electricity north west

Bringing energy to your door

Distributed Generation Looking Back Report 2013-14

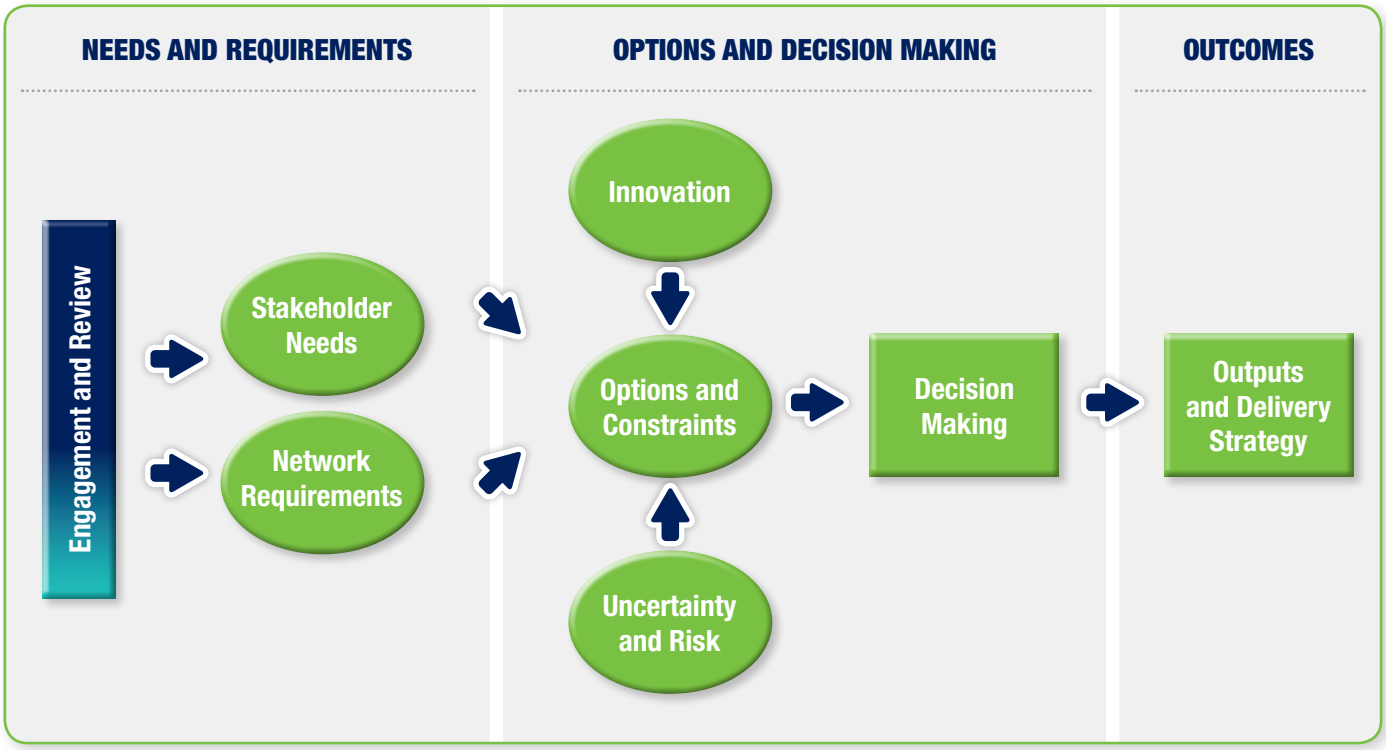
Contents

1. Introduction

This document is our 'Looking Back Report' and provides a review of our activities carried out during 2013-14 and set out in our 2013-14 work plan.

2. Our strategy for stakeholder engagement

We have developed a comprehensive and robust approach to stakeholder engagement that is shown in the diagram below.



Expertise from across the business was used throughout the process of formulating, developing and finalising our DG work plan for 2013-14. The tables that follow highlight how and where business engagement fitted into the development of the work plan.

3. How we developed our plan

At the Distributed Generation (DG) Forum in London in October 2012, Renewable UK challenged Distribution Network Operators (DNOs) to set out their improvement plans in advance so that they could be held to account against these plans.

We developed and published our first plan for the period 2013-14 in December 2012 and provided quarterly updates on progress on our website. Our CEO also provided an update against that plan at the DG Forum in London on 23 October 2013.

