



Incentive on Connections Engagement (ICE)

2020/21 Mid-year Update

What we do

At Northern Powergrid we manage the electricity distribution network that powers everyday life for more than 8 million people across the North East, Yorkshire and northern Lincolnshire.

Our network of more over 96,000 kilometres of overhead lines and underground cables spans from the Scottish borders to northern Lincolnshire and delivers a safe and reliable supply of electricity to 3.9 million homes and businesses.

We connect people to the electricity network and, if our customers' power supply is ever interrupted, we are there to fix it 24 hours a day, 365 days a year.



8 million
People served



3.9m
Homes and businesses



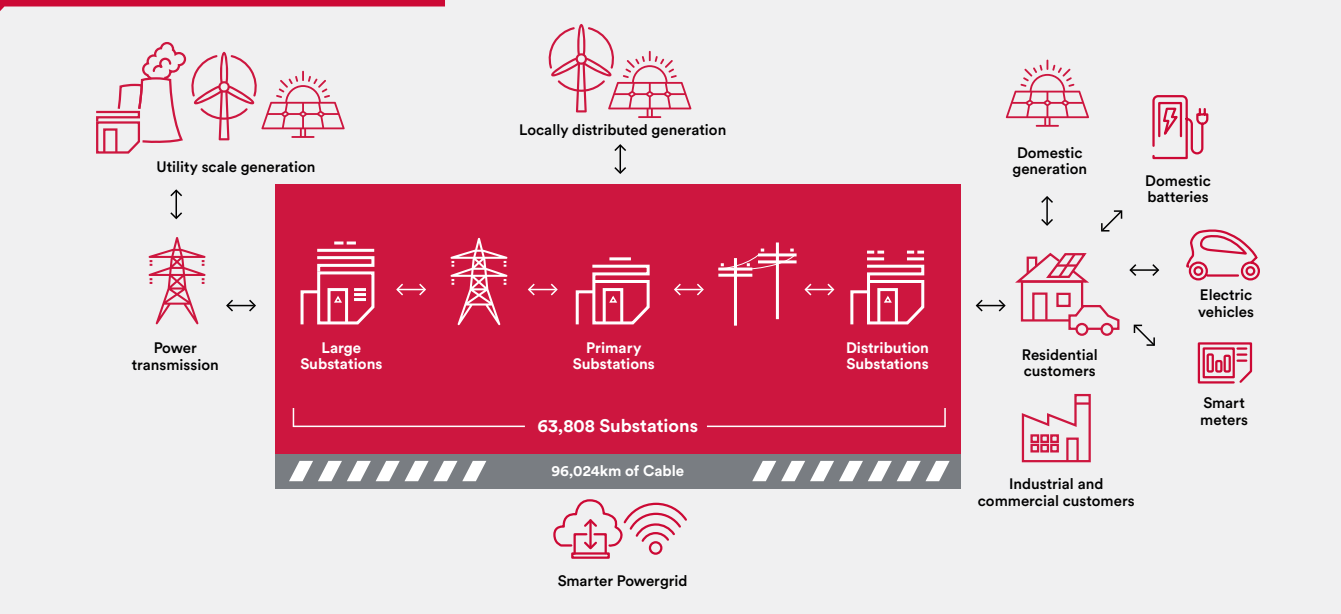
15,500
New connections
each year



£1m
Invested every day



Where we fit in the industry



Foreword

The events of 2020 have highlighted the critical role we have in powering the lives of the people and communities we serve.

While our operational colleagues remain on the front line supporting the national COVID-19 response, we have embarked on an ambitious and far reaching programme of engagement that will shape the future trajectory of our business into the RIIO-ED2 price control period.

Running alongside this important activity, we have continued to deliver the commitments we made in our 2020/21 Incentive on Connections Engagement (ICE) work plan. I am proud to work with a team that, even under these challenging circumstances, has risen to the challenge and continued to deliver service improvement actions and initiatives for the benefit of our customers.

I am pleased to report that we remain on track to deliver all the actions in our 2020/21 ICE work plan and that we will be adding one further action to it, in response to stakeholder feedback. That action is to host a connections forum for Independent Distribution Network Operators (IDNOs). Our team is working hard to complete these actions in line with the targets we have set but, as ever, our commitment is to deliver all our actions in the remainder of this ICE plan year.

I am encouraged by the response we received to this year's ICE consultation but know that we still have work to do if we are to deliver an outstanding connections service that meets the future needs of our customers.

We have a vital role to play in enabling the UK's ability to meet net zero emissions by 2050 and, as such, many of the actions in our 2020/21 ICE plan are

designed to drive forward this important transition. We are working with installers to accelerate the uptake of EV charge points, heat pumps and solar PV by making it quicker and easier to connect these type of Low Carbon Technologies (LCTs) and we are seeking feedback from our stakeholders on how to do this. We are engaging with stakeholders on the decarbonisation of heating and transport, two of the most significant changes required to meet net zero targets and supporting Community Energy stakeholders seeking a new connection to our network.

Our commitment to continuous improvement means that we are always looking at how we can do things better. I encourage all of our connections stakeholders to continue to contribute to ICE and to our wider engagement process. This year, we are also asking our connections stakeholders to take the time to engage with in developing our plan for RIIO-ED2, which is building on several initiatives that originated from the ICE process. I want to assure you that your views are being heard and used to drive significant improvements in our connections service and inform the future direction and priorities of our business.

Take care and stay safe.

Patrick Erwin
Patrick Erwin
POLICY AND MARKETS DIRECTOR



Engagement update

This year required a significant step change in the way we engage and interact with our stakeholders.

We work hard to understand the views of our connections stakeholders and to continually improve the service we provide. We encourage them to tell us what we do right and what we could be doing better and give them plenty opportunities to do so at the events we host, the surgeries we deliver, via the customer surveys and research we commission and through interactions with our team.

Our strategy is always evolving - usually in response to what our stakeholders are telling us - but this year we had to adapt our approach to rise to the challenges presented by COVID-19.

New ways to engage

With more people working from home and unable to travel, we have had to step up our digital engagement this year. Online workshops and discussions have replaced our usual face-to-face meetings and events and connections surgeries are now being delivered via WebEx or over the telephone. We also undertook a targeted email and telephone campaign to remind people about the ability to use AutoDesign and other online resources when working from home.

We have significantly increased our social media presence and launched a new website portal which gives stakeholders the opportunity to engage in our RIIO-ED2 business planning process. Stakeholders can also find information on upcoming engagements and view recordings from past events.

