



Planning for the future
STAKEHOLDER ENGAGEMENT
WORKSHOPS

Report prepared for NIE Networks

February 2022



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Key insights: an executive summary

Background

NIE Networks commissioned Perceptive Insight, an independent market research agency, to undertake a programme of research, designed to ascertain the views and perceptions of NIE Networks' customers and stakeholders. This report presents the findings from the latest stakeholder engagement workshop, which took place on 27th January 2022.

The main objective of this strand of research was to provide stakeholders with feedback on progress that has been made during the business planning period, RP6, to present the outline priorities for the next business planning period, RP7, and to allow stakeholders the opportunity to comment on these business planning priorities. To uncover these insights, a workshop was held, which incorporated a Q&A session with Paul Stapleton, Managing Director of NIE Networks, and four breakout discussion sessions. Due to the Covid-19 pandemic, the workshop was held via online videoconferencing. Over 120 stakeholders were invited to attend the workshop. The headline findings from the workshop are presented under the following headings:

- Q&A with Paul Stapleton;
- Meeting our customers' needs;
- Maintaining a safe and resilient network;
- Delivering an environmentally sustainable network; and
- Enablers for transformational change.

Q&A with Paul Stapleton

Paul Stapleton, Managing Director, NIE Networks delivered a presentation to inform stakeholders of the progress that has been made during the business planning period, RP6, and the areas of focus for NIE Networks looking ahead. Stakeholders were given the opportunity to ask questions to the managing director. The key points that were discussed as part of this Q&A session included:

- The Energy Strategy; this included reference to the future uptake of electric vehicles and heat pumps, and preparedness of the network to deal with the changing demands placed on it;

- Decarbonisation & electrification; how to encourage good behaviours i.e., customers who are flexible, have low carbon technologies and are digitally enabled, through the connections process;
- Current infrastructure; the extent to which new builds and developments are future-proofed to accommodate anticipated increased demand in the future;
- Policy issues; that is the disconnect between policy and the lack of support in place for customers for affordable technologies to drive the decarbonisation and electrification priorities;
- Housing & technology; what can be done with existing energy systems to make them smarter.

The breakout discussion sessions allowed further discussion of the key areas. A summary of the key findings from each of these sessions is outlined below:

Meeting our customers' needs

- Stakeholders voiced their opinions about the need for improvements in infrastructure as a pressing concern, especially with regard to accommodating technologies such as Electric Vehicles (EVs) and heat pumps;
- Cost of connection is a key deterrent to businesses becoming more sustainable. While some businesses have investigated bringing more renewables onto the network and reducing carbon in the supply chain, making these changes can be cost prohibitive currently. Several stakeholders asked for a review of the connection charging policy to bring costs more in line with GB;
- There was broad agreement that protections should be put in place for vulnerable groups including those who are digitally excluded or lack the means to pay for services, especially in emergency situations;
- Serving specific customer groups, including large energy organisations, as well as the prosumers and those in rural communities, and identifying their needs and the benefits they can provide, is encouraged when planning to grow customer engagement;
- There was a general interest in partnerships and collaborations that would be beneficial to both parties, to help advance the energy plan and meet targets for both businesses and NIE Networks; and
- While the overall plan was welcomed and provided a degree of clarity on the steps forward, some stakeholders wanted to see a more proactive approach in terms of tangible action on the ground.

Maintaining a safe and resilient network

- Overall, the discussions showed a general awareness of the movement towards a greater reliance on the electricity grid. This caused stakeholders to raise some concerns as to how network reliability will be maintained, while at the same time meeting the growing demands of customers. Stakeholders also questioned the course of action that would be taken during emergencies when there is a loss of electricity and what back up plans would be in place;
- In terms of whether the target of 70% renewables across the network is realistic by 2030, the discussion brought forward a need for collaboration and working together with other businesses, entities and groups to achieve this target. Furthermore, it was suggested that planning should change to allow for increased speed and efficiency;
- In light of the pandemic, essential services and companies providing support through the Covid response should be facilitated in a way that makes them and the network more resilient at the same time;
- With more people working from home, having a stable and resilient network becomes of increased importance;
- A few stakeholders experienced a lack of openness in their engagement with NIE networks in investigating their issues and suggested a more proactive approach to consumers, particularly to the big industrial users, as well as proactive monitoring in advance of problem arising;
- NIE Networks should work position itself to be seen as a trusted expert, who can advise and inform;
- Suggested recommendations included:
 - Improvements in resilience in the system;
 - Diversifying and decentralising the grid to generate more opportunities and growth for those in rural areas where a lot of their renewable resources are produced; and
 - Better and more efficient customer service updates regarding disruptions.

Delivering an environmentally sustainable network

- A common thread across most discussions was the existence of a knowledge gap in terms of what is available, the course of actions, and the impact of changes with regard to making environmental and sustainable decisions. It was suggested that partnerships, for example, with the university sector could help de-risk these situations going forward;
- Investment is needed to educate the public in order to instil behavioural change and encourage customer initiatives;
- Stakeholders agreed that sustainability and greening of the supply chain are vital going forward. Better articulation of the sustainability plan, NIE Network's green credentials and clarity on the strategy to customers would be encouraged;

- Stakeholders highlighted the importance of learning from other regions and jurisdictions and adopting successful measures and best practices rather than reinventing new ways. It was recognised that NI is an ideal location, due to the size of the population, to test and refine some of the emerging innovative technology;
- Discussions showed a general welcome for the transition to DSO to accommodate more renewables;
- Stakeholders emphasised NIE Network's central position in the electricity system, where they are seen as future leaders in the field of delivering the required system flexibility and decentralisation and commented on how they should leverage this position;
- Stakeholders highlighted the following as areas for further improvement:
 - Increased responsiveness and speed;
 - Leveraging natural resources, such as wind, to increase sustainable power generation;
 - Helping to resolve the continuing issue of energy storage; and
 - With greater electrification, demand is likely to rise, resulting in a need for demand management and energy efficiency.

Enablers for transformational change

- It was highlighted that the labour crisis will continue to be an issue and is unlikely to ease across this price control period. Automation was seen as a way of addressing some of the skills shortages, with employees being encouraged to increase their skills, ability and productivity, moving to different roles and functions;
- The need for apprenticeships that are also aimed at older people would help leverage the skills of those who may not be physically fit but possess beneficial transferable skills;
- Smart meters were a key topic of discussion, with recognition that they will be needed to manage the network effectively. However, stakeholders sought further clarity on their benefits as well as cost allocation;
- An open fund for innovation was identified as a challenge for RP7 with regard to the uncertainty about how it should be spent and who makes the decisions to allocate spending;
- There was general feedback on the inadequacy of policy, resulting in uncertainty and inflexibility to change according to outcomes;
- There was discussion around the benefits of having data more available and how data can become an enabler for individuals, businesses and for the DSO, empowering them to make informed decisions, helping to promote change in the network;
- Community energy communities were highlighted as a potential resource to help achieve sustainable outcomes. More priority could be given to interacting with communities, and local councils could be a key player in facilitating this.

Background and approach

Research background

NIE Networks commissioned Perceptive Insight, an independent market research agency, to undertake a programme of research designed to ascertain the views and perceptions of NIE Networks' customers and stakeholders.

The research programme is being overseen by NIE Networks in partnership with the Consumer Council, the Utility Regulator and the Department for the Economy. Representatives from these organisations form the Consumer Engagement Advisory Panel (CEAP). This joint panel provides advice and guidance throughout the research process.

