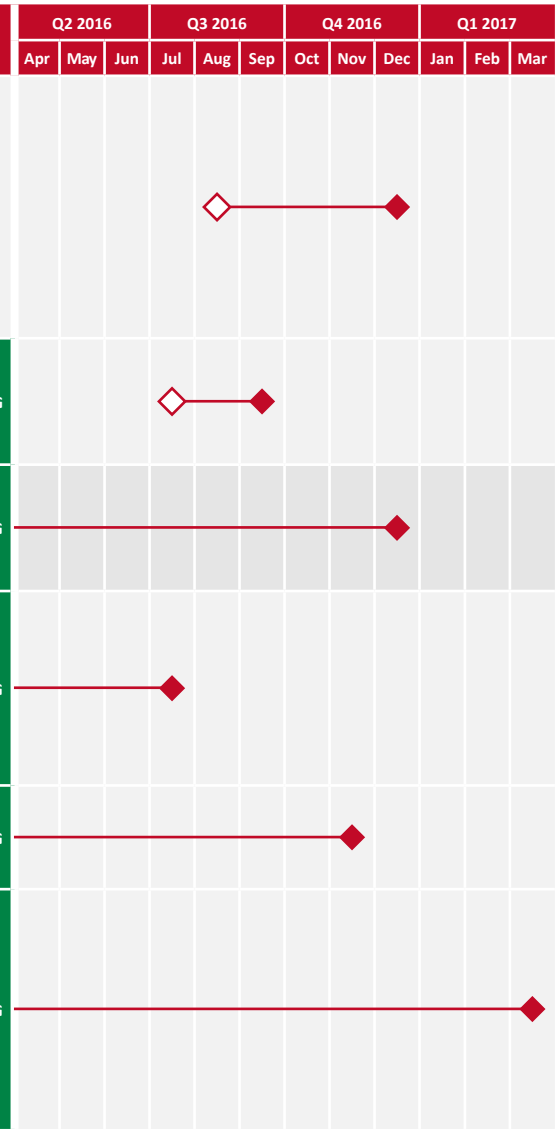
2016-17 service improvement work plan

Theme	Area for improvement	Action	Action originated from	The outcome for customers	Target measure	Voltage	RAG status	Customers affected
1.0 Provision of information	1.1 Heat maps	We will refresh the data on our generation and demand heat maps on a monthly basis	Ofgem consultation on 2015-16 ICE submissions August 2015	Up-to-date generation and demand heat map data	% of heat map updates performed on a monthly basis	EHV HV	OK to plan not started	M DG
	1.2 Connections case studies	We will produce case studies on different HV and EHV connections projects to help customers understand the likely cost and resources required to deliver a specific job	Connections Customer Forum November 2015	Better understanding of what is required to deliver different types of HV and EHV connections	Case studies available to customers	EHV HV	OK to plan not started	M DG
	1.3 Provision of wayleaves	We will publish quarterly wayleaves and easements performance statistics	Ofgem consultation on 2015-16 ICE submissions August 2015	Better visibility on the time taken for Northern Powergrid to obtain wayleaves and easements	Publication of quarterly performance statistics	EHV HV	OK to plan not started	M DG
	1.4 Stakeholder updates	We will ensure customers are kept informed of the progress of our ICE work plan actions with regular stakeholder updates and by developing the ICE section of our website	Explain market research March 2016	Better information available for our customers	Web page usage and stakeholder surveys	All	OK to plan not started	M U DG
	1.5 Understanding of technical terminology	We will develop a jargon buster to help customers understand the technical terminology used in connections	Explain market research March 2016	Better understanding of the industry and technical terminology used in connections	Jargon buster available to customers on our website	All	OK to plan not started	M U DG
2.0 Improving our application and delivery processes	2.1 ICP design approval	We will review of our ICP design approval process and make any necessary changes to ensure we can provide clearer and more timely responses to ICP submissions	Connections Customer Forum November 2015 Customer challenge December 2015	Clear & timely approval of ICP design submissions	% reduction in approval time under new process	All	OK to plan not started	M DG
	2.2 ICP design approval	We will publish approved standard templates for 11kV, 20kV and 33kV connections for use by ICPs in their designs	Connections Customer Forum November 2015 Customer challenge December 2015	Quicker approval of schemes designed by ICPs	% of ICPs using new standard templates	EHV HV	OK to plan not started	M DG
	2.3 ICP quotations	We will implement a new process where ICPs will benefit from faster quotes for sites where we have already issued a quotation	Connections Customer Forum November 2015 Stakeholder Panel January 2016	Quicker quotations	% reduction in time to quote under new process	EHV HV	OK to plan not started	M DG
	2.4 Applications	We will implement changes to our application process that make it easier for customers to apply for a separate temporary site supply	Connections contact centre December 2015	Making it easier to apply for a temporary site connection	% of temporary connections applied for using the new process	All	OK to plan not started	M DG



Key ◇ Start of action | ◆ Forecast completion | — Projected timescale | M metered demand | U unmetered | DG distributed generation

Theme	Area for improvement	Action	Action originated from	The outcome for customers	Target measure	Voltage	RAG status	Customers affected
2.0 Improving our application and delivery processes	2.5 Public street lighting reconnection	We will run a pilot with a Local Authority to reconnect knocked down street lighting within a target of 10 working days, from receipt of notification that a new column has been erected. Post-pilot, we will consider how to roll this out to other Local Authorities in our region	Connections Customer Forum November 2015	Faster reconnection of knocked down street lighting and a better service delivered to Local Authorities and members of the public	% decrease in working days taken to reconnect knocked down street lighting	LV	OK to plan not started	U
	2.6 Converting budget estimates into firm quotations	We will improve how we issue budget estimates to make it quicker and easier for customers to proceed to a firm quotation	Explain market research March 2016	Making it quicker and easier for customers to proceed from estimate to a firm quotation	Implementation of a new process	All	OK to plan not started	M U DG
3.0 Improving our communications	3.1 Single points of contact (key account management)	We will provide single points of contact in quotation and delivery for all connections customers	Carried over from 2015-16 work plan	Single points of contact in quotations and delivery for all customers	% of customers issued with single points of contact	All	In progress	M U DG
4.0 Technical and commercial developments	4.1 Export-limiting devices	We will develop and implement policy on the use of export-limiting devices for Northern Powergrid connections and communicate the policy to customers.	Connections Customer Forum November 2015 Customer challenge June 2015 'Ask the Expert' December 2015	Ability to propose the use of export limiting devices for DG connections	Policy implementation and information shared	All	In progress	DG
	4.2 Protection policy	We will review our protection policy and confirm our position on third party witness testing.	Connections Customer Forum November 2015	A policy review on protection and witness testing	Policy review and position on witness testing confirmed	All	In progress	DG
	4.3 Assessment & Design fees	We will continue to support and actively engage in DECC's consultation on Assessment & Design fees and keep our customers informed of the developments. We will implement any necessary changes to our policies and processes following the outcome of the consultation	DG-DNO steering group Connections Customer Forum November 2015	A revised approach to Assessment & Design fees	Progress reported, new policy and processes implemented	All	In progress	M DG