Our new stakeholder portal is online at engage.northernpowergrid.com/home

Innovation at the forefront

We hosted a series of online discussions and demonstrations as part of our Innovation Festival which took place throughout August and September. The sessions showcased some of our most innovative projects including AutoDesign and our Distribution Future Energy Scenarios (DFES) and were well received with more than 275 stakeholders taking part.

Ask our experts

Our customers continue to tell us how important it is for them to be able to talk to our engineers and how much they benefit from their local knowledge of the network. We publish contact details for our connections Design Team Managers and Commercial Engineers on our website and encourage customers to contact them when assessing their options and deciding where to connect.

Our monthly connections surgeries continue to be well utilised by a broad range of connections stakeholders, including Community Energy groups. This year, we are expanding the scope of this service and responding to stakeholder requests by introducing pre-application surgeries for developers and Local Authority planners, to help them identify the most viable and cost-effective connections solutions for LCTs.

To book a surgery appointment email connectionssurgeries@northernpowergrid.com

Targeted forums

We have seen the benefit of bringing together groups of stakeholders in similar roles or with similar interests to explore current challenges and future priorities.

Our DG Owner Operator forum continues to go from strength to strength with a record number of attendees taking part in our first

Engagement update

digital forum in September. Although a necessity due to COVID-19, attendees told us that they prefer this method of engagement and so we will be delivering more of these meetings via digital platforms.

Our Accelerated Loss of Mains local working group has also proved beneficial in helping to increase the number of funding applications from generators in our region.

A recent workshop provided an opportunity for LCT installers to get on their 'soapbox' and collectively tell us what is working in the connections process and what is not and how we can work together to accelerate the uptake of LCTs in our region.

A collaborative approach














In September, we hosted our first joint Local Authority forum with Northern Gas Networks that focused on local energy plans and how new connections will help to support economic growth and the green recovery.

The forum was aimed at Local Authority planners, transportation and decarbonisation managers and others tasked with delivering local net zero plans, and was well attended with the majority of the Local Authorities and Local Enterprise Partnerships (LEPs) in our region taking part.

We invited representatives from the West Yorkshire Combined Authority and Newcastle City Council to share their views. Those taking part told us they appreciated the opportunity to engage with both network operators at once and to hear about the experiences of their local government peers. These forums were always intended to be a springboard for closer and ongoing engagement and so we will be running more of them and will use them as a platform to explore future priorities and challenges with these stakeholders.



Past connections engagement activities

May 2020	June 2020	August 2020	September 2020	October 2020
<div> AutoDesign webinar for ICPs and IDNOs youtu.be/Jvn3jfa-jPc</div>	<div><div> Community Energy webinar regen.co.uk/event/net-zero-community-energy-webinar/</div><div> Accelerated Loss of Mains local working group meeting northernpowergrid.com/ALoMCP</div><div><div> ICP Seminar</div></div></div>	<div> Northern Powergrid Innovation Festival engage.northernpowergrid.com/events/past-events</div>	<div><div> Community Energy webinar regen.co.uk/event/community-energy-and-a-green-recovery/</div><div> Installer workshop: Working together to accelerate the uptake of low carbon technologies engage.northernpowergrid.com/events/past-events</div><div><div> DG Owner Operator Forum engage.northernpowergrid.com/events/past-events</div></div></div>	<div><div> Accelerated Loss of Mains local working group meeting northernpowergrid.com/ALoMCP</div><div><div> Net zero: Exploring pathways for decarbonisation engage.northernpowergrid.com/events/past-events</div></div><div><div> Local Authority forum: Focus on local area energy planning engage.northernpowergrid.com/events/past-events</div><div><div> DFES 'Lighting Talk' as part of the Leeds Digital Festival odileeds.org/events/planetdata3/</div></div><div><div> RIIO-ED2 deliberative workshop on connections engage.northernpowergrid.com/events/past-events</div></div></div></div>

How your feedback shapes our plans

We have a clearly defined strategy for engaging with our connections stakeholders and together, we have built a robust process for ICE that delivers real and meaningful results.

 **96%**

agreed we have a comprehensive work plan of service improvement activities that meets the needs of our connections stakeholders

Source: Explain telephone interview with 118 connections customers April/May 2020

We give our stakeholders and customers plenty of opportunities to give us feedback on our service through the in-year engagement activities that drive our ICE plans and, more recently, through our extensive programme of engagement on our RIIO-ED2 business plan.

















All the feedback we receive is recorded, considered and acted on as appropriate. Whether that requires a change to our business-as-usual practices, contact from our team or a more significant service improvement delivered through ICE.

We want to encourage our connections stakeholders to continue to engage with us and assure them that their views are being heard. The feedback we receive is being acknowledged and used to drive immediate service improvement actions, future iterations of our ICE plans and inform our longer-term business plans and priorities.



How your feedback shapes our plans

Upcoming connections engagement opportunities

November 2020	December 2020	January 2021	February 2021	March 2021
 AutoDesign co-creation workshop	 Accelerated Loss of Mains local working group meeting	 Local Authority forum	 Installer workshop: Working together to accelerate the uptake of low carbon technologies	 Local Authority forum
 Community Energy webinar	 DG Owner Operator Forum	 IDNO Forum	 Decarbonisation of transport event	 Accelerated Loss of Mains local working group meeting
 Community Energy panel			 Decarbonisation of heating event	 DG Owner Operator forum
 ICP Seminar				
 Decarbonisation of transport event				
 Decarbonisation of heating event				



For more information and to book upcoming events visit:
engage.northernpowergrid.com/events/upcoming-events

Actions update

We have been working hard over the past few months to deliver the actions in our 2020/21 ICE work plan. This section gives an update on the status of each of these actions and one new action we are adding to our work plan at the mid-year point, in response to stakeholder feedback.

ACTION

1.1

Additional heat map data

Generators told us that early visibility on the likely impact of transmission issues was key when considering a connection to our network. They told us that understanding whether a project was likely to require a Mod App with National Grid early in the process was critical, as this can significantly impact on the cost and timescales of a project.

Responding to this feedback, we began publishing Appendix G and Statement of Works information as part of the data sheets that accompany our network availability heat maps. We are now building on that action with a commitment to include data on transmission constraints and Mod Apps by the end of the year.

The downloadable datasheets that accompany our heat maps contain a wealth of useful information for customers who want to complete their own upfront assessments and feasibility studies. Publishing this data will further extend the provision of detailed network information we make available to our customers and help them make more informed decisions about where to connect.