Ofgem has developed this approach into a new regulatory incentive for DNOs that will take effect from 1 April 2015 known as Incentive on Connections Engagement (ICE). As part of the development of this incentive regime it has been agreed to trial the approach with DG stakeholders.

BUSINESS ENGAGEMENT - NATIONAL	BUSINESS ENGAGEMENT - NORTH WEST
Title: DG-DNO Steering Group **Dates:** Commenced 2013 **Frequency:** Every two months **Attendance:** Head of Market Regulation (Chair); other DNOs; DG Trade Associations	**Title:** External Stakeholder Panel **Dates:** Commenced March 2013 **Frequency:** Every six months **Attendance:** CEO, key stakeholder reps covering major business, DG developer, fuel poverty charity
Title: DG Technical Forum **Dates:** Commenced 2013 **Frequency:** Quarterly **Attendance:** Strategic Planning Manager plus other members of the working group	**Title:** DG Customer Survey **Dates:** Commenced 2013 **Frequency:** Every month **Attendance:** Telephone survey of a sample of DG connections customers
Title: DG Fora London, Cardiff, Glasgow **Dates:** October 2013 **Frequency:** Annual **Attendance:** CEO and senior managers; other DNOs; DG stakeholders	**Title:** Bilateral engagement **Dates:** 2013-14 **Frequency:** Ad hoc **Attendance:** Business Development Manager meetings with large connection customers
	Title: DG Workshops **Dates:** May 2013 **Frequency:** Every six months **Attendance:** Senior managers from Connections team; regional DG developers
	Title: UCLAN Grid Connection course **Dates:** 19 and 26 March 2014 **Frequency:** Ad hoc **Attendance:** 30/40 delegates each session

We have held specific distributed generation workshops during the year that have given customers a chance to engage with us. We have also attended many other events to talk to customers and this gives us the opportunity to understand what else we can do to make it easier to connect.

2013 also saw the creation of a DG-DNO Steering Group. This group acts as a forum for distributed generation representatives to engage with DNOs to identify and share best practice. This group is chaired by Electricity North West and has organised the three national forums (the DG Fora) held in Cardiff, London and Glasgow, previously organised by Ofgem.

During the year we introduced a specific customer survey of distributed generation customers so that we had some quantified feedback to add to the other qualitative feedback received through the channels identified above.

4. Progress against our 2013-14 work plan

This section provides a narrative of the progress that we have made during 2013-14 in making it easier for customers to connect. Appendix 1 provides a status report against each of the activities we identified in our work plan.

The diagram below shows the key stages in making a connection. Our philosophy is to make each stage as easy as we can and to give customers options and choices along the way.

Before you apply

We have implemented a number of initiatives to help customers before they even apply. The overarching theme of these is about information provision. We see this as a mutually beneficial approach.

- **It provides information for customers to consider options at their own convenience**
- **It reduces the number of formal quotations we have to offer**

Common to all DNOs we saw a rise in the number of applications we were receiving. In particular for DG there are occasions where we were getting multiple applications from the same customer. Our aspiration is to minimise the number of full quotations that we do to minimise the level of abortive work that there is across the whole process and therefore reduce costs for customers. Our approach is to encourage early engagement and we are happy to do this before customers have made a formal application.

During the year we introduced drop-in sessions. Dates and locations were identified on our website and customers could contact us to book a slot, with a designer for example. They could come in and discuss a number of prospective sites and our designer could give them an initial view of the capacity available at that location. We have extended this to an 'open door' policy where we will seek to accommodate such dialogue at any mutually convenient time and not limited to predetermined slots. We have had positive feedback on this approach.

Other customers have requested information to allow them to do some initial filtering of viable sites themselves. We have had 'heat maps' on our website for a couple of years covering 11kV and 33kV networks and identifying constraints due to both thermal capacity and fault level. During the year we added a further heat map that incorporated additional data on National Parks and Areas of Outstanding Natural Beauty where planning approval is more difficult to gain. Additionally we overlaid information on wind to identify areas that were most likely to be suitable for wind generation.

We added high voltage geographic and schematic network diagrams to the Long Term Development Statement area of our website. This shows the geographical location of our cables and overhead lines. The information available online shows the level of detail of information that is available but we recognise that it does not provide a usable level of granularity. It is intended that customers can have a look at the sort of information that is available and if it is useful to them we will provide higher resolution versions via CD copies free of charge. As part of our 2014-15 DG Work Plan we are looking to see how we can enhance this information and intend to make our network modelling information available online.