Key ◇ Start of action | ◆ Forecast completion | — Projected timescale | M metered demand | U unmetered | DG distributed generation

Theme	Area for improvement	Action	Action originated from	The outcome for customers	Target measure	Voltage	RAG status	Customers affected	Q2 2016			Q3 2016			Q4 2016			Q1 2017		
									Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
4.0 Technical and commercial developments	4.4 Release of unused capacity	We will continue to participate in the Ofgem Quicker More Efficient Connections (QMEC) actions being carried out by the DG-DNO steering group regarding the withdrawal of network capacity from slow moving projects. We will communicate the outcomes and implement any necessary policy and process changes resulting from these actions	Ofgem consultation on 2015-16 ICE submissions August 2015	Better management of slow moving contracts to release unused capacity	Progress reported, new policy and processes implemented	All	In progress	M DG									◆			
	4.5 Protection policy	We will review our protection policy, including the protection scheme requirements compared to the size and cost of the connection solution and advise customers our new policy	Ofgem consultation on 2015-16 ICE submissions	A revised policy on protection scheme requirements	Policy review and information shared	All	In progress	DG									◆			
	4.6 Sharing our smart grid strategy	We will run a focussed session for stakeholders on Northern Powergrid's innovation strategy, incorporating storage, demand side response and active network management	Stakeholder Panel January 2016	Better understanding of our innovation strategy and smart grid development plan	Information shared	All	OK to plan not started	M DG			◆									
	4.7 Active network management	We will run a focussed session for stakeholders on active network management	Connections Customer Forum November 2015	Better informed about our deployment plans for Active Network Management	Information shared	All	OK to plan not started	DG			◆									
5.0 Enabling competition	5.1 Part-funded reinforcement	We will run a part-funded reinforcement trial, communicate the progress and outcome to customers and post-trial consider how we can make this a business-as-usual practice	Carried over from 2015-16 work plan	Enable ICPs to participate in part-funded reinforcement trials	Information shared and next steps considered	HV LV	In progress	M DG												◆
	5.2 Metered disconnections	We will design and run an ICP metered disconnections pilot	Carried over from 2015-16 work plan	Allow ICPs to carry out metered disconnections on brownfield sites	Pilot scheme completed and outcome reviewed	HV LV	In progress	M									◆			
	5.3 Metered disconnections	We will implement metered disconnections for ICPs	Carried over from 2015-16 work plan	Allow ICPs to carry out metered disconnections on brownfield sites	Process and policy developed and information shared	HV LV	In progress	M									◇			◆

Key ◇ Start of action | ◆ Forecast completion | — Projected timescale | M metered demand | U unmetered | DG distributed generation

Appendix 2 2015-16 work plan by Relevant Market Segment

2015-16 service improvement work plan for metered customers

Theme		Area for improvement		Outcome for customers	Actions		Target measure	Voltage	RAG status	Evidence
1.0	Provision of Information	1.1	Wayleave guidance	Provide better guidance for customers about wayleaves & consents.	1.1.1	Develop and publish a wayleave guidance document	Wayleave guidance published	All	Completed	We produced two guidance documents and published them on our website – one for landowners http://www.northernpowergrid.com/asset/0/document/1977.pdf and one providing specialist advice for ICPs and IDNOs http://www.northernpowergrid.com/asset/0/document/1975.pdf
		1.2	Demand heat maps	Publication of demand heat map with primary substation information	1.2.1	Publish primary substation demand information	Publish demand heat maps	HV/EHV	Completed	Our demand heat map with primary substation information can be viewed here http://www.northernpowergrid.com/demand-availability-map
		1.3	Performance metrics	Availability of current performance metrics	1.3.1	Publish a monthly dashboard of performance information	Monthly dashboard published	All	Completed	Monthly performance metrics are now published on our website here http://www.northernpowergrid.com/performance-dashboard/#!/
		1.4	Access to mains records	Access online to mains records	1.4.1	Mains record system to be made available to customers online	Access to mains records	All	Completed	We have enabled customers to login to our mains records systems either at our premises or remotely, we will also despatch a data disk to customers who request it. We added a page on our website to tell customers about the information available and how to access it. http://www.northernpowergrid.com/getting-access-to-our-records
		1.5	Community Energy	Provide community energy groups with advice on how to get connected	1.5.1	Consult with local community energy groups	Consult	All	Completed	We consulted with stakeholders at our February 2015 Community Energy events. The feedback from this event informed our draft guidance document
					1.5.2	Create a guidance document for community energy connections	Draft guidance document	All	Completed	We considered the feedback from our stakeholder consultation
					1.5.3	Review with local community energy groups	Ensure fit for purpose	All	Completed	We consulted with community energy stakeholders in our region on the content of our draft guide and received comments from Involve, Hartlepower, Leeds Community Energy and the National Renewable Energy Centre.
					1.5.4	Publish guidance document	Publish guidance document	All	Completed	We launched our Community Energy Guide on 5 September 2015 at the Community Energy England Conference where it was well received. is published on our website at: http://www.northernpowergrid.com/asset/0/document/1857.pdf
2.0	Improving our Application Process	2.1	Plot call off process	Have a flexible quotation process for phased housing developments	2.1.1	Implement plot call off process for house builders	Implement	LV/HV	Completed	We have implemented a plot call of process for house builders and developers. Information on how to apply is available on our website here http://www.northernpowergrid.com/understanding-our-phased-housing-development-process
		2.2	Budget estimates and optioneering	Provide customers with the range of technical options available in a budget estimates	2.2.1	Implement enhanced budget estimates at LV	Implement	LV	Completed	We introduced a new process that offered all customers considering a connection at EHV a range of technical options available to them at an early stage in the process. We then then extended this service to HV and LV customers. Our budget estimates have been modified so that, as standard, they include cost details of technical options discussed with or requested by the customer.
					2.2.2	Implement enhanced budget estimates at HV	Implement	HV	Completed	
					2.2.3	Implement enhanced budget estimates at EHV	Implement	EHV	Completed	
3.0	Improving Communication	3.1	Written communication improvements	Quotations written in understandable plain English including all the required technical information	3.1.1	Redesign the small works quotation letters and information pack to provide clear and more understandable information	Implement new letters	LV	Completed	We redesigned our letter and information pack.
					3.1.2	Redesign the large works quotation letters and information pack to provide clear and more understandable information	Implement new letters	HV/EHV	Completed	We redesigned our letter to make it clearer and easier to understand. All the relevant information is now included in the letter so that a separate information pack is not necessary.