We are working to make this information available and are confident that we will be able to include data on transmission constraints and Mod Apps in the data sheets that accompany our heat maps by the end of 2020.

M

DG

ON TRACK

✓

Quick glance summary

Ref	Commitment	Status
1.1	We will publish data on transmission constraints and mod apps on our heat maps.	ON TRACK ✓
1.2	We will develop and run a trial with generators to provide more timely and accurate information on planned outages.	ON TRACK ✓
1.3	We will produce a guide aimed at Local Authorities and LEPs which signposts the support and tools we make available.	COMPLETE ✓
2.1	We will make changes to our online application process to make it easier to apply to install different types of low carbon technologies.	ON TRACK ✓
2.2	We will engage with stakeholders and seek feedback to develop our LV budget estimating tool.	ON TRACK ✓
2.3	We will work with customers who make multiple, repeat applications to streamline our applications process.	ON TRACK ✓
2.4	We will offer free, pre-application surgeries for developers, Local Authority planners and consultants to help them identify the optimum and most cost-effective connections solutions.	ON TRACK ✓
3.1	We will host local energy planning forums for local government and other interested stakeholders.	ON TRACK ✓
3.2	We will provide support for Community Energy groups and stakeholders seeking a new connection to our network.	ON TRACK ✓



Ref	Commitment	Status
3.3	We will host a connections forum for Independent Distribution Network Operators.	ON TRACK ✓
4.1	We will establish a local working group for stakeholders involved in the Accelerated Loss of Mains Change Programme.	ON TRACK ✓
4.2	We will continue to engage with stakeholders about the actions we are taking to support the roll-out of Electric Vehicles in our region and on our role in the low carbon transition.	ON TRACK ✓
4.3	We will engage with stakeholders on the electrification of heating and our role in the low carbon transition.	ON TRACK ✓
4.4	We will engage with installers of low carbon technologies to better understand their priorities, any challenges they are facing and how we can best support them.	ON TRACK ✓
5.1	We will make changes to the alternative provider register on our website so that ICPs who are authorised to self-determine points of connection and self-approve designs are clearly identifiable to customers looking to appoint an ICP to carry out contestable works.	ON TRACK ✓
5.2	We will review our policy on the installation of link boxes for non-domestic, small works IDNO connections.	ON TRACK ✓
6.1	We will continue to engage with stakeholders as we transition to a Distribution System Operator	ON TRACK ✓
6.2	We will continue to engage with stakeholders to inform our Distribution Future Energy Scenarios.	ON TRACK ✓

ACTION
1.2
Information on planned outages

To run a safe and secure network, we will sometimes need to undertake essential inspection and maintenance works. For generators, particularly those with cheaper single circuit connections, the operational and financial impact of service interruptions caused by planned outages can be significant.

Our DG Owner Operator Forum gives generators the opportunity to meet with our team and discuss a range of operational issues, including the impact of planned outages.

Generators who engage in our forum can access up to date information on planned outages and other constraints that will help them to plan more strategically. Feedback from these stakeholders, however, was that they require more bespoke information, potentially on a site-by-site basis.

In response to these comments, we made a commitment to run a trial with a small

number of generators with significant operating assets in our region. To deliver this, we are working with our customers to understand their requirements and, together, we will develop a new process to provide them with more accurate and timely information on planned outages.

At our DG Owner Operator Forum in September, notification of planned outages was a key area for discussion and we asked those taking part to prioritise the type of information they would like to receive from us. We are currently developing our trial proposition and will be engaging with generators to ensure it meets their expectations.

With the work we have done so far, we remain on track to deliver this action by the end of March 2021. Learning from this trial will then inform our approach to the provision of planned outage notifications for all generators connected to our network.

DG

ON TRACK ✓

ACTION
1.3
Local Authority and LEP connections guide

Local Authorities are on the front line in the drive to reach net zero and are increasingly looking to us to collaborate on their plans. Our connections team is now busier than ever supporting these stakeholders, as they strive to achieve targets for EV infrastructure roll-out and rise to the challenges presented by the low carbon transition.

At the request of the Humber Local Enterprise Partnership we created a simple guide that signposts the support and online resources available to those seeking a connection to our network.

The new guide provides an overview of the support we can offer, including information on our monthly connections surgeries and how to contact our Design Team Managers and Commercial Engineers.

It features links to online resources, including our generation and demand heat maps, our new AutoDesign tool and the DFES visualisation tool we developed together with Element Energy and the Leeds Open Data Institute. The guide describes how each of these tools can be used, the information available and how to contact us should they need further help or advice.

The new guide was completed in line with our forecast and sent to 20 local government representatives, including the stakeholder who requested the action. Following their feedback, we distributed the guide to Local Authorities and LEPs in our region.

M UM

COMPLETE ✓

ACTION
2.1
LCT application process

The transition to net zero is driving a significant increase in the amount of local generation and LCTs connecting to our network.

We received feedback from some of our customers that they found it difficult to navigate our online application process and find the right form to use when applying to connect different types of LCTs including EV chargers, heat pumps and solar arrays.