During 2021 there has been a series of workshops, focus groups and customer surveys. This report presents the findings from the most recent stakeholder engagement phase of the study, which took place in January 2022.

Approach & attendees

The main objective of this strand of the research was to engage with stakeholders of NIE Networks to present the outline plans for the business planning period, RP7 and to obtain feedback on the content and prioritisation of the plans, to identify any gaps in the plans and to obtain views on the scale of ambition within the proposed plans. To uncover these insights, one large workshop was conducted via Zoom video.

Structure of the workshop

Taking into account the optimum way to use video technology, it was decided to host one main workshop, with the provision of break-out rooms for discussion. The agenda for the workshop is outlined below:

Welcome & introduction

Edel Creery, Head of Communications & Stakeholder Engagement, NIE Networks

Opening remarks

Alan Bryce, Board member, NIE Networks

Review of RP6 at NIE Networks. How have we been performing?

Presenter: Paul Stapleton, Managing Director, NIE Networks

Followed by Q&A session

Looking ahead to 2030: Tell us what matters to you?

Each of the four presented topics were followed by a 10-minute breakout session

- 1. Meeting the needs of our customers

Presenter: Ronan McKeown, Customer & Market Services Director, NIE Networks

- 2. Maintaining a safe and resilient network
- 3. Delivering an environmentally sustainable network
- 4. Enablers & Other issues to consider

Presenter: Roger Henderson, Network Assets Director, NIE Networks

Feedback session and next steps

Thank & close

Who attended

Perceptive Insight worked in partnership with the NIE Networks' project team to define the delegates to be invited to the workshops. A total of approximately 120 stakeholders were invited to participate. The following table summarises those organisations that registered to attend the workshop.

Developers/Planners	Government/Policy/Economy	Utilities/Generators/Suppliers
NIHE	Dept for the Economy	Mutual Energy
Lagan Homes	Utility Regulator	Phoenix Gas
Taggart Homes	The Consumer Council	SONI
Windsor Developments	Centre for Competitiveness	Electric Ireland
Braidwater Group	Health and Safety Executive	Business Customers
Translink	Local District Councils	Manufacturing NI
Warrenpoint Harbour Authority		Seagate
Apex Housing	Educators/ Innovators	Heatboss
NI Community Energy	Power On Technologies	Almac Group
CEFNI	MEUC	Huhtamaki
	CASE	
Domestic customers	The Electric Storage Company	Environment
Advice NI	SGN Natural Gas	Northern Ireland Environment Link
COPNI	Queen's and Ulster Universities	RSPB NI

Format of the workshop

NIE Networks' key role on the day was to present a review of RP6 and to outline plans for RP7. A number of senior managers attended the workshop to listen to the views of stakeholders, as well as provide information and clarification to any questions posed, and to provide follow-up to stakeholders who were interested in future engagement.

Perceptive Insight's role within the workshops was to independently facilitate this dialogue, capture the data and follow up with a report highlighting the key findings.

Each of the four breakout discussions lasted 10 minutes, with time allocated at the end of the workshop for each group to provide a summary and feedback on the discussions that took place.

In the sections that follow we identify the key messages from each workshop, based on the following structure.

- Main workshop Q&A with Paul Stapleton;
- Meeting our customers' needs
- Maintaining a safe and resilient network
- Delivering an environmentally sustainable network
- Enablers for transformational change

Q&A with Paul Stapleton

Paul Stapleton, the Managing Director of NIE Networks took the opportunity to welcome all the stakeholders in joining the NIE Networks' representatives in the virtual forum to discuss the key priorities for the 2024 – 2030 RP7 business plan. He indicated that prior to engaging in the Q&A session, he wanted to reflect on the performance of current RP6 and set the context for NIE Networks' future plans.

Paul delivered a short presentation based on the following structure:

10 Network promises made for RP6

In relation to this, several key commitments were outlined including efficiency savings, network reliability, response to faults, customer service, and innovation. Importantly, Paul indicated that NIE Networks was on track to successfully deliver on all the commitments made to the consumers and stakeholders. Paul also highlighted that during RP6, the climate change agenda accelerated considerably and the changes in priorities should be accurately reflected going forward into RP7. Further, the impacts of power outages throughout the duration of Covid-19 pandemic became more significant, particularly in the domestic settings.

Network performance

With regards to the overall network performance during RP6, Paul indicated that the standards set for RP6 period are being achieved and he was satisfied with the quality of services provided. More specifically, Paul commented on Customer Minutes Lost as a measure of network's reliability, which at an average of 38 minutes per year, reflects a highly effective network performance. Despite this high level of reliability, Paul recognised that the implications of any power outages for businesses, particularly those in the manufacturing sector, could be considerable, and thus, NIE Networks is striving to improve network performance even further.

Another component of network performance which Paul reflected upon was in relation to NIE Network's response to major weather events. He briefly outlined the processes involved in such events whereby all efforts and resources are directed to restoring connections and non-essential tasks are postponed. Given that the weather events are expected to become a more frequent and severe occurrence, Paul emphasised the importance of feedback from the attendees on how to address such challenges going forward whilst maintaining a resilient network.

Health, safety, and environment

On the subject of health and safety, Paul stressed that this aspect is the most fundamental issue for the organisation, and that safeguarding employees, contractors and customers is essential. He announced an investment of £60 million to improve the safety of the network alongside a significant public safety engagements program during RP7 and was particularly interested in panellists' opinion on the direction NIE Networks is taking going forward.

Customer service

In terms of customer service, Paul acknowledged that all the complaints received are being investigated. Not surprisingly, during RP6 there was an impact from Covid-19 related complaints, however the overall trends indicate a reduction in consumers reporting issues on the network. Furthermore, a vulnerable customer strategy was published to safeguard households most in need. For the RP7 period, Paul emphasised NIE Networks' intent to improve customer engagement, keep people informed and create digital capabilities.

Connections

The connections process has been subject to considerable change over the years. More recently, digital capabilities significantly improved with the introduction of a job tracker system, whereby customers have the ability to track the progress of an active assignment. However, Paul recognised that there are challenges around meeting customers' expectations and timelines for delivery of connections. Further, the cost of connections is a particular issue for NI, whereby the connecting party is required to cover a larger share of associated costs than what is typically expected in GB and ROI. Given that this is a policy issue, Paul noted that attempts are continuously made to engage government departments to undertake policy review.

Future Networks and innovation

Being innovative and looking to the future is another key focus for NIE Networks. Paul highlighted that several innovative technologies are being implemented during RP6, which will be embedded in the network to a greater extent going forward. Internal as well external projects explore the application of technologies in a variety of settings, such as domestic heating and integrated energy systems. Moreover, as part of its transition to the DSO, NIE Networks is determined to create greater access to the electricity network, improve visibility, controllability and market access, as well as make higher volumes of data available to stakeholders.

Sustainability

Paul highlighted the importance of sustainability in the plans for RP7 since the organisation has a responsibility for enabling decarbonisation of society. An achievable set of external as well as internal standards and targets, has been established to facilitate the transition, and NIE Networks has engaged in a series of partnerships with other organisations to achieve their sustainability goals.

Networks for Net Zero and Energy Strategy

In supporting the process of developing energy policy and energy strategy for NI, NIE Networks commissioned a range of specific research and engaged extensively with several organisations. Moreover, Paul highlighted that NIE is very proactive in turning policy into action and in bringing forward additional investments, which he acknowledged can be delivered within the current price control period to enable the network to cater for low carbon technologies and more renewables.

Key questions and comments put forward to NIE

Networks

In the context of the presented brief, stakeholders had the opportunity to address any issues and pose questions to Paul and other NIE Networks representatives. The questions, comments and responses are detailed below.