When you apply

During the year we considered introducing the requirement for a 'letter of authority' from the landowner before we would provide customers with a quotation. On balance we decided not to do this as it did not align with our aspiration to make it easier for customers. We encourage developers who have not contacted landowners to meet with us before they apply to identify the most viable projects before they invest time engaging and getting agreement from landowners.

Through the Energy Networks Association a generic DG application form and DG guide has been created. The form includes a significant level of detail that is sometimes needed to allow us to consider the impact of the proposed connection on our network. For most situations there is some core information that we need and can agree a range for many of these. Based on this core information we provide a connection offer that is valid so long as the turbine actually installed falls between those identified ranges. In some circumstances we do need further detail but we treat these as an exception rather than the norm.

When a customer applies and our analysis of the network identifies that there are going to be any reinforcement costs, we know the next question the customer will ask is "how much could I connect?" Rather than just issuing a quote for what they initially ask for and make them reapply for a different, smaller turbine, we will have that dialogue with the customer before we issue their quotation. Some customers have told us what their 'break even' point is for various turbine sizes so we can assess their applications for them and give advice on those that are most likely to be viable.

We have also developed flexible application processes to meet the needs of our customers. For instance, for one developer specialising in high volume but small installations, we developed a simple assessment stage approach. Rather than making a formal application for each, they complete a spreadsheet with prospective sites. We assess them on the spreadsheet and provide the following information so that the developer can decide which sites to progress:

- **Green – no cost to connect**
- **Amber – up to £1,500**
- **Red – over £1,500**

When we quote

When we issue a quotation to our customers we provide a good level of breakdown of our charges. We split the work between contestable and non-contestable activities and further split these activities into the key components.

During the year we extended our approach of dual quotes to all low voltage quotes in competitive market segments. Dual quotes provide two options for customers and they can accept either;

- **A full-works quote which includes the costs of us carrying out all the work ie both the contestable and non-contestable works**
- **A non-contestable quote which includes the costs for us carrying out the non-contestable work only, facilitating the customer seeking alternative third party quotes for the contestable work**

We initially introduced this approach to our high voltage quotations in early 2013 for both demand and distributed generation quotations. We extended it to low voltage distributed generation in June 2013 and then to low voltage demand in October 2013. We believe that we are the only DNO that has implemented this approach across all competitive market segments for demand and distributed generation. This has been recognised by Ofgem as best practice in supporting competition in connections.

We have also reviewed our approach to upfront payments in light of customer feedback. We recognised that there was generally a more pronounced lead time between customers accepting their connection offer and work starting on site, often due to the need for planning permission to be approved. We no longer require upfront payment in full for any quote greater than £20,000. For these projects we only require payment of the assessment and design charges on acceptance of the project. Customers can also pay for any legal or wayleave charges if they wish us to commence progressing those activities at that stage to avoid any delays once planning permission has been granted. We will then agree a payment profile for each job to ensure we remain 'cash positive'. We believe that these are the most favourable payment terms of any DNO and have been beneficial to the cash flow of our customers.

Similarly in response to customer feedback our connection offers are open for 180 days (six months). This generally gives customers ample time to consider our quote, get quotes from alternative providers and progress it through their internal governance procedures. If customers do need longer then we will extend the offer period if there have been no subsequent applications for that part of the network.

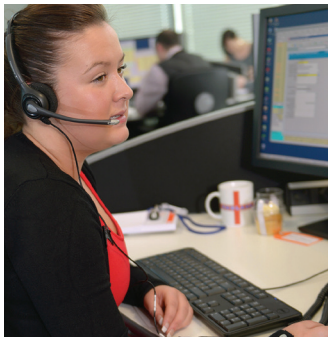
As part of our 'Capacity to Customers' trial we offer flexible connection offers to give customers a managed connection offer where otherwise there would be associated reinforcement costs. The trial involves around 15% of the high voltage and all of our extra high voltage circuits on our network and allows us to connect additional connections to the network by altering the running arrangements of our network to utilise the latent capacity in that network. During normal running, the customer sees no difference. If there is a fault on our network then customers with a managed connection offer may be off supply for a slightly longer period.