Theme		Area for improvement		Outcome for customers	Actions		Target measure	Voltage	RAG status	Evidence
3.0	Improving Communication	3.2	Key timescales for contact	Communicate effectively with our customers	3.2.1	Contact customers within 5 days of application to ensure it is complete (LV)	Implement & Measure	LV	Completed	Where an application does not contain the minimum required information, we contact the customer within 5 days of receipt to help them complete their application. In addition, we have introduced single points of contact for small works customers who will contact the customer within 5 days of the job being set up to validate their requirements and proceed with the quotation. As part of our on-going connections transformation process, we will extend the single point of contact principle to all our connections customers in 2016.
					3.2.2	Contact customers within 5 days of application to ensure it is complete (HV)	Implement & Measure	HV	Completed	
					3.2.3	Contact customers within 5 days of application to ensure it is complete (EHV)	Implement & Measure	EHV	Completed	
					3.2.4	Contact from a project engineer within 5 days of acceptance of a quotation	Implement & Measure	All	Completed	We have implemented a process where a project engineer will contact a customer within 5 days of acceptance of their quotation.
4.0	Technical and Commercial Developments	4.1	Wayleave timescales	Introduce a service level standard to complete legal consents	4.1.1	Implement a service level standard to complete legal consents within 66 working days	Internal service standard implemented	All	Completed	We implemented this service standard, in line with our published wayleaves guidance policy
		4.2	Progress the release of unused capacity	Reduce connection charges in line with a customer's capacity	4.2.1	Identify customers with spare capacity	Identify customers	All	Completed	We implemented a process to identify customers where there may be spare capacity
					4.2.2	Seek agreement for release of spare capacity	Contact customers	All	Completed	We identified and contacted demand customers with capacity underutilisation. To date, we have successfully released 26MW from connected customers.
5.0	Enabling Competition	5.1	ICP self-determination POC	Enable self-determination POC by ICPs	5.1.1	Provide access to all relevant data and standards required by ICPs	Provide access	All	Completed	We provided access to the relevant data and standards and developed and implemented the design process. The information is contained in the following published documents: Code of Practice for PoC assessment using standard design rules for both single and three phase low voltage connections up to 60kVA (covers technical designs) https://www.northernpowergrid.com/downloads/1932 ICP Self-Select PoC Design Considerations and ICP Design Approval Requirements (covers matrix designs) https://www.northernpowergrid.com/downloads/2063 Design Inspection Levels https://www.northernpowergrid.com/downloads/2175
		5.2	ICP design approval	Enable design approval by ICPs	5.2.1	Develop and implement an audit process to assess and maintain standards for ICP derived POC and design approval	Implement audit process	All	Completed	
		5.3	Competition information	Provide customers with information about available ICPs and Competition in Connections (CinC)	5.3.1	Implement a register of ICPs operating in NPg regions	Implement / maintain an ICP register	All	Completed	The register can be viewed on our website here http://www.northernpowergrid.com/alternative-providers
					5.3.2	Ensure customers receive CinC information as part of the connections application process	Promote CinC	All	Completed	CinC information is included in the letter we send to customers confirming that their application includes the minimum required level of information. We have a dedicated CinC page on our website so that customers are fully informed of their choices before they make a connection application http://www.northernpowergrid.com/competition-in-connections
					5.3.3	Promote CinC in every external email related to the connections business	Promote CinC	All	Completed	We include information on CinC in the email footer of all external emails sent to connections customers
					5.3.4	Where a phone has a hold function the message will promote CinC	Promote CinC	All	Completed	We include a message on CinC in the welcome and on-hold messages for customers who call our connections call centre
					5.3.5	Issue emails targeted at customers in relevant market segments	Issue emails	All	Completed	A targeted email campaign with CinC information and links to useful online resources including was sent to 3,500 customers on 25 February 2016. See page 3 of the mailing http://www.northernpowergrid.com/asset/0/document/2302.pdf

Theme		Area for improvement		Outcome for customers	Actions		Target measure	Voltage	RAG status	Evidence
5.0	Enabling Competition	5.4	Metered disconnections	Allow ICPs to carry out metered disconnections on brownfield sites	5.4.1	Design and run an ICP metered disconnections pilot	Run pilot scheme	LV	In progress	We engaged with interested ICPs and established all the contractual and operational aspects of the trial. We continue to work with ICPs to identify a suitable site and willing customer of theirs to conduct this trial. We will continue to run this trial throughout 2016. We have made information about the trial available our website http://www.northernpowergrid.com/downloads/2338
					5.4.2	Implement metered disconnections for ICPs	Implement	LV	In progress	We have made all the changes necessary to implement ICP disconnections as a business-as-usual process following completion of the trial
		5.5	Dual quotations	Provide dual quotations for all major works applications	5.5.1	Implement dual quotes at LV	Implement	LV	Completed	We now offer dual quotations as standard for all section 16 quotations in the relevant nine market segments, in line with the Competition in Connections Code of Practice
					5.5.2	Implement dual quotes at HV	Implement	HV	Completed	
					5.5.3	Implement dual quotes at EHV	Implement	EHV	Completed	
		5.6	Part -funded reinforcement	Enable ICPs to carry out part funded reinforcement	5.6.1	Implement and run a part funded reinforcement trial	Implement	LV/HV	In progress	We contacted ICPs to seek expressions of interest. We have established all the contractual and operational aspects of the trial and are now awaiting an ICP to come forward with a suitable scheme that requires cable overlay enforcement. We will continue to run this trial throughout 2016.