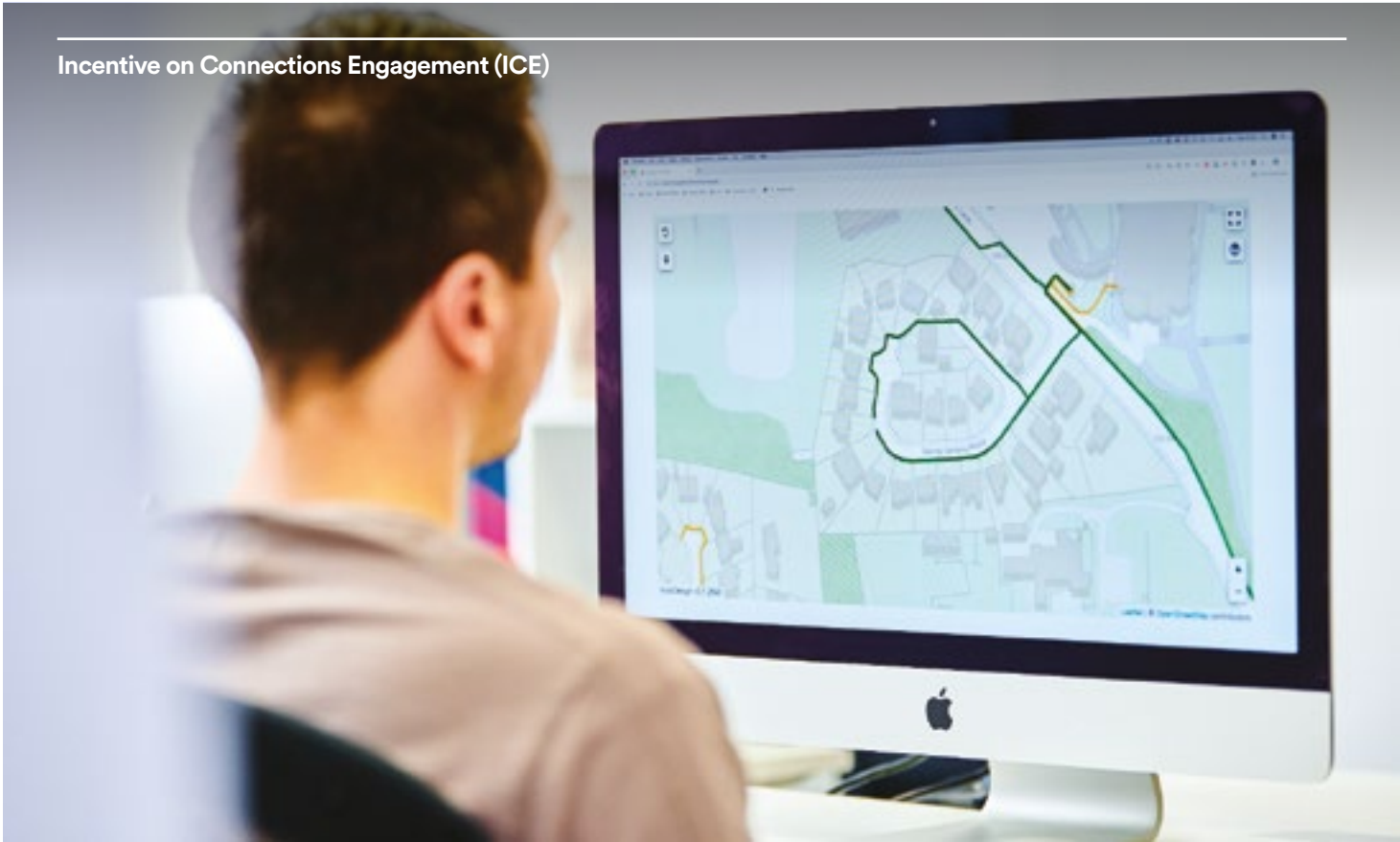
We are responding to that feedback with a commitment to simplify and improve our online application process.

We have completed a review of our existing online process and are now engaging with our stakeholders to understand their requirements. We remain on track to deliver this action by our target completion date of March 2021.

M DG UM ICP CE

ON TRACK ✓





ACTION
2.2

AutoDesign LV budget estimating tool

In January 2020, we launched AutoDesign, our new LV budget estimating tool. Our stakeholders were involved at every stage, providing feedback that helped shape the development of the tool.

AutoDesign, which was awarded the 'game changer of the year' accolade at the 2020 Network Awards, is already proving beneficial to Local Authorities by helping them to identify the most viable locations to install new EV charging infrastructure. Stakeholders who have been impacted by COVID-19 restrictions also told us they found the online tool particularly useful in helping them progress projects whilst working from home.

Since its launch, we have been proactively engaging with a broad range of stakeholders on AutoDesign, this activity includes;

- A targeted campaign in April that highlighted the benefits of using AutoDesign for those working from home due to COVID-19. A bespoke email was sent to 140 local government representatives and this was followed up with a targeted telephone campaign to raise awareness;

- An AutoDesign workshop for ICPs and IDNOs in May, 30 stakeholders took part and we discussed how the tool could be developed for point of connection requests;
- AutoDesign was demonstrated as part of our Innovation Festival in August; and
- AutoDesign was on the agenda at our LCT Installer workshop in September where we provided a virtual demonstration of the tool's capabilities.

We will continue to engage with our stakeholders as we move to the next stages of AutoDesign development and, in November, we will be inviting stakeholders who took part in pre-launch user acceptance testing, along with some of our most frequent AutoDesign users to take part in a co-creation workshop.

This interactive session will allow us to work together and develop ideas on future functionality and use cases for the tool. In doing so, we can ensure we are developing AutoDesign in line with our stakeholders' requirements.



"I found Northern Powergrid to be really supportive and very responsive to our questions and suggestions whilst they were developing the tool. During the enforced lockdown as a result of COVID-19, we've been able to put the tool to great use and have evaluated around 250 potential sites as part of the SOSCI¹ project."

Kevin Wood
Cybermore Services Limited



ON TRACK ✓

¹ SOSCI - Scaling off Street Charging Infrastructure Project, <http://sosci.co.uk/>



ACTION
2.3

Streamlining our application process

Consultants who make multiple, repeat applications, usually on behalf of another customer, told us that our standard application forms require a lot of information that is not relevant to their connection and that providing this information every time they make a new application can be time-consuming and resource heavy.

We can and will accept new connection applications in a different format, as long as it contains all the information we require to process the application. We have identified 40 customers who fall into the category of making multiple, repeat applications and will be contacting them with an invite to work with us to streamline their application process. We are also developing a new internal process to ensure these applications are dealt with quickly and efficiently.

We remain on track to deliver this action by the end of the ICE plan year.



ON TRACK ✓

ACTION
2.4

Pre-application surgeries for planners and developers

Through our engagement with Local Authorities, we identified an issue where their planning teams are encountering developers who have told them that they cannot integrate LCTs, such as EV charging points, into their plans because the connection costs are prohibitive.

To support Local Authorities in achieving their net zero ambitions and developers in identifying the most viable connections solutions, we will be offering pre-application surgeries.

This free of charge service will build on the monthly connections surgeries we already offer, which are proving more popular than ever and with a diverse range of connections customers and stakeholders now making use of this service.

During a surgery appointment, which due to the current COVID-19 restrictions will be delivered virtually, our engineers will meet with all parties concerned, review their plans and work with them to identify the most cost-effective connections solutions.

We will be contacting the planning teams at all the Local Authorities in our region to make them aware. We have also identified several consultants and developers that we think might benefit and will be contacting them with an invite to make use of this free service.

We are on track to complete this action to our target completion date.



ON TRACK ✓

ACTION

3.1

Local Authority energy planning forums

Last year we hosted a series of targeted Local Authority forums that focused on topics including the decarbonisation of transport and future energy scenarios.