Energy strategy

Comment: The very ambitious energy strategy factors in installation of a considerable number of heat pumps, quickly followed by the uptake of EVs. It is almost as if we are sipping cocktails on the beach and there is a tsunami coming to us. The lumpy loads could be formidable, and we are going to have to control the distribution network relatively quickly.

Paul Stapleton: Absolutely, we're going to see new demands on electricity network in terms of the electrification of transport with all of us adopting electric vehicles in due course and electric heat pumps. Heating in particular, is playing a big part in how we move ourselves off from the dependency on oil that we have for heating our homes in NI. That will create demand for the network. That is one of the reasons why we have been proactive in bringing forward additional investment in RP6, why we envisage much more substantial increase in investment in the network for the next price control period.

Andrew Cupples: Certainly, the uptake of low carbon technologies is going to be a major driver for investment over the next number of years. We have tried to select the innovation projects that will give us more options on how to deal with the uptake and the increased demands on the system. So, in some cases, we will continue with the conventional investment to upgrade transformers, substations, cables and other assets but in other cases, and complementary to that, we will also apply smart and flexible solutions. That is what some of our projects are exploring; how we can manage customer demands through customer facilitation, through control of the charging of electric vehicles, and through tariffs. All these will be options to us over a number of years.

Follow-up comment: From a customer's point of view, I think it is going to be unavoidable but to put in a lot of wires and new transformers. There is also a 'Day Two' question, where

big clumps of capacity will be put into certain places, and how do you get social good from that? A couple of years ago, 15% of the wind energy was centrally wasted and we cannot see that going away with PPA and private wind farms. We would like to think of having smart loads brought on that might only be on for a few years, until everybody else in the street gets EVs and thermal storage batteries. In terms of just the amounts of money that are going to have to be expended to put the copper in the ground, it might be better to do it quicker in terms of the commodity prices. The 'Day Two' question you may have to be more proactive on. Historically, you have probably been more reactive, you saw a demand and you made it. You may have to try and promote demands in certain places to get the social value out of the investment.

Paul Stapleton: I think a key theme for us and for RP7 is being more proactive. I think what you termed as 'a tsunami wave that is going to come at us over the next decade or so', is one we will not be able to cope with on a reactive basis. We are going to have to get ahead of it; we are going to have to invest in the network, so that it can cope with EVs and the heat pumps, when they come, rather than waiting for customers to knock on our door and say, 'I want to put in a heat pump or EV, can you upgrade my supply'. That latter approach will not work, so we are going to have to be much more proactive and participatory in our investment plans. But it is not just about copper. With the increased digitalisation and technology, we can minimise the investment in the additional amount of copper that is needed, through smart technology and deploying ICT solutions. Ultimately, creating a smart network and smart charging will probably require smart meters to be part of that. So that we can create a digitalised energy system that can cope with all the needs in a very dynamic way, and not just adding more capacity. Additional capacity will certainly be needed but I think there is a balance of solutions for society.

Roger Henderson: This is a valid point, and I think it is important to understand how we are moving away from incremental growth to a transformation. The point about 'Day Two' is that we will have to see this in the context of the magnitude of a program that we are about to embark on, in terms of the energy transition and moving away from the thinking of extrapolation of the growth in the past. When you look at it from a program perspective and in terms of what we have to deliver going forward with regard to capacity increases and how we optimise operations, we do need to move quickly, we need to move swiftly, and certainly that is a key factor going into RP7.

Decarbonisation & electrification

Comment: In relation to the comment earlier about how connection charges are reflected, I think it is good to see that being addressed, because that is a major issue. One of the things I think we should be considering when we are thinking about spreading the costs around the wider customer base, is those customers who are connecting to the network who are flexible, who have low carbon technologies, and who are digitally enabled. Perhaps we should be

thinking about encouraging that and bringing that forward, because once those customers are connected, low carbon and digital, that benefit accrues to everybody, because the carbon zero target applies to everyone, and every contribution counts from as early as possible. So, I commend that work, and I think that is something that needs serious consideration by the Regulator as to how we encourage the good behaviours as early as possible.

Paul Stapleton: Connection charges is a complex issue and there are complex economic issues at play. Ultimately all connections have to be paid for fully, so if the connecting party does not pay, the general body of consumer does. I believe we have to find a model that encourages people to connect quickly to low carbon solutions, as it will benefit everybody. Not just in reducing the carbon footprint, but also, the additional load spreads the cost of the overall network across the general body of consumers, so more connections are good for everybody. Particularly, more low carbon technology connections will absolutely be good for everybody, so we need a connections policy that encourages and supports that. There are policy issues, these are not issues that we determine. They are issues for the department from a policy perspective and for Utility Regulator then in terms of the detailed allocation.

Current infrastructure

Question: My question is about the network that is currently being installed. I work for house builder, so we have cables going in every day. Is the current network being installed, is the infrastructure robust enough to take into account that in eight years' time, most people are probably going to have EV cars or is there going to be a big retrofit required at some point? And the new footpaths being laid today, are they going to have to be ripped up and heavier cables put in? Are there enough substations going into new developments?

Paul Stapleton: In summary, I do not think our network is sufficiently futureproofed in terms of what we are currently installing. We need to change standards in that area. Also, housing standards need to change, and we certainly will respond to that.

Roger Henderson: It is a fair question, and we are starting to develop capacity looking forward. In terms of the policies and specifications, that has served us well in the past in terms of keeping costs as efficient as they can. Now, as we look forward, we are bringing forward investment, and as part of our green recovery, expenditure, and our low carbon technology reopeners, we are looking at replacing the transformers to build in that capacity now. As we go out and around the network, we are starting to increase capacity to facilitate a lot of this additional demand in the network going forward.

Andrew Cupples: When we're connecting on housing sites, it is based on a standard demand per household, which historically has not included EVs and heat pumps. We are considering how that increases and our intention is to go to consultation. With the current connections regime that has

been talked about, there is obviously a direct impact on the connected customer if you upgrade the amount of capacity, so it is just getting the right balance and buy-in on that.

Policy issues

Comments: One stakeholder made comments and raised a number of issues, summarised as follows:

- **In relation to the customer service objective, the cultural change within NIE Networks is appreciated;**
- **Engagement with customers, businesses and business representative organisations improved significantly and continuation of this is encouraged going forward;**
- **The current energy environment is extremely challenging to businesses, and there are no recommendations for sensible pricing levels;**
- **A partnership with a strategically important organisation like NIE Networks is critically important;**
- **In achieving the ambitious decarbonisation and electrification targets, policy is critical;**
- **Currently there is disconnection with policy, as exemplified by the decision to withdraw the red diesel rebate with no provisions in place for affordable and available alternatives for companies who rely on this fuel for business operations;**
- **There is lack of support for and absence of available, affordable technologies for customers to drive the decarbonisation and electrification priorities.**

Based on the comments, the following question was posed. How do you balance all of that when there is one policy on one side but no support on the other?