2015-16 service improvement work plan for unmetered customers

Theme		Area for improvements		Outcome for customers	Sub actions		Target measure	Market affected	RAG progress	Evidence
1.0	Provision of Information	1.1	Performance metrics	Availability of current performance metrics	1.1.1	Publish a monthly dashboard of performance information	Monthly dashboard published	Local Authority, PFI & unmetered other	Completed	Monthly performance metrics are now published on our website here http://www.northernpowergrid.com/performance-dashboard/#!/
		1.2	Access to mains records	Access online to mains records	1.2.1	Mains record system to be made available to customers online	Access to mains records	Local Authority, PFI & unmetered other	Completed	We have enabled customers to login to our mains records systems either at our premises or remotely, we will also despatch a data disk to customers who request it. We added a page on our website to tell customers about the information available and how to access it. http://www.northernpowergrid.com/getting-access-to-our-records
2.0	Improving our Application Process	2.1	Online self-service process	Customers will be able to apply for unmetered connections/ disconnections online	2.1.1	Apply & be quoted for unmetered connections/ disconnections online	Implement online service	Unmetered other	Completed	Customers are now able to apply for a connection or disconnection and track their jobs online. https://myservices.northernpowergrid.com/connections/index.cfm
3.0	Improving Communication	3.1	Written communication improvements	Quotations written in understandable plain English including all the required technical information	3.1.1	Redesign the unmetered quotation letters and information pack to provide clear and more understandable information.	Implement new letters	Unmetered other	Completed	We have redesigned our letters to make them clearer and easier to read. We incorporated all the necessary information in the letter so that a separate information pack was not needed.
					3.1.2	Redesign the PLA quotation letters and information pack to provide clear and more understandable information.	Implement new letters	Local Authority	Completed	
		3.2	Key account management	Unmetered customers will have access to a single point of contact for quotations and for delivery	3.2.1	Appoint & train staff for PLAs	Train points of contact	Local Authority	Completed	We have appointed six people to act as single points of contact for our unmetered and PLA connections customers, they hold face-to-face meetings on both a regular and ad-hoc basis.
					3.2.2	Assign & train staff for other unmetered customers	Train points of contact	Unmetered other	Completed	
					3.2.3	Establish a programme of meetings with customers	Establish meetings	Local Authority, PFI & unmetered other	Completed	
		3.3	Key timescales for contact	Communicate effectively with our customers	3.3.1	Contact customers within 5 days of application to ensure it is complete (Local Authority)	Implement & measure	Local Authority	Completed	Where an application does not contain the minimum required information, we contact the customer within 5 days of receipt to help them complete their application. In addition, we have introduced single points of contact for small works customers who will contact the customer within 5 days of the job being set up to validate their requirements and proceed with the quotation. As part of our on-going connections transformation process, we will extend the single point of contact principle to all our connections customers in 2016.
					3.3.2	Contact customers within 5 days of application to ensure it is complete (Unmetered Other)	Implement & measure	Unmetered other	Completed	
					3.3.3	Contact customers within 5 days of application to ensure it is complete (PFI)	Implement & measure	PFI	Completed	
					3.3.4	Contact from a project engineer within 5 days of acceptance of a quotation	Implement & measure	Local Authority, PFI & unmetered other	Completed	We now have a process in place whereby a project engineer will contact the customer within 5 days of acceptance of their quotation.
4.0	Charging	4.1	PLA charging regimes	PLA's will receive a fixed annual price	4.1.1	Fixed annual price process to be implemented for PLAs	Implement	Local Authority	Completed	We implemented a fixed annual pricing regime for Public Lighting Authorities.
					4.1.2	Process review and improvements in conjunction with PLAs	Review process	Local Authority	Completed	We completed a process review and improvements and the new process was confirmed in writing to all Public Lighting Authorities.

Theme		Area for improvements		Outcome for customers	Sub actions		Target measure	Market affected	RAG progress	Evidence
5.0	Enabling Competition	5.1	ICP self-determination POC	Enable self-determination POC by ICPs	5.1.1	Provide access to all relevant data and standards required by ICPs	Provide access	Local Authority, PFI & unmetered other	Completed	We have provided access to the relevant data and standards, and developed and implemented the design approval process. The information is contained in the following published documents :
		5.2	ICP design approval	Enable design approval by ICPs	5.2.1	Develop and implement an audit process to assess and maintain standards for ICP derived POC and design approval	Implement audit process	Local Authority, PFI & unmetered other	Completed	Code of Practice for PoC assessment using standard design rules for both single and three phase low voltage connections up to 60kVA (covers technical designs) https://www.northernpowergrid.com/downloads/1932 ICP Self-Select PoC Design Considerations and ICP Design Approval Requirements (covers matrix designs) https://www.northernpowergrid.com/downloads/2063 Design Inspection Levels https://www.northernpowergrid.com/downloads/2175
		5.3	Competition information	Provide customers with information about available ICPs and Competition in Connections	5.3.1	Implement a register of ICPs operating in NPg regions	Implement / maintain an ICP register	Local Authority, PFI & unmetered other	Completed	Our ICP register is can be viewed at http://www.northernpowergrid.com/alternative-providers
					5.3.2	Ensure customers receive CinC information as part of the connections application process	Promote CinC	Local Authority, PFI & unmetered other	Completed	CinC information is included in the letter we send to customers confirming that their application includes the minimum required level of information. We have a dedicated CinC page on our website so that customers are fully informed of their choices before they make a connection application http://www.northernpowergrid.com/competition-in-connections
					5.3.3	Promote CinC in every external email related to the connections business	Promote CinC	Local Authority, PFI & unmetered other	Completed	We include information about CinC in the email footer of all external emails sent to connections customers.
					5.3.4	Where a phone has a hold function the message will promote CinC	Promote CinC	Local authority, PFI & unmetered other	Completed	We include a message on CinC in the welcome and on-hold messages for customers who call our connections helpline.
					5.3.5	Publish a specific CinC leaflet for our unmetered markets	Publish leaflet	Local Authority, PFI & unmetered other	Completed	We published 'Simplifying Competition in Connections' http://www.northernpowergrid.com/downloads/2434 and a guide to help customers step by step through the process https://www.northernpowergrid.com/asset/0/document/2191.pdf
					5.3.6	Issue emails targeted at customers in relevant market segments	Issue emails	Local Authority, PFI & unmetered other	Completed	A targeted email campaign with CinC information and links to useful online resources including was sent to 3,500 customers on 25 February 2016. See page 3 of the mailing http://www.northernpowergrid.com/asset/0/document/2302.pdf