Feedback from these forums was positive, with those taking part telling us that they appreciated the opportunity to help shape the agenda of the sessions and benefitted from hearing about the experiences of other Local Authorities.

These forums were intended to be a springboard for on-going and closer engagement and so we committed to run more of these sessions and focus on local energy planning, a topic these stakeholders told us they wanted to engage with us on.

The first forum took place in September and was hosted jointly with Northern Gas Networks, giving those taking part the opportunity to engage with two energy network operators at once. The digital forum focused on the role network operators will have in supporting the government's 'build back better' message and how new connections can help to boost economic growth and the green recovery.

Learning from best practice at our previous forums, we invited representatives from West Yorkshire Combined Authority and Newcastle City Council to share their views. The session was aimed at local energy planners, transport and decarbonisation managers and 36 stakeholders took part.

We see the value in these interactions and how these forums can play an important enabling role for decarbonisation and help drive economic activity as we start to recover from the COVID-19 crisis.

We plan to hold two further forums before the end of the ICE plan year and, as such, we remain on track to deliver this action to target.

M DG UM ICP

ON TRACK



ACTION

3.2

Community Energy

Community Energy has an important role to play in supporting the country's net zero ambitions. Recognising this, we made a commitment to engage with these stakeholders and work together to drive forward the growth and development of Community Energy projects in our region.

Our experience with Community Energy stakeholders is that they have great ambition and worthwhile ideas but limited knowledge and experience of our connections process.

We set out to address this with a series of commitments in our ICE work plan intended to better support these stakeholders when they are seeking a connection to our network. To do this we have;

- Created a new Community Energy hub on our website;
- Published an engagement strategy and commissioned a study of Community Energy projects in our region;
- Hosted two webinars for Community Energy stakeholders where we signposted connections resources and how to access free technical support and advice, in which over 120 stakeholders took part;
- Delivered connections surgeries for Community Energy stakeholders;
- Sought feedback from stakeholders on the support they need when seeking a connection to our network; and
- Established a Community Energy Panel so that the voices of these stakeholders are heard as we continue to develop our RII0-ED2 business plan.

We remain on track to deliver this action to target, with only a frequently asked questions factsheet left to produce. It is our intention however, to continue to engage with this important stakeholder group and seek their feedback to help inform our future business plans and priorities.

Our Community Energy hub is online at northernpowergrid.com/community-energy

CE

ON TRACK

NEW

ACTION

3.3

Independent Distribution Network Operator forum

We received a challenge during this years' ICE consultation that we could be doing more to engage with IDNOs.

Although not a relevant market segment as covered by ICE, we will include actions in our ICE plans that benefit ICPs and IDNOs where they will help promote fair and open competition in connections.

We believe our approach to engaging with IDNOs is established and robust. However, we are constantly reviewing and adapting our approach in response to what our stakeholders are telling us about the ways they want to engage and interact with us.

Acting on the feedback we received, we are making a commitment to hold a dedicated connections forum for IDNOs. The forum will also provide us with a platform respond appropriately to any feedback we receive. We will be engaging with the stakeholder who raised the issue and expect to host a virtual engagement forum in the first quarter of 2021.

IDNO

ON TRACK





ACTION
4.1

Accelerated Loss of Mains local working group

We have joined forces with UK DNOs, IDNOs, the Energy Network Association and National Grid ESO on the Accelerated

Loss of Mains Change Programme, an initiative to incentivise generators to make the changes required to ensure compliance with new protection settings introduced under the Distribution Code. Funding is available to those who can do so before the September 2022 deadline.

During the first part of this year, we encountered a number of consultants and generators who were seeking clarification on the scheme and there was significant support amongst those stakeholders for a local ALoMCP working group.

The local working group provides a channel for stakeholders to seek clarity on the process, access support and advice, and if necessary, equip us with the information we need to advocate on their behalf with the national working group.

Feedback from those who attended our first meeting in July, was that the single most important thing we could do to support them would be to promote and add credibility to the scheme. We have been doing this by;

- Undertaking a comprehensive stakeholder mapping exercise to identify the broad range of generation owners and sectors affected;

- Producing a suite of targeted materials including a press release, case studies and social media content to promote the scheme and build awareness in the identified sectors;
- Identifying generators connected to our network and notifying them about the requirements and the funding windows available;
- Establishing a recognised ALoMCP contractor scheme; and
- Sharing the suite of materials we developed with National Grid and other network operators, to support their outreach and ensure a coordinated approach.

We are playing an active role in the national working group and our dedicated project team has been working hard to drive through a significant number of funding applications from our region.

We remain on track to deliver this action to target and will continue to engage with stakeholders and support them through the process.

- 🔗 For more information visit northernpowergrid.com/ALoMCP
- 🔗 Contact the project team at G59protectionsettings@northernpowergrid.com

DG CE

ON TRACK ✓

ACTION
4.2

Electrification of transport

Based on our latest DFES projections, we expect to over a million Electric Vehicles on our region's roads by 2028.

We are committed to supporting the electrification of transport in a way that minimises the need for new network infrastructure and reinforcement and delivers maximum value for our customers.

We have been engaging with stakeholders on the topic as part of our RIIO-ED2 engagement. However, with more of our stakeholders than ever before mapping a road to net zero, we made a commitment to host two dedicated EV-focussed events in the year. The first of these will take place before the end of 2020, with a follow up event planned for quarter one, 2021.

We remain on track to deliver this action by its target completion date.

M DG UM ICP CE

ON TRACK ✓

ACTION
4.3

Electrification of heating

Decarbonisation of heating is one of the most significant changes required for the UK to reach its target of net zero emissions by 2050.

Local Authority stakeholders have told us that changes in government policy are making the installation of electric heating for new builds, existing properties and social housing one of their most important priorities.

We committed to hosting a minimum of two dedicated engagement events in the 2020/21 ICE plan year. These events will provide an opportunity for us to engage with stakeholders, set out what we are doing to support the electrification of heating in our region and how we can support them. The first of these events will take place before the end of this year, with a follow up session planned for quarter one, 2021.

We are on track to deliver this action to target.

M DG UM ICP CE

ON TRACK ✓





EVs

By 2028 we could see over a million customers wanting to use electric cars.



187k

Domestic heat pumps in our region.

ACTION 4.4

Installers of Low Carbon Technologies

Installers of LCTs such as EV charge points and heat pumps are a group that we have not proactively engaged with to date outside of our business as usual

programme of connections engagement.

We recognise, however, that these stakeholders are on the front line in driving forward the adoption of LCTs and enabling the UK's net zero ambitions. They also have extensive experience of the connections process and can provide valuable feedback that will help drive service improvement initiatives at both a local and national level.