Paul Stapleton: I absolutely appreciate the pressure the customers of all shapes and sizes are under at present, residential to large industry, large manufacturers in particular who are large energy users. We don't have a solution to the short-term issues in terms of international wholesale fuel prices and the issues that are driving up energy prices. What we can do in the short-term is make sure we run our business as efficiently as we can, so that we are not putting additional costs on customers' bills. The network's piece of the bill is typically about 20% of the bill. For large industry there will be a much smaller share of that, and it's reducing currently. It could be a lot lower this year than it was last year, and we need to absolutely be mindful of that piece of the bill, as we pass our plan for RP7 as well. Longer term, I think where we can play a much bigger role, is enabling NI to move away from its dependency on fossil fuels, move away from our dependency on imported oil and gas and diesel in whatever colour, to a more sustainable energy system that is not just better for the climate, but also better for the economy. I fundamentally believe we can do that. We should be able to do that without driving up energy prices. I think energy prices should not be more expensive in 2030/2040 than they are today, and our ambition should be that they are less. It will be

about investing in infrastructure and technology rather than using commodities at the scale we are using them today. We do not have a solution for the short-term issues other than making sure we do our piece as efficiently as we possibly can. I believe we have a major role to play in finding a longer-term solution and reducing NI's exposure on these issues and that will be a focus for the business plan. In doing that we are absolutely aware of the pressures the customers are under and at a residential level, fuel poverty and the vulnerable customer strategy needs to take account of that also. And we need to be mindful in our engagement with customers of all shapes and sizes of the pressure they are under.

Housing & technology

Comment: In housing, we would be aware that only maybe 2-3% of houses in any year are new houses, and we are very interested in what we can do with existing energy systems to make them smarter. Practically, nearly half a million of oil-fired houses in this country also have an immersion heater, which is a direct electric heater. We would like to see that this could be used at times to displace those heating fuels, because essentially the big problem is heating fuels which are undertaxed. We need to see some way to get the low, stable price renewable electricity into the heat sector and to start that in some ways. Heat pumps might cost between £2,000 and £6,000 but not everybody will have that handy. If we could do a couple of hundred pounds worth of electronics and use the existing immersion heater, we can shift a lot of carbon, create a lot of value locally, and help to pay for wind farms by doing that.

Paul Stapleton: We agree, and we want to be part of it, and we do support projects in innovation trials and technologies of that nature. We would like to be doing more of that in the next price control period and maybe that is something we can get discussion on later in the morning, but in principle, absolutely support what you have outlined there.

Comment: Everybody is very focused on this issue, and we are seeing this in the energy strategy as well. I would just like to provide a bit of a reality check around heat pumps. In my view, heat pumps are definitely a solution to a lot of problems, but they are more suitable for new builds, rather than retrofit solutions. As I understand heat pumps generally go up to like 35-40 degrees. If you are going to retrofit them in your existing house, you have to resize your radiators, so there is a big cost involved. The future for heat pumps in my view is a hybrid solution along with an alternative source.

But I will just pick up on one other thing about the standard demand. That is something that people need to be thinking about yesterday and, it is quite an urgent thing. I used to lecture about how in the 1960s the network was set up, the average demand was allowed for two kilowatt per household, and a lot of them are still there. We have got all these new demands coming which we are all aware of. Today, a lot of houses have two electric showers, so that

issue that was sort of touched on existing standard demand is something that would need to be reviewed fairly urgently, because standard demand today is maybe not the standard demand that it was last year, or 10 years ago. So, it really needs updated and monitored on an ongoing basis.

Sinead Ferris: We are looking at a public consultation to go out to customers for exactly the point that you have just raised. Our infrastructure has a 50-year lifespan, and we believe that we should be putting that infrastructure in the ground now. With the current charging philosophy that exists in NI, we have to put in the least cost technically acceptable. As part of the consultation, we will be asking customers about the appetite for NIE Networks to size the connections that we put in the ground now, to cater for what we know will happen from 2030 to 2050, which covers the lifespan of the asset, and will allow us to put infrastructure in the ground now to cater for that. What we need to happen in parallel, is for the connection charging regime in NI to become more in line with our neighbours in the RoI, or in GB. That means that customers will not pay for all the reinforcement, which is the case at the moment.

Following the Q&A session a presentation was made of NIE Networks' plans for RP7. This part of the workshop was split in to four segments, with a short presentation of the plans followed by a break-out discussion for each. The four segments included:

- Meeting our customers' needs;
- Maintaining a safe and resilient network;
- Delivering an environmentally sustainable network; and
- Enablers for transformational change.

Meeting our customers' needs

As part of this segment of the of the workshop, the following topics were covered in relation to NIE Networks' draft plans for RP7:

- Enhancing customer service;
- Supporting vulnerable customers;
- Supporting customer with the energy transition; and
- Supporting competition in connections.

Stakeholders were asked whether the proposed plans reflected their views and priorities, whether there are any issues that have been missed and if the scale of ambition is appropriate. It should be noted that much of the discussion in the first break-out sessions reflected stakeholders immediate concerns about the readiness of the network to accommodate future needs in terms of meeting customer demands. This overlaps to some extent with the next section on 'Maintaining a safe and resilient network'.

Infrastructure

Across the group discussions several points were made by stakeholders about the likely future demands that will be placed on the network. They recognised the challenges that NIE Networks faces in having to meet rising demand for electricity, for example, through increased use of EVs and heat pumps, alongside creating flexibility in the network to allow for the sourcing of additional renewable energy.

Several stakeholders pointed out that, as customers become increasingly reliant on electricity, it will be even more important to maintain and improve on the reliability of the supply in order to meet customer needs. A number of points were highlighted:

- The need to have the infrastructure in place to receive electricity on to the grid from both new and existing developments and as a result of neighbourhood/community retrofit programmes;
- The increasing demand for electric vehicles, insufficient charging capabilities and the need for improvements in infrastructure as a pressing concern;

- That infrastructure supplying electricity should be capable of dealing with the future anticipated loads as technology develops; and
- There is a need for these issues to be addressed urgently and proactively, with supporting policy put in place.

A number of stakeholders commented about the lack of progress that has taken place in Northern Ireland compared to other regions, stating that, based on what they have experienced elsewhere, NI is much further behind in terms of renewables, car charging and relevant infrastructure. The point was made that the network is still being designed to older standards in terms of new housing development sites, which do not have the sufficient capacity for electric vehicles.

People coming from different countries are way ahead of us and they're coming back home and are starting to ask us for all these bits and pieces to be added into their houses and we can't give that to them.

It was highlighted that those building new developments in GB are required to provide the infrastructure for electric vehicle charging points. One developer emphasised the need to futureproof new infrastructure and gave the example that currently they are only able to provide 7kW points for EVs. He anticipated that with improved battery technology, EVs may eventually operate with 30kW up to 100kW charging points, and there is currently a lack infrastructure to support this.

An associated issue was the need for EV infrastructure in the public realm. The suggestion was made that it would be beneficial for NIE Networks to engage with architects and other urban designers regarding the incorporation of E-charging points into the public places.

Stakeholders agreed that there was a need for a change in mindset from reactive investment in the network towards a more proactive investment, in order to future proof the network. This would involve forecasting ahead, identifying problem areas and reinforcing the network in anticipation of those occurrences.

Connections

The cost of connections, and its resultant impact, was mentioned across several the group discussions. The current system was viewed as a major barrier to both development and the adoption of renewable energy systems. A few stakeholders recounted that when they or their clients had looked at investing in renewable energy, they were constrained because the connection costs were viewed as prohibitive. There was recognition that if businesses are to become greener, and more self-sufficient to protect against volatility in the energy markets, then the current policy for

connection costs needs to be reviewed. There was a call for the connection policy to be changed to make it more comparable to the policy in GB. Regarding RP7, a request was made for more clarity on cost, the impact on major energy users and how it affects their competitiveness in NI with their competitors in mainland Europe.

A number of stakeholders proposed that there is a need to incentivise development in clusters – towns, villages, and hamlets, as this enables people to live more sustainably. Part of this sustainability is the efficient provision of essential infrastructure like electricity. It was suggested that connection charges should be geared in such a way to support sustainable development.