When we deliver

During 2012 we developed a 'connect and manage' approach to small PV installations. We worked with one council who wanted to install significant numbers of PV installations on their social housing stock. We recognised that our network modelling approaches identified the worst case scenario. If we followed a traditional approach we would have needed to carry out reinforcement work that would result in a charge to the customer. We recognised that we had less historic data on the network effects of large amounts of PV installations. We therefore took a different approach to install some network monitoring equipment and allow the installations to be made. Our experience to date has endorsed this approach of taking this managed risk as we have had very few situations where we needed to do any retrospective work to alleviate network problems. During 2013 we extended this approach to small low voltage installations up to 15 kVA.

We do not insist on the generation customer providing a circuit breaker at the interface. However we would routinely design the interface assuming that a circuit breaker will be installed as it is the easiest way for the generator to discharge their own ESQCR duties. We will connect a generator's installation without the generator protecting their network with their own circuit breaker, provided that the generator satisfactorily demonstrates that their installation is safe and ESQCR compliant when protected by the Electricity North West metering circuit breaker.

We do not necessarily require DG to operate at a fixed power factor and have in fact many DG sites that operate anywhere within a prescribed range.



As part of our Well Justified Business Plan submission we included some specific investment to make distributed generation easier to connect in the future. 33kV overhead line networks are generally protected by distance protection relays at the source substation. Increased DG penetration, particularly in rural areas, limits the ability of the distance relays to properly protect the overhead line circuit. This problem could be removed by installation of unit protection but this requires a secure communications medium connecting all ends of the circuit. Installation of unit protection would facilitate increased DG connections whilst maintaining the ability to protect the overhead line circuit. We have a policy to install fibre optic communications whenever asset replacement or reinforcement work is undertaken on our 33kV overhead line network to provide capability for unit protection to be installed in the future.

Connection of DG to urban HV networks is often constrained by the fault level capacity of old 13.1kA rated switchgear on 6.6kV networks. We are committed to removing all 13.1kA (6.6kV) switchgear from the network. Work to do this has commenced in the current regulatory period and is planned to continue in RIIO-ED1 with a proposed £14m programme. The switchgear replacement is targeted to ensure whole 'primary' networks become fault level up-rated.

To demonstrate our commitment we included a 20% reinforcement efficiency 'discount' in our reinforcement costs in our RIIO-ED1 submission.

5. Conclusion

Overall we believe we have made really good progress against a challenging plan to improve our communication and processes with DG stakeholders.

We have achieved all the things we had set out in our plan and have used the learning from these, together with further feedback from stakeholders to develop our plan for 2014-15.

Feedback from our customer satisfaction survey of distributed generation customers validates the progress we have made with satisfaction being greater than 80% for most months.

Appendix 1. Status updates for each 2013-14 work plan activity

AREA	ISSUE	ACTION	PROGRESS UPDATE
CUSTOMER SERVICE AND FEEDBACK	Monitor Customer Satisfaction	In addition to monitoring customer satisfaction through the Broad Measure of Customer Satisfaction which can capture DG customers' views, we have sought feedback from specific DG workshops with developers and landowners including the Country Landowners Association. We will develop a specific customer satisfaction survey for DG customers. We will consider the feasibility of doing a joint survey with other DNOs	Complete DG customer survey developed and surveys commenced August 2013
	Checklist of what customers can expect	In the workshops identified above, we have sought feedback from customers in respect of our application process and information that we provide to our DG customers and acted upon this feedback. We will be producing a user friendly guidance document to circulate to our DG customers	Complete We have made improvements to the information available on our website: www.enwl.co.uk/dg We are engaging with some stakeholders to better understand what additional information is required
	Account Managers	We have a centralised specialist team that deal with all DG enquiries and applications that engage with customers to identify their specific needs and quote on average well within GSoP timescales	Implemented
	Recruitment of non-technical support	Due to the high volumes of DG applications we have established a process where suitably competent staff address various elements of the quotation process from system studies to designing cable routes, we also have a dedicated Commercial section to support the process both from Terms and Conditions of Connection and arranging payment options. We will continue to monitor timescales for all activities and address any issues that arise	Implemented