In line with the commitment we made in our ICE work plan, we have hosted the first of two dedicated workshops and invited more than 300 LCT installers to take part. As the first workshop in the series, the session focused on identifying barriers to adoption and how we can work together to accelerate the uptake of LCTs. During the session we:

- Offered installers a 'soapbox' to discuss what is working and what is not in the connection process, gaining valuable feedback on their experience and views;
- Brought them up to speed on our AutoDesign tool and sought feedback on this and other automated processes they would like to see developed; and
- Fostered discussions about the real-life barriers to LCT adoption and the ways that we can overcome them.

The second workshop which will take place in quarter one of 2021, will focus on how we are developing solutions to the challenges identified and continue discussions on the levels of service and support these stakeholders require.



ON TRACK ✓



ACTION 5.1

Alternative Providers Register

We are not the only company that can provide a new connection to our network. Our customers are free to compare our prices and levels of service with ICPs who

can also deliver some or all of the work.

The work ICPs can undertake is known as contestable work and we remain committed to fostering an environment where they can compete freely with us to undertake this work.

One of the ways we promote fair and open competition in connections is by providing an alternative providers' register on our website, with contact details of ICPs in our region who are accredited to carry out contestable works.

During the seminar we hosted in November 2019, one ICP taking part highlighted an issue whereby some Local Authorities will not accept self-approved designs from ICPs, unless those designs had also been approved by a DNO.

They asked us to make changes to our alternative providers register, so that ICPs who are accredited by us and the National Electricity Register Scheme (NERS) to self-approve designs would be more easily identifiable to customers.

To address this, we engaged directly with the stakeholder who requested the change and agreed the outcomes and timescales for completion of the action. We are making the required changes to our alternative providers register and are on track to complete this action by the end of December 2020.

Our Alternative Providers Register is available online at northernpowergrid.com/alternative-providers



ON TRACK ✓

ACTION 5.2

Link box policy

Link boxes for new embedded IDNO connections are a critical part of the underground low voltage network. In the event of a cable fault situation, they ensure that work on fixing faults on IDNO networks can start quickly and that faults on IDNO

owned networks do not impact on our customers.

Our current policy is that all new IDNO connections will require a link box to be installed, usually at the boundary of the IDNO site. However, we are reviewing our requirement for link boxes to be installed for smaller, non-domestic IDNO connections - specifically, EV charging points - following requests from IDNOs who want to adopt, own and operate these smaller single service connections.

We are responding to this feedback by reviewing our policy and making changes as appropriate. Where practical, and by utilising other means of physical electrical protection, we intend to remove the requirement to install link boxes for these types of small works connections.

We expect our review to be completed by the end of December 2020 and remain on track to deliver this action by our target completion date.

ICP

ON TRACK ✓



ACTION
6.1

Our DSO transition

As we transition to a Distribution System Operator (DSO), it is important that we do so in a transparent and open way that ensures the views of all our stakeholders, including our connections customers, are taken into account. It is only by doing so that we can ensure an efficient and inclusive transition.

For us, transitioning to a DSO is about operating a smarter, more flexible and cost-effective network that is built around the needs of our customers. We have been engaging with our stakeholders as part of our RIIO-ED2 engagement programme. Our commitment however, was to hold two dedicated engagement sessions in the year and so DSO will be on the agenda at our DG Owner Operator forum in December and we will be hosting a further DSO event in quarter one of 2021.

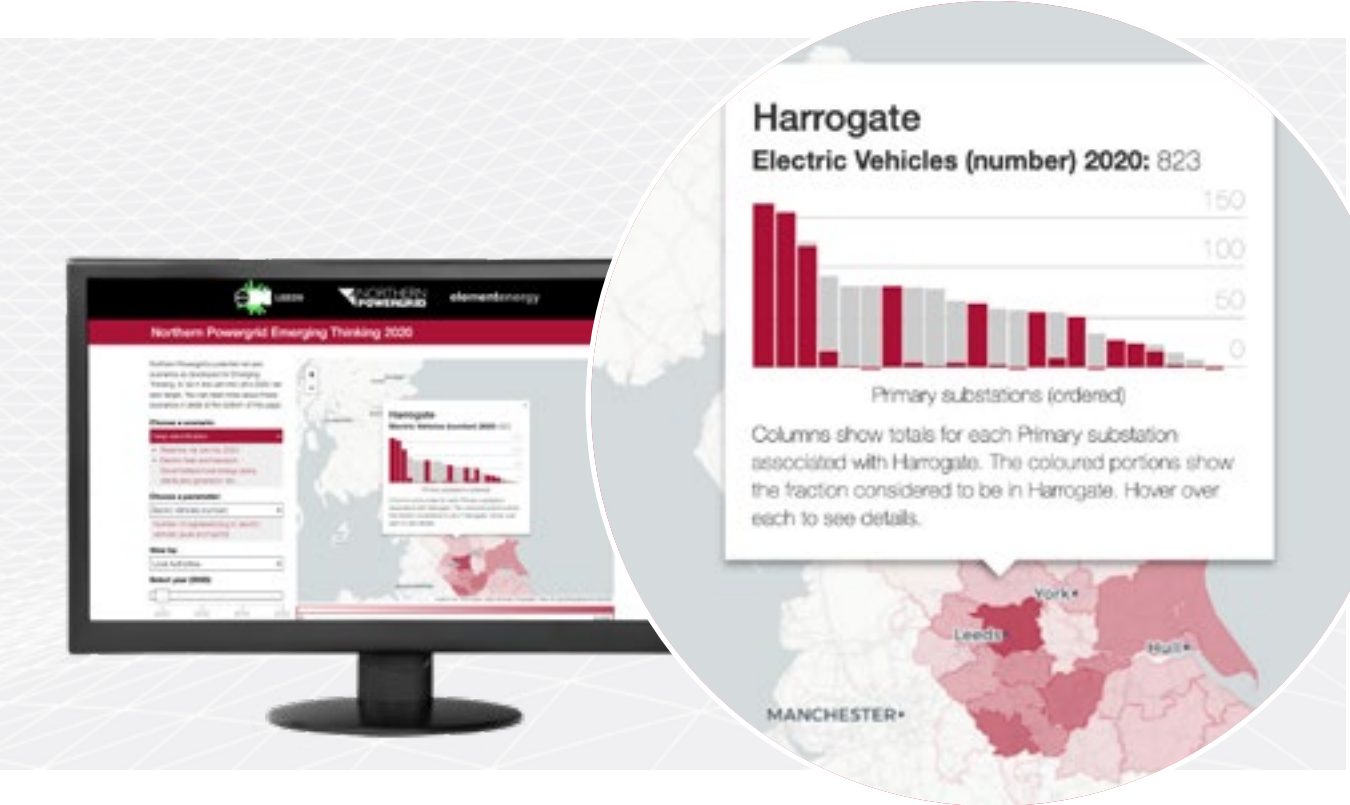
At the DG Owner Operator forum in December we will provide an update Flexible Power, a collaboration between ourselves, SPEN, SSE and WPD, which will make it easier for flexibility providers to interface with network operators. We will also be seeking feedback to further inform our RIIO-ED2 business plan propositions.