Vulnerable groups

Stakeholders raised several points in relation to vulnerable customers including the issue of digital poverty and exclusion, the affordability of proposed investment in the network and the provision of services in cases of emergency.

Digital exclusion

During the discussions there was positive recognition of the work that NIE Networks is doing/planning in relation to developing digital platforms. However, there was also acknowledgement of the difficulties associated with providing services to a population with inequalities.

The point was made that there is a cohort of customers that are digitally excluded and that while the world moves towards the provision of essential services through digital channels, it is important to ensure that there are protections in place for these groups. It was highlighted that digital exclusion incorporates not only those who do not have access to broadband but also ‘digital poverty’ whereby people may have access to a smartphone but their ability to interact is limited by their contract.

Customer affordability

Concern was expressed about how the investment that is needed for the infrastructure would be paid for and how this could be made affordable, especially for vulnerable households. The question was asked, would the cost of investment be directed straight towards consumers?

People can't afford an electrical charge, never mind getting an EV put into the house. There has to be support put in there for those lower income brackets.

Emergency planning

There was some discussion around emergency planning and provision of essential services. The point was made that it is important to consider the impact of changes to infrastructure on vulnerable

groups. Of particular concern is the plan to remove all copper telephone landlines from homes by 2025 and replace them with fibre cables which will rely on electricity. During a power outage, this would affect vulnerable groups that do not have a mobile phone/smartphone, meaning that they would be unable to call NIE Networks or emergency services.

Serving specific customer groups

There was recognition of the need to engage with customers groups in different ways and the growth in customer engagement that NIE Networks has undertaken in recent years.

Larger customers

One of the stakeholders highlighted the need to consider all types of customers and not just those in a domestic setting. The point was made that if most resources are going into serving multiple individual domestic consumers, then there is the potential that larger customers could lose out. These larger customers have a disproportionate economic impact on the business of NIE Networks, as well as on the energy market as a whole, and therefore require a different level of engagement. It was pointed out that as the energy challenges increase, the larger, more complex businesses need a different level of service that reflects this transition and growth.

Prosumers and rural community

It was observed that those in a rural setting face additional challenges and that NIE Networks' strategy could do more to help the rural community. For example, broadband provision tends to be quite poor in some rural areas and therefore the use of smart meters is likely to be limited. The comment was also made that the Energy Strategy makes no reference to decentralisation or energy communities. It was proposed that there should be flexibility built into the system to enable and facilitate community energy. It was suggested that it would be important to identify prosumers groups.

We're still behind the times in that we're just talking about customers, and the Energy Strategy very much focuses on the customer and then just tags on communities as an afterthought. We need NIE Networks, as a bigger voice, to help us with this.

Scale of ambition

Stakeholders were asked to comment on the scale of ambition in NIE Networks plans in relation to meeting customers' needs. There was general agreement that the plans met the expectations of those present at the workshop and the discussions reinforced the priorities that these stakeholders had. There were several additional questions and comments made as detailed below.

During one of the discussions, a stakeholder expressed interest in NIE Networks' plans especially regarding industrial partnerships. They commented that their organisation aspires to electrify their heavy plant equipment but currently do not have available electricity infrastructure to do this. They had identified multiple stages that they would have overcome to achieve electrification of their equipment. This, along with the expense involved, would mean they would not be able to afford it with their own finite resources by 2030.

One of the participants commented that they thought there was a lack of ambition in the new Energy Strategy in relation to the number of heat pumps and EVs. They also mentioned that they expected to see more in terms of smart connections and limited connections that would help to avoid overloading the grid at the winter peak.

Another stakeholder remarked that the group he represents have experienced major problems connecting to the grid over a number of years. With the expectations that customers will want to connect more wind turbines, anaerobic digestion plants and solar installations to the grid in the lead up to 2030, he wanted to know if this would be facilitated and become easier in the new plan.

The level of ambition is reasonable. I think that things have to move a lot quicker now than they ever did before. I think we have to think a lot bigger and how that needs to be done and what needs to be achieved.

We welcome the overall plan, it's a step forward, and provides some clarity on the way forward. More action is needed to carry out a review of tangible progress on the ground. Policy has to change at a much more dynamic pace, in terms of actions on the ground.

In relation to gaps in the plans, one of the participants highlighted the following issues that he felt the plans need to reflect more clearly:

- The need for more clarity around the types of technologies that are being aspired to regarding the energy mix by 2030;
- A suggestion to add distribution heat networks rather heat pumps at individual houses;
- The need for updated regulatory revisions; and
- Costs of connections being a major barrier to development.

Another participant suggested the following issues could be considered:

- The need for performance regulation;
- Reconsidering the energy order which currently gives priority to gas;

- Until power generation on the island of Ireland completely sustainable, some form of a baseload is required;
- A priority for heat network;
- An outlook of energy efficiency first, including low carbon heating, heat networks, heat pumps, electric storage etc.;
- The need for time of use tariffs. Agile tariffs might put a risk on the householder; and
- The issue of behavioural change and education.

Maintaining a safe and resilient network

The second presentation of RP7 plans focused on maintaining a safe and resilient network and included the following topics:

- Safety;
- Network resilience to climate change;
- Improved security of supply;
- Reducing unplanned supply outage times; and
- Reducing the number of customers defined as 'Worst Served'.

During this discussion session stakeholders focused on the stability of the network, the implications of the Covid-19 pandemic, system resilience and backup and customer engagement.

Stability of the network

As stated previously, stakeholders recognised the challenges of meeting the future demands. One of the issues of concern was the impact that both increased demand and the introduction of additional renewable connections might have on the stability of the network and whether this might lead to further outages or impact on quality of supply.

One stakeholder wanted to know what NIE Networks' plans are to deal with this to maintain the stability of supply. In response, a NIE Networks' representative highlighted that in RP7, innovation, a smart system, a digital network and more automation is fundamental to provide a stable reliable network so when new renewables are added, the network is able to maintain a certain level of resilience.

In terms of level of ambition, it was questioned whether NIE Networks would be in a position to have 70% renewables on the network by 2030. A stakeholder asked how realistic the goal was given that there is not yet planning permission submitted to the Crown for offshore wind, electrolysis plants or any battery plants built to stabilise the network.

In general stakeholders acknowledged that, as there is a global move towards digitisation, there is increased need to provide a resilient and stable network. Furthermore, having experienced frequent

storms, this has highlighted the vulnerability of the network and reinforced the need of having a resilient network.

Covid-19 pandemic

The Covid-19 pandemic has created a new working landscape with more employees working from home, which has created additional challenges for the network. The pandemic has also helped to highlight the critical role of business in providing essential services. Both issues were discussed in relation to network performance and resilience

Working from home

It was observed that, compared to working in an office, power outages are much more noticeable and can have a larger impact when working from home. One stakeholder asked for clarity in terms of quantifiable targets for network resilience in NIE Networks' plans.

Increased risk for emergency situations

Another stakeholder added to this saying that changes due to the pandemic have resulted in a refocus on emergency planning side of things. They highlighted that there are now several additional risks to consider in relation to the co-ordination of emergency response. For example, those co-ordinating the response could be working from home, and may be at increased risk of power outages if they live in a rural setting, which may impact their ability to respond.

Risk was also highlighted in relation to the plan to increase the number of electric powered vehicles, both within NIE Networks and other organisations that have a role in emergency response. It was questioned what back-up plans would be in place during long term power outages.