2015-16 service improvement work plan for distributed generation customers

Theme		Area for improvements		Outcome for customers	Sub actions		Target measure	Voltage affected	RAG progress	Evidence
1.0	Provision of Information	1.1	Provision of heat maps	Expand the information provided on our heat maps to include: • Bulk supply points •Distribution substations above 200kW •EHV/HV underground and overhead networks & share base data.	1.1.1	Publish BSPs/GSPs with RAG status	BSP/GSP RAG Status published	EHV	Completed	An enhanced version of our generation heat map featuring all the required data can be viewed here http://www.northernpowergrid.com/generation-availability-map
					1.1.2	Publish capacity availability for bulk supply points	BSP capacity information added	EHV	Completed	
					1.1.3	Publish EHV underground and overhead network on heat maps	EHV network maps included	EHV	Completed	We have enabled customers to login to our mains records systems either at our premises or remotely, we will also despatch a data disk to customers who request it. We added a page on our website to tell customers about the information available and how to access it. http://www.northernpowergrid.com/getting-access-to-our-records
					1.1.4	Publish HV underground and overhead network on heat maps	HV network maps included	HV	Completed	
					1.1.5	Include distribution substations and show the area they serve above 200kW	Distribution substations added	HV	Completed	
					1.1.6	Provide heat maps base data in spreadsheet format	Base data to be provided on request	All	Completed	We provided this data to the customer who requested it. We also used our ICE stakeholder update http://www.northernpowergrid.com/asset/0/document/2302.pdf which was emailed to 3,500 customers to notify them that it was available on request by emailing ICE@northernpowergrid.com
		1.2	Substation information	Publish substation address information	1.2.1	Publish substation longitude and latitude information	Substation information provided	All	Completed	The information has been included on our generation heat map, which can be found at: http://www.northernpowergrid.com/generation-availability-map
		1.3	Wayleave guidance	Provide better guidance for customers about wayleaves & consents.	1.3.1	Develop and publish a wayleave guidance document	Wayleave guidance published	All	Completed	We produced two guidance documents and published them on our website – one for landowners http://www.northernpowergrid.com/asset/0/document/1977.pdf and one providing specialist advice for ICPs and IDNOs http://www.northernpowergrid.com/asset/0/document/1975.pdf
		1.4	Contracted capacity	Publish a contracted capacity register for primary substations within our heat maps	1.4.1	Publish quoted capacity at primary substations	Quote information published	HV/EHV	Completed	We have made quoted and contracted capacity information available for each of our primary substations on our heat maps. We included this information, along with quoted capacity per primary online here http://www.northernpowergrid.com/asset/4/document/2378.pdf as a capacity register The capacity register also includes cumulative connected capacity per GSP.
					1.4.2	Publish contracted capacity at primary substations	Contracted information published	HV/EHV	Completed	
					1.4.3	Publish connected capacity at primary substations	Connected information published	HV/EHV	Completed	
					1.4.4	Publish cumulative connected capacity by GSP	Cumulative information published	All	Completed	
		1.5	Community Energy	Provide community energy groups with advice on how to get connected	1.5.1	Consult with local community energy groups	Consult	All	Completed	We consulted with stakeholders at our February 2015 Community Energy events. The feedback from this event informed our draft guidance document.
					1.5.2	Create a guidance document for community energy connections	Draft guidance document	All	Completed	We considered the feedback from our stakeholder consultation.
					1.5.3	Review with local community energy groups	Ensure fit for purpose	All	Completed	We consulted with community energy stakeholders in our region on the content of our draft guide and received comments from Involve, Hartlepower, Leeds Community Energy and the National Renewable Energy Centre.
					1.5.4	Publish guidance document	Publish guidance document	All	Completed	We launched our Community Energy Guide on 5 September 2015 at the Community Energy England Conference where it was well received. It is published on our website at: http://www.northernpowergrid.com/asset/0/document/1857.pdf