To find out more about our DSO plans, visit northernpowergrid.com/DSO



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ACTION
6.2

Distribution Future Energy Scenarios

As part of our DFES project, we have created a data visualisation tool that maps the potential future uptake of LCTs,

including EV charge points, heat pumps and solar PV, as well as larger energy generation and storage projects such as commercial batteries or wind farms in our region.

The scenarios presented by the data behind the tool has been collated together with Element Energy and the Leeds Open Data Institute and made publicly available to the benefit of a broad range of stakeholders.

DFES provides an overview of possible future energy pathways and the scenarios it presents offer a detailed view of the potential rates of decarbonisation for generation, heating and transport connecting to our network up until 2050. The regional data behind the tool is updated annually and is built around the four scenarios defined as part of the National Grid Future Energy Scenarios, which are consumer evolution, community renewables, steady progression and two degrees.

The accuracy of this data is vital to help us plan and invest in our network in line with customer need. The network plans we develop based on this data will have a direct impact on our customers' activities, so the need for close collaboration is crucial.

Our connections stakeholders told us they want to be more involved in our DFES project to ensure that our network evolution matches the scale and ambition of their plans and so we have been engaging with stakeholders throughout the course of the year, notable examples include;

- A communication that was issued asking stakeholders to contribute to our DFES;
- Two dedicated engagement events held in March, jointly hosted with Element Energy and the ODI;
- DFES was on the agenda at our Innovation Festival in August and 51 stakeholders took part in the online discussion and demonstration; and
- Our team delivered a 'Lightning Talk' as part of the Leeds Digital Festival in October.

We remain firmly on track to meet our commitments by the end of 2020. However, we will continue to engage with stakeholders, as we plan to launch our updated net zero scenarios in early 2021.

Maintaining an open dialogue on energy at a local level is critical, as it will help our stakeholders to understand our plans and us to better understand their future strategies and ambitions.

- To use our DFES data visualisation tool visit odileeds.github.io/northern-powergrid/
- For help interpreting the information available, discuss your plans and contribute to our DFES contact npg.system.planning@northernpowergrid.com

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2020/21 ICE Looking Forward work plan

MID-YEAR UPDATE

ACTION	THE OUTCOME	PERFORMANCE METRICS	MEASURES OF IMPACT/SUCCESS	VOLTAGE	STATUS	APPLICABLE TO					Q2 2020			Q3 2020			Q4 2020			Q1 2021			INFO
											Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1.1	We will publish data on transmission constraints and mod apps on our heat maps.	Stakeholders will be better informed and have access to more timely and accurate data.	<ul style="list-style-type: none">Data published as part of the detailed datasheets that accompany our heat maps.	<ul style="list-style-type: none">Data published and updated on a monthly basis.Stakeholder feedback.	EHV HV	ON TRACK	M		DG			◇								◆			P8
1.2	We will develop and run a trial with generators to provide more timely and accurate information on planned outages.	Stakeholders will be better informed about network constraints and any planned outages affecting their assets.	<ul style="list-style-type: none">Trial participants identified.Trial developed and implemented.Next steps agreed with stakeholders.	<ul style="list-style-type: none">Updates delivered in a timely manner.Stakeholder feedback.	EHV HV	ON TRACK			DG			◇										◆	P10
1.3	We will produce a guide aimed at Local Authorities and LEPs which signposts the support and tools we make available.	Stakeholders will have a useful reference that signposts the help, support and online tools we make available to those seeking a new connection to our network.	<ul style="list-style-type: none">New guide developed and published.Guide issued to all Local Authorities and LEPs in our region.	<ul style="list-style-type: none">Number of guides issued.Stakeholder feedback.	ALL	COMPLETE	M	UM				◇				◆							P11
2.1	We will make changes to our online application process to make it easier to apply to install different types of Low Carbon Technologies (LCTs).	Stakeholders will be better informed and find it quicker and easier to make applications for different types of LCTs projects.	<ul style="list-style-type: none">Engage with stakeholders to understand their experience and requirements.Make improvements to our online application process as required.	<ul style="list-style-type: none">Website improvements delivered.	ALL	ON TRACK	M	UM	DG	ICP	CE	◇										◆	P11
2.2	We will engage with stakeholders and seek feedback to develop our budget estimating tool.	Stakeholders will have opportunities to contribute to the continued development of our budget estimating tool and to help inform future use cases and the tool's functionality.	<ul style="list-style-type: none">Engage with stakeholders to understand their requirements.Feedback used to help inform future use cases and development of the tool.	<ul style="list-style-type: none">Number of stakeholders engaged.Stakeholder feedback.	LV	ON TRACK	M	UM	DG	ICP	CE	◇										◆	P12
2.3	We will work with customers who make multiple, repeat applications to streamline our applications process.	Customers who submit multiple, repeat applications on behalf of themselves or a third party will find it quicker and easier to make new connections applications.	<ul style="list-style-type: none">New process developed and implemented.Customers who are potentially affected identified and notified.	<ul style="list-style-type: none">Number of customers making use of the new process.	ALL	ON TRACK	M	UM		ICP		◇										◆	P13
2.4	We will offer free, pre-application surgeries for developers, Local Authority planners and consultants to help them identify the optimum and most cost-effective connections solutions.	Stakeholders considering new builds and significant developments will be able to access local, specialist knowledge and advice. We will work together to identify the most viable and cost-effective connections solution.	<ul style="list-style-type: none">Notify all Local Authorities and LEPs in our region about the new service we are making available to them.Identify developers and consultants active in our region and ensure they are also aware of the service we can offer.	<ul style="list-style-type: none">Number of stakeholders engaged.Number of surgery sessions delivered.Target of 85% satisfaction rate with sessions delivered.	ALL	ON TRACK	M	UM	DG	ICP		◇										◆	P13
3.1	We will host local energy planning forums for local government and other interested stakeholders.	Stakeholders can come together to explore future priorities and any emerging challenges. They will have opportunities to shape the content of these sessions and be better informed about the help and support we provide.	<ul style="list-style-type: none">Three forums delivered during the 2020/21 ICE plan year.	<ul style="list-style-type: none">Number of stakeholders taking part.Target of 85% satisfaction rate with the engagements delivered.Stakeholder feedback.	ALL	ON TRACK	M	UM	DG	ICP		◇										◆	P14
3.2	We will provide support for Community Energy groups and stakeholders seeking a new connection to our network.	Community Energy groups and stakeholders will have access to specialist advice and will be better supported when seeking a new connection to our network.	<ul style="list-style-type: none">Create a dedicated Community Energy section on our website.Provide information on available technical support, advice and free online tools.Create a frequently asked connections questions factsheet aimed at Community Energy stakeholders.Minimum of two engagement sessions held in the 2020/21 ICE plan year.	<ul style="list-style-type: none">New webpage developed and deployed.Frequently asked questions factsheet published.Number of stakeholders engaged.Stakeholder feedback.	LV	ON TRACK					CE	◇										◆	P14
NEW 3.3	We will host a connections forum for Independent Distribution Network Operators (IDNOs)	IDNO stakeholders will have a forum to engage with us on the issues that are important to them and their customers.	<ul style="list-style-type: none">Deliver a IDNO connections forum in the 2020/21 ICE plan year.	<ul style="list-style-type: none">Number of stakeholders engaged.Forum delivered in Q1, 2021.	ALL	ON TRACK				IDNO							◇					◆	P15