Critical industries

It was highlighted that one of the lessons learned from the Covid pandemic was the critical nature of having a production capability in Northern Ireland. The view was expressed that the response of businesses to support the crisis positions them as being critical and essential. One stakeholder wanted to know if there is scope in NIE Networks plans to facilitate these businesses in a way that makes them and the network more resilient at the same time.

System resilience and backup

Across the discussions stakeholders commented on the criticality of the infrastructure. One participant commented, with regard to EVs, that power outages become even more critical because it affects more than heat and light in houses. Therefore, it is not only having a reliable supply that matters, but also system resilience and having a backup. He also questioned whether dual supply, particularly for critical assets, is something NIE Networks would introduce to the network design.

The NIE Networks representative acknowledged the importance of resilience and highlighted network automation as a big opportunity which would help improve response times. He also identified tree cutting as an area of investment for NIE Networks' which has a large impact on overall network resilience.

Customer engagement and resilience

Customer service interaction

A few stakeholders said they had experienced a lack of openness in their engagement with NIE networks in investigating their issues and suggested a more proactive approach to consumers, particularly to the big industrial users, as well as proactive monitoring in advance for problem areas;

One participant commented on the level of trust that he had in relation to NIE Networks and that he regards them as experts in their area; he felt that this role of 'trusted expert who can advise and inform' is something that NIE Networks should promote further.

In business generally there is no point in waiting until a customer comes and tells you there is a problem, you're better to go and find out from them in advance because immediately you're seen as a cooperating partner rather than things becoming adversarial.

Communications and essential services

One of the stakeholders noted the importance of thinking about the provision of a more robust electrical supply to telephones and basic communications in rural settings. He commented that, in emergency situations, some groups could feel very isolated. As part of the solution, he suggested that NIE Networks could run a cable in the same duct as the optical fibre.

Another stakeholder recommended a text message service for all the customers, similar to that which Northern Ireland Water provides, to inform before a power outage takes place. She felt that this could be particularly useful for domestic customers.

Worst served customers

One of the participants highlighted the issue of 'worst served customers'. He expressed concern that worst served customers continue to appear to be in the same places. He commented that those who have poor service on a recurring multi-year basis must be extremely frustrated.

Issues identified

Removal of red diesel

One of the stakeholders remarked on the increase in costs to businesses with the removal of red diesel. Due to this, their business is considering converting some equipment to electric and buying new electric equipment. He wanted to know what NIE Networks' plan was towards trying to accommodate businesses in this position.

Power quality

Another large business stakeholder highlighted power quality as a major issue where even investing more money to improve it has had little impact. In their case they moved from the 11kV to the 33kV network due to high noise level, however they have found that this has not made a significant difference. He also identified storms are a concern, therefore appreciated improvements in resilience in the system.

Suggested recommendations

Comparison with other network providers

One of the stakeholders commended NIE Networks on their performance rating. However, he wanted clarity on how NIE Networks compares with other network operators in the UK. He stated that since NIE Networks is a member of the Energy Networks Associate there must be a benchmarking hierarchy. He suggested that if this is not already taking place, it could be added to RP7.

Diversifying and decentralising the grid

Another stakeholder highlighted that one of the issues identified as an impediment to investment was the lack of high voltage network in their area compared to other districts. He proposed diversifying and decentralising the grid so that they can then generate more opportunities and growth for others who are in more rural areas, especially since the rural areas are where a lot of their renewable resources are, in terms of wind and solar energy.

Climate change

One of the participants observed that in England they are re-starting coal fired power stations again because the security of supply is compromised by the lack of gas. He therefore highlighted the importance of taking climate change into the equation of resilience.

Delivering an environmentally sustainable network

The third presentation focused on delivery of an environmentally sustainable network as part of the RP7 preparation, and included the following topics:

- Decarbonisation;
- DSO strategy; and
- Environmental Action Plan;

Knowledge gap

Several stakeholders highlighted the knowledge gap that exists regarding sustainability and environmental impact. They commented that there is restricted access to or a lack of information on the impact of sustainable actions and changes. One of the large business stakeholders, who is currently looking at alternative energy sources, stated that they have experienced a knowledge gap in sourcing the information that they need to make an informed decision. It was suggested that to address some of the gaps in knowledge, partnerships could be established, for example, with universities. Also, the Energy Strategy's proposed 'one-stop-shop' could help to address some of these issues.

Education, behaviour change and customer responsibility

One of the business representative stakeholders remarked that environmental credentials are not solely for NIE Networks or governments to achieve but are also important at a business level. He pointed out that NIE Networks' efforts to provide environmental reporting will assist many larger firms to meet their own sustainability reporting targets.

Another stakeholder highlighted that there is an increased need to engage with and educate domestic customers in relation to sustainable behaviours, so that these consumers can be integrated and contribute effectively to sustainability as well.

You can have the system established and in place but there's the other side of that. If the system is there, how do we get them to use it effectively and efficiently and with the background knowledge on how they need to engage with it.

One of the big knowledge gaps we have is that we know where and how much energy is used but not necessarily when and until we have that knowledge the better utilisation of the existing grid is very difficult.

Open data

Reference was made to Project Girona, on the topic of open data, which looks at how to move forward in terms of a smart grid for customers. One stakeholder commented that for the DSO to be able to function, it is essential that customers provide the data. He pointed out that customers will need to be educated on this to effect behavioural change. This is because there is a history of customers being a passive recipient of services rather than being an active part of a two-way, equally beneficial conversation.

You can only be smart if you know what's going on; you only know what's going on if you have data.

This is not just the role of NIE Networks; it's going to take us all working together to get to that point and the different range of consumers that are going to have to engage in this.

Heating efficiency

One of the stakeholders commented that many of the homes that will eventually install EVs and heat pumps in the future now have immersion heaters fitted, which are an unused potential source of storing energy. He suggested that until heat pumps are fitted, an immersion heater could be used with existing and any new grid assets to decarbonise heat and hot water demand. He stated that direct resistance heating uses two or three times as much current as a heat pump, so it can make better use of the grid if controlled by inexpensive electronics. He further added that this could fund the expansion of a more reliable wind energy supply by paying for peak outputs that would otherwise be wasted.

Greening of the supply chain

One stakeholder stated that the sustainability options proposed for NIE Networks' supply chain are vital from their perspective. He highlighted that the greening of the wider supply chain going forward is a big challenge for their organisation.

The greening of supply chain - it is very topical in commerce and in all sectors today. It's unavoidable. People are now having that as a requirement.

NIE Networks' position and learning from other regions

Learning vs reinvention

One of the stakeholders noted that NI is behind other jurisdictions in terms of sustainability and could use this opportunity to learn rather than reinvent new ways, and learn from mistakes rather than replicate them. He wanted to know NIE Networks' view on incorporating best practises from different areas into NI, making NI a "hotbed of innovative testing".

NIE Networks' representative noted that NI is a small customer base compared to the rest of GB and Europe and would therefore not be a massive innovator in terms of R&D since it requires large investments. However, he pointed out that there is technology and learning from others that can be adopted. This was the approach taken for the innovation strategy for RP6.

NIE Networks as leaders in the electricity system

One of the stakeholders remarked on NIE Networks' important central position in the electricity system. The comment was made that customers and stakeholders are looking to NIE Networks to be leaders in the field of delivering the required system flexibility and decentralisation. It was suggested that NIE Networks is well-placed because of their in-house expertise to come forward with proposals and ideas and it was noted that NIE Networks is one of the few entities in NI that has the capacity, resource and skill set to make it happen, along with support from the Utility Regulator.