Theme		Area for improvements		Outcome for customers	Sub actions		Target measure	Voltage affected	RAG progress	Evidence
1.0	Provision of Information	1.6	Performance Metrics	Availability of current performance metrics	1.6.1	Publish a monthly dashboard of performance information	Monthly dashboard published	All	Completed	Monthly performance metrics are now published on our website here http://www.northernpowergrid.com/performance-dashboard/#!/
		1.7	Access to mains records	Access online to mains records	1.7.1	Mains record system to be made available to customers online	Access to mains records	All	Completed	We have enabled customers to login to our mains records systems either at our premises or remotely, and we will also despatch a data disk to customers who request it. We added a page on our website to tell customers about the information available and how to access it. http://www.northernpowergrid.com/getting-access-to-our-records
2.0	Improving our Application Process	2.1	Interactivity	To provide an industry best practice interactivity process	2.1.1	Issue consultation on interactivity process	Consult	All	Completed	The consultation was discussed at our Nov 2015 Connections Customer Forum. In December 2016 we commenced a 4 week open consultation, approaching 4,000 customers for feedback.
					2.1.2	Review customer feedback	Utilise feedback	All	Completed	Customers told us that our current processes were acceptable and that consistency across DNOs was important. We chose to retain our moratorium period of 10 days and provided clarification on certain parts of the interactivity process. We will continue to monitor feedback an engage with customers on the issue.
					2.1.3	Make necessary process changes to the interactivity process	Change process if necessary	All	Completed	We wrote to all customers them of the outcomes of our consultation, we published our decision document on our website http://www.northernpowergrid.com/downloads/2335
		2.2	Generator application process	Making generation applications more understandable	2.2.1	Develop information material on generation applications	Develop material	All	Completed	Our customers told us that the ENA guidance on DG applications was good and that developing our own materials was not necessary. We added links to the guidance and additional information on our website here www.northernpowergrid.com/help-and-information/getconnected/how-do-i-connect-generation-equipment-to-your-network
					2.2.2	Publish webinar	Publish / promote on website	All	Completed	We held a technical webinar on making DG applications, paying particular reference to ANM connections. We published the webinar online for customers unable to take part and wrote to customers pointing them to the location of the recorded webinar here: https://www.youtube.com/watch?v=ozWU_EJM-kw&feature=youtu.be
		2.3	Quotation feasibility service	Implement a quote plus feasibility service	2.3.1	Design and implement a quote plus process	Implement quote plus	All	Completed	We launched our quote plus process and wrote to over 300 HV and EHV customers to inform them it is available. We also included information on our website here. https://www.northernpowergrid.com/help-and-information/getconnected/can-i-apply-for-multiple-quotations-for-a-single-site
		2.4	Electronic G59 application forms	Provide electronic G59 application forms, up to 50kW, up to 200kW, and above 200kW	2.4.1	Introduce G59 application forms split by capacity	Implement application forms	All	Completed	We amended our application process so that customers requesting a connection of less than 200kW need to provide less information than for a connection of more than 200kW
					2.4.2	Discuss wider adoption of electronic G59 forms with ENA.	Discuss with ENA / other DNOs	All	Completed	We have raised this issue within the ENA and the DG-DNO steering group and continue to work to achieve consistency across DNOs
		2.5	G83 application to connect notifications	Expand our online service to include G83/2 multiple premises application/ notification and introduce an online account for all SSEG installers	2.5.1	Creation of online accounts for all SSEG installers	Online accounts for SSEG	LV	Completed	We introduced a new online account service for generators that makes it quicker and easier for them to notify us of G83/2 single premises installations at https://www.northernpowergrid.com/my-account/login
					2.5.2	Online service to include G83/2 multiple premises application/notification	Online service goes live	LV	Completed	Our online service has been enhanced to handle multiple G83 applications and notifications https://myservices.northernpowergrid.com/connections/index.cfm?som_event=general.index&open=8&som_path=/connections/index.cfm and published guidance http://www.northernpowergrid.com/asset/0/document/2312.pdf
		2.6	Budget estimates and optioneering	Provide customers with the range of technical options available in a budget estimate	2.6.1	Implement enhanced budget estimates at LV	Implement	LV	Completed	We introduced a new process that offered all customers considering a connection at EHV a range of technical options available to them at an early stage in the process, and we then extended this service to HV and LV customers. Our budget estimates have been modified so that, as standard, they include cost details of technical options discussed with or requested by the customer.
					2.6.2	Implement enhanced budget estimates at HV	Implement	HV	Completed	
					2.6.3	Implement enhanced budget estimates at EHV	Implement	EHV	Completed	
		2.7	Statement of works	Streamline working with national grid to reduce waiting times	2.7.1	Move straight to Mod app stage where necessary	Save customers time	HV/EHV	Completed	We have implemented this change in our Statement of Works process.

Theme		Area for improvements		Outcome for customers	Sub actions		Target measure	Voltage affected	RAG progress	Evidence
3.0	Improving Communication	3.1	Key timescales for contact	Communicate effectively with our customers	3.1.1	Contact customers within 5 days of application to ensure it is complete (LV)	Implement & measure	LV	Completed	We have provided access to the relevant data and standards, and developed and implemented the design approval process. The information is contained in the following published documents : Code of Practice for PoC assessment using standard design rules for both single and three phase low voltage connections up to 60kVA (covers technical designs) https://www.northernpowergrid.com/downloads/1932 ICP Self-Select PoC Design Considerations and ICP Design Approval Requirements (covers matrix designs) https://www.northernpowergrid.com/downloads/2063 Design Inspection Levels https://www.northernpowergrid.com/downloads/2175
					3.1.2	Contact customers within 5 days of application to ensure it is complete (HV)	Implement & measure	HV	Completed	
					3.1.3	Contact customers within 5 days of application to ensure it is complete (EHV)	Implement & measure	EHV	Completed	
					3.1.4	Contact from a project engineer within 5 days of acceptance of a quotation	Implement & measure	All	Completed	We now have a process in place whereby a project engineer will contact the customer within 5 days of acceptance of their quotation.
		3.2	Written communication improvements	Quotations written in understandable plain English including all the required technical information	3.2.1	Redesign the DG quotation letters and information pack to provide clear and more understandable information	Implement letters	All	Completed	We redesigned our quotation letter to make it clearer and easier to understand. We have included all the necessary information in the letter so that a separate information pack is not needed.
		3.3	Key account management	Establish key account management for regular DG customers	3.3.1	Train key account managers	Train key account managers	All	In progress	We said we would appoint key account managers for all regular DG customers by December 2016. In 2015 we embarked upon a significant transformation of our connections business, reviewing our structure, processes, roles and responsibilities. We have implemented single points of contact within our quotation and delivery functions for all small works customers and as part of our continued transformation process, we shall to introduce single points of contact for all our connections customers.
					3.3.2	Key account managers to make initial contact	Managers to make contact	All	In progress	
4.0	Technical and Commercial Developments	4.1	Active network management (ANM)	Develop ANM connection service offers	4.1.1	Develop ANM connection service offers	Develop ANM trials	All	Completed	Following a series of trials, customers who apply for a connection to our Driffield network in East Yorkshire will now be offered an ANM connection. We included information on this in the ICE stakeholder update we sent to 3,500 customers in February 2016 http://www.northernpowergrid.com/asset/0/document/2302.pdf. We wrote to 45 customers who had previously applied for a connection in the area and held a technical webinar https://www.northernpowergrid.com/help-and-information/getconnected/what-is-an-active-network-management-connection to ensure customers were informed of their options.
4.0	Technical and Commercial Developments	4.2	Progress the release of unused capacity	Reduce connection charges in line with a customer's capacity	4.2.1	Identify customers with spare capacity	Identify customers	All	Completed	We have implemented a process to identify customers where there may be spare capacity.
					4.2.2	Seek agreement for release of spare capacity	Contact customers	All	Completed	We identified and contacted DG customers with capacity underutilisation. To date, we have successfully released 3MW from connected customers and a further 167MW by revoking connections offers.
		4.3	Wayleave timescales	Introduce a service level standard to complete legal consents	4.3.1	Implement a service level standard to complete legal consents within 66 working days	Internal service standard implemented	All	Completed	This has been implemented in line with our published wayleaves guidance policy.
5.0	Enabling Competition	5.1	ICP self-determination POC	Enable self-determination POC by ICPs	5.1.1	Provide access to all relevant data and standards required by ICPs	Provide access	All	Completed	All information is available on our dedicated CinC webpage here http://www.northernpowergrid.com/competition-in-connections in line with the Competition in Connections Code of Practice
		5.2	ICP design approval	Enable design approval by ICPs	5.2.1	Develop and implement an audit process to assess and maintain standards for ICP derived POC and design approval	Implement audit process	All	Completed	