AREA	ISSUE	ACTION	PROGRESS UPDATE
CUSTOMER SERVICE AND FEEDBACK	Arrange customer workshops	Joint workshops with local DG stakeholders including Envirolink, Lancaster University and individual DG customers have taken place to explain processes and seek feedback from customers. We plan to carry out more of these workshops on a regular basis in the coming months	We attended workshop organized by Hydro power and the Environment Agency on 8 Feb 2013 We have worked with the University of Central Lancashire to develop and contribute free workshops on 'Energy and Grid Connection Basics'. For more detail see: www.uclan.ac.uk/iswindtech We held a DG-specific seminar on 23 May 2013 which was attended by a range of DG developers
	Risk free appeals process	Feedback from customers at our Connections Customer Seminar held on 11/12/12 was that an internal escalation process is introduced, while we have this for complaints we have not specifically communicated an appeals process to DG customers. We intend to communicate an appeals process to all customers including DG in January 2013	We already have an escalation process for technical queries. If our designer cannot answer the question they will escalate it to one of our Design Managers. If they cannot resolve the issue it would be escalated to one of our senior managers in the Connections team to discuss with our technical policy experts
	Issues log – capture new issues	We have listened to feedback from our customers and have created an issues log with identified actions	Implemented
APPLICATION PROCESS	Iterative process	We provide dialogue with our customers on receipt of an application and we will be introducing drop-in sessions for DG customers in the New Year	Drop-in sessions held during April, May and July 2013 Further sessions being arranged as business as usual
	Database of turbine specs	We have been working closely with a specific DG customer to provide standard characteristics that provides a consistent approach to our designs and we are more than happy to work with other DNOs to agree standard specifications. We will proactively work with other DNOs and the ENA to agree a centralised database if this is a practical solution for the DG market	This has been completed by the ENA
	Option for extension of validity	Offers open for 180 days (6 months) We also provide flexibility to extend validity periods if this will assist with our customers' requirements	Implemented
	Contestable works part of same application	We currently provide this for EHV quotations and will be extending this to other quotations in the New Year	Implemented 5 Feb 2013

AREA	ISSUE	ACTION	PROGRESS UPDATE
INFORMATION PROVISION	Information on LV network, voltage issues and plans	ENWL Working group has been set up to determine what information we will provide to the DG community	The following information is now available on request: - Graphical Information System - HV Schematics - LV Schematics - HV Connectivity Model - Network Load Data The information is being made available in stages on line. HV schematics and geographical layouts are now within our secure Long Term Development Statement pages. www.enwl.co.uk/about-us/long-term-development-statement/secure-information-login
TECHNICAL	Innovation collation and roll out	On DG work we have adopted a process where HV & LV schemes have a detailed study on acceptance rather than at quotation stage therefore improving quotation times and reducing abortive work. We have also introduced a 'connect and manage' policy on bulk PV schemes to enable easy connections for developers and local authorities	Applications up to 15kVA now connected on a 'connect and manage' basis
	Safeguards against unnecessary works	Electricity North West's policy on interface circuit breakers, looping in and communications infrastructure are designed to minimise unnecessary works. If other situations are identified we will review these	We aim to provide minimum cost connections that are in accordance with our design policy. We regularly review our design specifications especially when we receive feedback from our customers
	Consistency in standards interpretation	We have reinforced our consistent approach to applying our technical commercial policies with our design teams. The standard approach has been reinforced by re-organising our team structure to be functional rather than regional	Organisational changes completed March 2013
	Use of legacy projects and strategic developments	Work has commenced on using standard matrices for DG connections at EHV and HV to standardise design (needs to work in conjunction with turbine database)	Standard solutions developed and introduced. These act as the default design for the majority of designs at EHV to speed up the design timescales

AREA	ISSUE	ACTION	PROGRESS UPDATE
CHARGING	Fair deposit	We provide customers with more financial options for funding connection costs providing viability to projects leading to an increase DG connected. We will also accept payments for A & D fees plus wayleaves up front, then on an agreed project-specific payment plan to agreed milestones	Implemented
	Itemised quote breakdown of costs	We already provide a comprehensive cost breakdown with our connection offers	Implemented
	Application fee	We are working with the other DNOs and stakeholders to develop a business case to present to DECC	Document sent to DECC during July 2013. Meeting arranged with DECC to discuss during October
CHOICE	Address barriers to competition	We have already passed the Competition Test for high voltage and extra high voltage distributed generation connections	Complete

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