Decarbonisation

Zero emission technology and policy

Many stakeholders identified policy as a barrier to bringing forward zero emission technologies, decarbonisation, as well as bringing renewables onto the network. One stakeholder commented that their clients want to bring more renewables onto the network and reduce carbon in the supply chain but it is cost prohibitive due to the capital expenditure of the renewables as well as expenditure of upgrading the network. He indicated a need for policy change to take place before the plan, which would make the transition easier.

We seem to keep going in a circle. We have got a chicken and egg situation, but something needs to happen to break that cycle so that we can then encourage more customers to get renewables on the network.

Types of carbon reduction

One of the environmental stakeholders highlighted that to the carbon offset potential, there are a number of methods of carbon reduction:

- Reducing your own carbon usage;
- Reducing carbon usage of those you work with; and
- The carbon you cannot do anything about – working to restore damaged peatlands that can help get retention of carbon.

He commended NIE Networks on working with his organisation to help survey peatlands in NI to see what the potential is for the third carbon reduction option listed above.

NIE Network Internal Carbon Footprint

One of the participants commented that the plans for RP7 are a great opportunity for NIE Networks to not only undertake the work to get to net-zero but also share the knowledge gained along the way. He highlighted the following decisions/trade-offs that would have to be considered:

- Embodied carbon of existing buildings;
- Embodied carbon of new materials;
- Longevity of new materials;
- Operational carbon; and
- Cost.

He further noted that it would be good to make a commitment to consider embodied carbon in all decisions about the building stock. He suggested establishing a presumption against demolition or to make a commitment to assess carbon cost of demolition in advance of the decision in order to fully understand the carbon consequences.

Another stakeholder further suggested that making assets last longer is an important part of the net zero challenge, since it reduces the need to build a new network and therefore avoid carbon.

One of the harbour stakeholders asked for clarity in relation to decarbonisation and the impact of vessels coming into and out of Northern Ireland. He questioned whether there is government funding to provide shore-side sustainably sourced power while vessels are in port. He highlighted the difficulty of providing this without government assistance.

Sustainability plan and scale of ambition

One of the stakeholders observed that some of the wording in the plans regarding sustainability was not clear enough to indicate whether NIE Networks' strategy was inward looking or outward looking. He recommended sharpening the wording, suggesting that some customers would want to know NIE Networks' green credentials. Therefore, articulating that to the customer is very important.

A few stakeholders mentioned that the plan was very ambitious. The goals would be welcomed if they were to be achieved, however some found it difficult to see the end result at these early stages. However, for them the main priority was to ensure customers are protected.

Other issues and recommendations

Increased responsiveness and speed

One stakeholder expressed frustration, from a community energy point of view, due to the speed of progress and the inability to make concrete plans. While they would like to undertake community energy projects with more solar and EV charging, the main issue for them is capacity and connection to the grid. She noted that to assess capacity, somebody needs to go directly through NIE Networks who are very busy with multiple requests.

Wind power generation

Another stakeholder highlighted the benefit of getting sustainable power generation on the island of Ireland. He stated that the big benefit that the island of Ireland has is wind. His organisation has an ambition to put in 1GW turbines, and the ROI has an ambition of 5GW. He remarked that wind could provide a sustainable price on the island of Ireland and reduce the need for bringing in Liquefied Natural Gas (LNG) from America. Moreover, along with getting a performance-based regulation, it would provide more benefit to the consumer.

Storage

Several stakeholders raised the issue of storage and the option to have batteries for storage. It was commented that storage has been highlighted as an issue multiple times over the years, however it continues to be a major concern.

Demand management

One of the stakeholders noted that with greater electrification, demand is likely to rise, resulting in a real need for demand management and energy efficiency. He therefore wanted to know if NIE Networks is focusing on issues like decentralised energy. He also sought further clarity on the baseline for NIE Networks' carbon emissions regarding 50% reduction by 2030.

Enablers for transformational change

The fourth presentation and discussion session focused on enablers for transformational change and other issues to be considered as part of the RP7 preparation and included the following topics:

- Workforce resilience;
- Taking a 'whole system' approach;
- Innovation;
- Data and digitisation; and
- Telecoms, cyber security and metering.

Workforce resilience

Labour crisis

One of the business representative stakeholders commented on the current labour crisis stating that it would be unlikely to ease across the current price control period. He reported that NI has lost a third of EU nationals since the EU referendum and currently does not possess any means to adequately replace those people because of the migration regime. He also noted that there is a record number of people on payrolls resulting in fewer available people and more jobs. From a manufacturing perspective, he highlighted that people are being encouraged to increase their skills, ability, and productivity, moving to different roles and functions. He noted that there is a benefit to NIE Networks in terms of their technical capability requirements, which means that the UK's migration system might assist in bringing people into NI to do those roles. However, there is still a gap in terms of apprenticeship funding and third level education. Therefore, he encouraged all businesses, including NIE Networks, to assume that they are going to have recruitment difficulties and to incorporate alternative strategies, including automation, into their plans.

A NIE Networks representative responded with the following:

- Retention: He highlighted the importance of being seen as an employer of choice, making sure to sustain high-quality jobs, providing challenging and rewarding careers in NIE Networks;
- Technology and automation: While all parts of the business and business processes are not suitable for automation, technology and automation should be used to reduce labour dependency;

- **Training and development:** To help to increase the low level of participation in the workforce in NI, notwithstanding the availability of jobs. This involves actively engaging with the DfE to put traineeships in place to not just to support the business but to provide support across the utility and construction industries as well.

It was further commented that part of the wider problem is the interdependency of work with external organisations. This was recognised this as a broader problem for NI as a whole, highlighting the need for companies to work together for a solution. Another stakeholder commented on the importance of not just a resilient workforce, but a customer focused workforce.

Apprenticeships and older communities

One of the stakeholders pointed out the need to provide apprenticeships that are also aimed at older people. He stated that in NI and UK an equivalence is emerging in the number of long term unemployed older people and younger persons. This would result in a resource of people who may not be physically fit but who possess transferable skills that might be beneficial to NIE Networks within the network and in back-office services.

Developing skills and focus on health and well-being

Stakeholders stated that NIE Networks' ambitions were positive, detailed and forward looking and welcomed the focus on skills, and on health and well-being as well. Stakeholders also welcomed the training being provided to staff, the process of involving them in the engagement programme and seeking their views in the form of a risk assessment. Stakeholders were also encouraged by seeing the wide range of people NIE Networks are looking to employ, from technicians to apprentices.

Smart meters

Providing visibility for NIE Networks

One of the stakeholders wanted to know whether smart meters for consumers would provide an improved degree of visibility for NIE Networks.

A NIE Networks representative responded that smart meters would provide more data in terms of the network. He added that smart meters have a 'last gasp' functionality which would aid customer restoration efforts in the case of power outages. He highlighted that NIE Networks is working to understand more fully the benefits of smart meters to the network as well as the customer.

Investment, cost allocation and benefit

It was questioned whether there is going to be interim investment in smart meters as one of the big issues is who is responsible for paying for them. Some stakeholders expressed the view that the customers should not have to pay for smart meters.

Until we have smart meters in Northern Ireland and the time of use grid information that they bring, I don't see how we can move very far forward, but we'll keep on stumbling on not having the information we need.

Capturing excess power generated

One of the stakeholders stated that NIHE had completed research on 1000 PV systems and found that roughly only 39% of the power generated at the houses were used by the householders and the rest was exported. He suggested that if these households had smart meters, the relevant data could be captured and utilised further. He added that currently "it's spilling into the big pool which is the grid, and nobody really sees it."