Theme		Area for improvements		Outcome for customers	Sub actions		Target measure	Voltage affected	RAG progress	Evidence
5.0	Enabling Competition	5.3	Competition information	Provide customers with information about available ICPs and Competition in Connections	5.3.1	Implement a register of ICPs operating in NPg regions	Implement / maintain an ICP register	All	Completed	Our ICP register is can be viewed at: http://www.northernpowergrid.com/alternative-providers
					5.3.2	Ensure customers receive CinC information as part of the connections application process	Promote CinC	All	Completed	CinC information is included in the letter we send to customers confirming that their application includes the minimum required level of information. We have a dedicated CinC page on our website so that customers are fully informed of their choices before they make a connection application.
					5.3.3	Promote CinC in every external email related to the connections business	Promote CinC	All	Completed	We have included information about CinC in the email footer of all external emails sent to connections customers http://www.northernpowergrid.com/competition-in-connections
					5.3.4	Where a phone has a hold function the message will promote CinC	Promote CinC	All	Completed	We include a message on CinC in the welcome and on-hold messages for customers who call our connections helpline.
					5.3.5	Issue emails targeted at customers in relevant market segments	Issue emails	All	Completed	A targeted email campaign with CinC information and links to useful online resources including was sent to 3500 customers on 25 February 2016. See page 3 of the mailing http://www.northernpowergrid.com/asset/0/document/2302.pdf
		5.4	Dual quotations	Provide dual quotations for all major works applications	5.4.1	Implement dual quotes at LV	Implement	LV	Completed	We offer dual quotations as standard for all section 16 quotations in the relevant nine market segments, in line with the Competition in Connections Code of Practice.
					5.4.2	Implement dual quotes at HV	Implement	HV	Completed	
					5.4.3	Implement dual quotes at EHV	Implement	EHV	Completed	
		5.5	Part-funded reinforcement	Enable ICPs to carry out part funded reinforcement	5.5.1	Implement and run a part funded reinforcement trial	Implement	LV/HV	In progress	We contacted ICPs to seek expressions of interest in participating in the trial. In December 2015 we held a meeting with interested ICPs and afterwards shared the materials with all other ICPs in our region. We have established all the contractual and operational aspects of the trial and are now awaiting an ICP to come forward with a suitable scheme that requires cable overlay enforcement. We will continue to run this trial throughout 2016.

Appendix 3 Explain market research report

Northern Powergrid
ICE
April 2016

Northern Powergrid
ICE
April 2016

Executive summary[9]

Introduction

As part of their Incentive on Connections Engagement (ICE) programme, Northern Powergrid commissioned Explain to conduct a market research exercise. Explain contacted 300 major works connections customers from the three market segments covered by the ICE initiative (metered demand, unmetered and distributed generation connections). Within the research, there was a 'Looking Back' element to gather feedback on actions and outcomes achieved as part of the 2015-16 ICE work plan, and a 'Looking Forward' element to establish whether Northern Powergrid's proposed 2016-17 work plan was supported by customers and whether there were any other actions that could be added to the work plan.

'Looking Back' survey

Support for the 2015-16 ICE plan was high, with the majority of the 300 customers surveyed (242 metered, 53 distributed generation, five unmetered) agreeing that changes made within each section of the plan have improved the connections service Northern Powergrid provides:

- 76% of metered customers, 85% of DG customers, and 100% of unmetered customers agreed that changes to the provision of information have improved the connections service Northern Powergrid provides
- 87% of metered customers, 72% of DG customers and 67%[1] of unmetered customers agreed that changes to the application process have improved the connections service Northern Powergrid provides
- 88% of metered customers, 84% of DG customers and 67%[1] of unmetered customers thought changes to communication have improved the connections service Northern Powergrid provides
- 80% of metered customers, 76% of DG customers and 100% of unmetered customers agreed that changes to technical and commercial developments have improved the connections service Northern Powergrid provides
- 79% of metered customers, 82% of DG customers and 100% of unmetered customers agreed that changes to the way information about competition is provided have improved the connections service Northern Powergrid provides

[1] Please note, although five unmetered customers were interviewed, only three respondents answered this question and thus percentages are based on a sample of three.