2020/21 ICE Looking Forward work plan

MID-YEAR UPDATE

ACTION	THE OUTCOME	PERFORMANCE METRICS	MEASURES OF IMPACT/SUCCESS	VOLTAGE	STATUS	APPLICABLE TO					Q2 2020			Q3 2020			Q4 2020			Q1 2021			INFO	
											Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
4.1	We will establish a local working group for stakeholders involved in the ENA's Accelerated Loss of Mains Change Programme (ALoMCP).	Stakeholders will have a channel to give feedback and seek clarity on the process and, if necessary, can use us as an advocate to work on their behalf and share their issues with the national working group.	<ul style="list-style-type: none">Quarterly meetings held.Stakeholder updates delivered.		ALL	ON TRACK			DG		CE	◇											◆	P16
4.2	We will continue to engage with stakeholders about the actions we are taking to support the roll-out of Electric Vehicles (EVs) in our region and on our role in the low carbon transition.	Stakeholders will be better informed about the actions we are taking to support the electrification of transport in our region. They will have a platform to explore emerging opportunities and any potential roadblocks to achieving the decarbonisation of transport by 2035.	<ul style="list-style-type: none">Minimum of two engagement sessions held in the 2020/21 ICE plan year.		ALL	ON TRACK	M	UM	DG	ICP	CE	◇											◆	P17
4.3	We will engage with stakeholders on the electrification of heating and our role in the low carbon transition.	Stakeholders will be better informed about the steps we are taking to support the electrification of heating in our region.	<ul style="list-style-type: none">Minimum of two engagement sessions held in the 2020/21 ICE plan year.		ALL	ON TRACK	M	UM	DG	ICP	CE	◇											◆	P17
4.4	We will engage with installers of Low Carbon Technologies (LCTs) to better understand their priorities, any challenges they are facing and how we can best support them.	Stakeholders will have opportunities to provide feedback on our connections process and how we can best support them. We will signpost available support and free online tools that can help them when seeking a new connection to our network.	<ul style="list-style-type: none">Stakeholders identified and feedback sought.Minimum of two engagement sessions held in the 2020/21 ICE plan year.		LV	ON TRACK	M	UM	DG		CE	◇											◆	P18
5.1	We will make changes to the alternative provider register on our website so that Independent Connections Providers (ICPs) who are authorised to self-determine points of connection and self-approve designs are clearly identifiable to customers looking to appoint an ICP to carry out contestable works.	It will be quicker and easier for customers to identify ICPs who are authorised by Northern Powergrid and NERs to self-determine points of connection and self-approve designs.	<ul style="list-style-type: none">Website changes implemented.Stakeholder briefings delivered.		ALL	ON TRACK		UM		ICP		◇											◆	P19
5.2	We will review our policy on the installation of link boxes for non-domestic, small works Independent Distribution Network Operator (IDNO) connections.	The requirement to install link boxes for non-domestic, small works connections like EV chargers on IDNO networks will be reconsidered and where practicable removed, making the process quicker, easier and more cost-effective.	<ul style="list-style-type: none">Policy reviewed and revised as required.Stakeholder briefings delivered.		LV	ON TRACK				ICP		◇											◆	P19
6.1	We will continue to engage with stakeholders as we transition to a Distribution System Operator (DSO).	Stakeholders will be involved and their views taken into consideration as we transition to a DSO.	<ul style="list-style-type: none">Minimum of two engagement sessions held in the 2020/21 ICE plan year.Stakeholders will have opportunities to inform and help shape our strategy and approach.		EHV HV	ON TRACK	M	UM	DG	ICP	CE	◇											◆	P20
6.2	We will continue to engage with stakeholders to inform our Distribution Future Energy Scenarios (DFES).	Stakeholders will be involved and have opportunities to contribute to our DFES and as a result will be able to help inform and shape our future investment plans.	<ul style="list-style-type: none">Data sought from stakeholders to inform our plans and projections.Minimum of two engagement sessions held in the 2020/21 ICE plan year.		EHV HV	ON TRACK	M	UM	DG	ICP	CE	◇											◆	P21

KEY:

- M

 METERED DEMAND CUSTOMERS
- UM

 UNMETERED CUSTOMERS
- DG

 DISTRIBUTED GENERATION CUSTOMERS
- ICP

 INDEPENDENT CONNECTIONS PROVIDERS
- CE

 COMMUNITY ENERGY GROUPS AND STAKEHOLDERS
- IDNO

 INDEPENDENT DISTRIBUTION NETWORK OPERATOR
- ◇ ACTION STARTS
- OUR FORECAST TIMESCALE FOR COMPLETION
- ◆ FORECAST COMPLETION DATE
- ◆ ACTUAL COMPLETION DATE

Contact us



0800 011 3433



ICE@northernpowergrid.com



www.northernpowergrid.com/get-connected