Innovation

Innovation was viewed as being essential to underpin progress towards a sustainable network and the proposals regarding the innovation fund were welcomed. One of the stakeholders remarked that one of the challenges for RP7 is how an open fund for innovation is administered, and the decision-making process of how that money is spent successfully and where it would add value. Another stakeholder suggested that given the scale of requirement going forward, a medium-term view might be more appropriate when considering innovation.

Policy and the pace of change

Comments were made about policy, its role in supporting transformational change, and its impact on the pace of change. Several stakeholders stated that there is an increased level of urgency to effect change, and therefore highlighted a need for change in how planning and reviewing progress is approached. The discussion brought out the need for NIE Networks to work with their stakeholders to articulate their views to the Utility Regulator in the absence of clear information from policymakers.

The policy piece is a key barrier, and the complexity of connection costs is a barrier to decarbonisation, something which is steadily becoming more and more a key policy of our Northern Ireland Executive.

You have to be ahead of the game. At the minute we are reactive when we need to be proactive.

Educating and empowering the public

Most of the discussions highlighted the need to educate customers on energy use, equipping them with relevant information to be enablers of change.

Educating customers

Comments were made on the importance of bringing the public along, obtaining their buy in and ensuring that customers understand NIE Networks' plans and what it means to them.

It was observed that one of the challenges for NIE Networks is getting the message across to customers about the need for change and decarbonization, but also provide reassurance, data and information on cost minimisation. Once that is achieved and the public accepts that, it would be more likely that customers are willing to adapt their behaviours. One stakeholder noted difficulty for NIE Networks in doing this, highlighting that unless NIE Networks is in a supply scenario, they might lack a direct connection with customers.

Providing visibility on energy use

Another stakeholder highlighted the importance of giving customers more visibility of their energy use. He added that when people use heat pumps and have an oil boiler as backup, they are aware of heat pump usage but are not aware of the amount oil they are using. He stated that heat pumps work best if used constantly to preheat a house, but people do not appreciate that. Therefore, people need to be alerted to different kinds of information and energy use behaviours.

Focus on community energy

One of the stakeholders pointed out the importance of community energy communities. While in Scotland there are over 500 officially recognised community energy communities, in NI there are only two, which was attributed to a lack of policy support. She further commented that in terms of the wider picture, policy development is required in order to reach similar levels to the other jurisdictions. She highlighted that communities have been a great resource to achieve certain outcomes during Covid-19 and that these should be leveraged.

Another stakeholder commented that there is strategy for community resilience for emergencies and noted that community energy could be linked to build better resilient communities.

Leveraging local councils

Local councils were viewed as a key player, who are often seen by local communities as their first 'go-to' place. However, it was noted that councils are not particularly engaged in energy. One stakeholder commented that Scotland and England are much further ahead in enabling grants to

help communities obtain a better understanding of energy and where it comes from and the councils in NI would require encouragement to get involved in the process.

Another stakeholder highlighted that in NI, whilst the issue was highlighted within the DfE Energy Strategy, in the 2022-23 action plan community was not listed as a part of the prioritised actions. He stated that while the DfE is aware of the issue, they are not grasping it as an immediate priority. He further added that it would be advantageous if the councils were involved in the DfE one-stop-shop in delivering information at a local level.

As we move towards more innovative, decentralised and flexible energy systems, which is absolutely going to be needed, they need to engage with local communities as it becomes more and more needed and a key.

From our experience, the more you talk to people, it is the trust thing in NI. Unless they know your face, they know where you are from etc., they do not trust you. So, there is a significant part of creating a relationship with them.

Digitalisation

The following comments were made regarding the digital changes that need to be made during the RP7 to support NIE Networks' ambitions:

- Development of an NI smart system and flexibility system plan is required in partnership with industries;
- Digitalisation and availability of data will enable management of the network;
- While digitisation is useful, the more vulnerable and less technologically capable people must be catered to as well; and
- Finding the correct balance and achieving flexibility is key and welcomed going forward;

Cyber security

While stakeholders welcomed the focus on developing a smart system, they noted that this might lead to cyber security issues like hacking personal information. Therefore, the considerations of cybersecurity in the plan were appreciated.

Appendix: Opening remarks by Alan Bryce

Can I add my welcome to everyone on behalf of the Board of NIE Networks. I am one of the three non-executive directors. I would also like to thank you for giving up your time for what is a very important part in a planning process.

The Board has, as one of its key priorities, to ensure that customer and stakeholder views are reflected in how we conduct our business. That is always true. That is never more so than when we are creating our future plans. Of particular relevance today, our plan for the next price control period, which has the catchy title of RP7. As the Board thinks about the plan, a key test is, “does this move us towards a vision of delivering a sustainable energy system for all and does it fully reflect our core values of focusing on safety, our people, our customers, efficiency, both in our own operations and in how we partner with our supply chain, and is it innovative and future focused”.

Today is part of our continuing stakeholder engagement. Taking stock is always a good place to start, so you may know that we are currently working to the plans and commitments we made to customers and agreed with the Utility Regulator for the RP6 period, which is 2017 through 2024. We will hear about how we have performed and are performing during the current period. But importantly, the current plan is a living one; since we started in 2017, the team has engaged extensively with stakeholders, including workshops, focus groups, and surveys, which many of this morning's attendees have helped us with. Not only has that led to positive change in how we deliver some services today, but it also helps us to plan for the future for RP7, which is likely to run from 2024 to 2030; the year by which huge progress on so many public policy goals for carbon reduction needs to be achieved. We at NIE Networks have a big part to play in that. Helpfully the Northern Ireland Executive recently published its Energy strategy, along with its action plan for 2022. These will articulate public policy for transformational change in energy in important areas, for example, an electric vehicle infrastructure plan, support mechanisms for renewables to reach 70% by 2030 and a plan for smart systems and flexibility in an energy system, including the potential for smart metering.

Going back to NIE Networks' vision of delivering a sustainable energy system for all, our RP7 plan on working with the Utility Regulator, SONI, government, and you, our stakeholders, must be able to deliver on public policy, and indeed be in the vanguard when it comes to enabling the achievement

of those public policy goals. At the same time, we must continue to meet the needs of the 900,000 customers we serve every day and crucially to do so in an affordable way.

Now plans involve forecasting and here in Northern Ireland just as in Great Britain, there is only one certainty when it comes to forecasting and that is uncertainty itself. A planned regulatory settlement must be flexible enough to respond to the inevitable uncertainties we will face. For example, in the pace of customer take-up of low carbon technologies, the impact of climate change, statutory planning approvals, and the rate of which renewable projects come online. How these uncertainties are dealt with, and how we best balance our stakeholder needs requires to be informed by stakeholder input. That is why both in Great Britain, and here in Northern Ireland, stakeholder input to network companies' plans and the wider regulatory process is so crucial. In Great Britain, as part of the regulatory price review process, there has been, and is continuing to be, extensive stakeholder engagement to help the companies and Ofgem grapple with those very same issues.

So having seen how important stakeholder engagement has been on the other side of the water, I am looking forward very much to today's event in particular for us to hear from my colleagues how stakeholder input has already influenced our plan, and to hear further from you, our stakeholders. Network businesses are, at least in part, natural monopolies. That is why the direction we take, and the decisions we make have to be grounded in the needs of our customers and our stakeholders. It is through ensuring a collaborative two-way stakeholder engagement, that your inputs lead demonstrably to our action. That is how we believe we can deliver the best outcomes and the best levels of service for all. Effective stakeholder engagement is an absolute priority for every member of the NIE Networks' team; from the Board, Executive, and management team to the staff delivering on the ground every day.