9 Executive summary, the full report is provided in the supporting evidence pack

'Looking Forward'

Support was also strong for the 2016-17 draft work plan. The proportion of customers who said they would support the proposed changes to the plan are shown in the table below:

	Proposed actions		Online survey	Telephone survey		
				M	DG	UM
Provision of information	Action 1.1	Producing case studies on different types of HV and EHV connection projects	100%	97%	96%	100%
	Action 2.2	Publishing wayleaves / easements performance statistics on a monthly basis	88%			
	Action 1.3	Developing their dedicated ICE page on their website to feature more information and resources	100%			
Application process	Action 2.1	A review of ICP design approval to provide clear, succinct and timely responses	100%	100%	100%	100%
	Action 2.2	Reviewing ICP design approval to provide clear, succinct and timely responses	100%			
	Action 2.3	Improving the speed of which they can provide point of connection quotations requested by multiple ICPs for the same location by re-using the same quotation	100%			
	Action 2.4	Implementing changes to the application process to make it easier for customers to apply for a separate temporary site supply	100%			
Delivery process	Action 2.5	Running a pilot with a Local Authority to reconnect all knocked down public lighting within a target of 10 working days	93%			100%
Improving communications	Action 3.1	Training and deploying single points of contact (key account managers) for all regular connections customers	100%	99%	98%	100%

Technical and commercial developments	Action 4.1	Providing a focussed update on active network management at the May 2016 Connections Customer Forum	100%	99%	100%	N/A
	Action 4.2	Developing and implementing a policy on the use of export limiting devices	88%			
	Action 4.3	Reviewing the protection policy and confirming the position on third party witness testing	100%			
	Action 4.4	Reviewing the protection policies, including the protection scheme requirements compared to the size and cost of the connection solution	100%			
	Action 4.5	Continuing to engage with DECC on its consultation on Assessment & Design fees and keep customers informed of any developments	100%			
	Action 4.6	Participating in the Ofgem 'Quicker More Efficient Connections' (QMEC) actions being carried out by the DG DNO steering group regarding the withdrawal of network capacity from slow moving projects and implement any appropriate process changes within Northern Powergrid	100%			
	Action 4.7	Running a focussed stakeholder session on innovation, including storage, demand side response and active network management to help customers better understand Northern Powergrid's innovation strategy and smart grid development plan	93%			
Enabling competition	Action 5.1	Communicating the progress and outcome of their part-funded reinforcement trial to customers and consider the next steps in the development of the process	85%	99%	98%	N/A

Appendix 4
Performance metrics

Table 1 – Section 16 performance Year ended 31 March 2016					
Time to Quote (excluding days paused)[1]					
Market Segment	**Work category**	**Standard days**	**Min**	**Max**	**Average**
LV Demand	M	25	0	45	18
HV Demand	M	45	0	35	25
EHV Demand	M	65	2	65	51
132kV + Demand	M	65	-	-	-
LV Generation	DG	45	0	57	31
HV and EHV Generation	DG	65	1	66	46
Unmetered LA	U	25	0	25	14
Unmetered PFI	U	25	-	-	-
Unmtered Other	U	25	0	25	10
Time to Quote (including days paused)[2]					
LV Demand	M	-	0	613	36
HV Demand	M	-	0	699	54
EHV Demand	M	-	2	136	67
132kV + Demand	M	-	-	-	-
LV Generation	DG	-	0	466	48
HV and EHV Generation	DG	-	1	421	77
Unmetered LA	U	-	0	96	21
Unmetered PFI	U	-	-	-	-
Unmtered Other	U	-	0	685	28
Time to connect (acceptance to connection)[3]					
LV Demand	M	-	1	1277	67
HV Demand	M	-	13	955	157
EHV Demand	M	-	390	390	390
132kV + Demand	M	-	-	-	-
LV Generation	DG	-	12	276	76
HV and EHV Generation	DG	-	1	484	142
Unmetered LA	U	-	0	357	37
Unmetered PFI	U	-	-	-	-
Unmtered Other	U	-	0	352	67
Volume of quotations 2014–15					
LV Demand	M	-	3360	3232	1593
HV Demand	M	-	1442	1403	610
EHV Demand	M	-	35	16	7
132kV + Demand	M	-	-		-
LV Generation	DG	-	1705	1655	445
HV and EHV Generation	DG	-	1159	781	227
Unmetered LA	U	-	5207	4668	4642
Unmetered PFI	U	-		-	-
Unmtered Other	U	-		520	184

Table 1 – Section 16 performance Year ended 31 March 2016					
Time to Quote (excluding days paused)[1]					
Market Segment	**Work category**	**Standard days**	**Min**	**Max**	**Average**
LV Demand	M	15	0	15	10
HV Demand	M	20	0	28	13
EHV Demand	M	50	40	48	44
132kV + Demand	M	-	-	-	-
LV Generation	DG	30	2	30	22
HV and EHV Generation	DG	65	1	65	42
Unmetered Connections	U	-	-	-	-
Time to Quote (including days paused)[2]					
LV Demand	M	-	0	398	36
HV Demand	M	-	0	640	54
EHV Demand	M	-	40	48	44
132kV + Demand	M	-	-	-	-
LV Generation	DG	-	2	145	41
HV and EHV Generation	DG	-	1	388	91
Unmetered Connections	U	-	-	-	-
Time to connect (acceptance to connection)[3]					
LV Demand	M	-	0	15	7
HV Demand	M	-	1	43	17
EHV Demand	M	-	-	-	-
132kV + Demand	M	-	-	-	-
LV Generation	DG	-	15	15	15
HV and EHV Generation	DG	-	3	20	15
Unmetered Connections	U	-	-	-	-
Volume of quotations 2014–15					
LV Demand	M	-	796	684	132
HV Demand	M	-	1060	878	156
EHV Demand	M	-	9	2	0
132kV + Demand	M	-	-	-	-
LV Generation	DG	-	33	21	4
HV and EHV Generation	DG	-	165	99	23
Unmetered Connections	U	-	-	-	-

1 From receipt of an acceptable application to the date of the quotation excluding days on pause whilst we await further information

2 From receipt of an acceptable application to the date of the quotation including days on pause whilst we await further information

3 From receipt of a customer acceptance to the date the connection is jointed onto our network (though perhaps not energised)

Contact us regarding our plan

As an essential service at Northern Powergrid we believe that our customers and other stakeholders are the best judges of our performance and we always want to hear your views and opinions on the services we provide and your ideas for what we could be doing. If you would like to comment, you can contact us in a number of ways:

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On twitter

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Via our online community

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