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Transcript – NPG ED2 Open Hearing – 17th March 2022

Steve McMahon, Ofgem, Deputy Director, Network Price Control Setting – introduction:
Good morning everyone and welcome to the second of our RIIO ED2 Open Hearings, this time with Northern Powergrid.
I'm Steve McMahon, Ofgem's Deputy Director for Network Price Control Setting and the SRO for the ED2 programme. Before handing over to Jonathan Brearley, Ofgem's CEO, for some introductory remarks, I will briefly cover some housekeeping issues for this event.
Firstly, all attendees should note that the session is being recorded and a transcript will be published including all the questions posted in the chat from participants. The session is also operating as a moderated Teams session, so the visible participants are currently limited to Ofgem panel members, Northern Powergrid attendees and the representatives from the independent ED2 Challenge Group and the NPG Customer Engagement Group. From Ofgem, alongside myself, we have Jonathan Brearley - CEO, we've got Myriam Madden – Non-Executive Director and Ben Burke-Davies, the Programme Director for ED2. From Northern Powergrid we have Phil Jones – the CEO, Tom France, General Counsel, Alex Jones – Director of Planning and Performance and Jim Cardwell - Head of Regulation & Strategy. From the Challenge Group we have two of its member, Helen Parker and Bob Hull. From the NPG Customer Engagement Group, we have its chair, Justin McCracken and Jenny Saunders.
All other attendees will have their cameras and microphones disabled in the meantime. If you do want to participate in the Q&A then please post your question for each session in the chat along with your name and organisation – so don't use the 'raise hands' function as would be normal in a Teams event. The questions are being moderated by some of my Ofgem colleagues and if your question is selected then we will come to you and we'll enable your camera and microphone for you to pose your question to the NPG team. You will still have to unmute yourself from your laptop. So, that's really important as we seemed to have a few issues with that in the first session. If for whatever reason the technology doesn't work and won't let you appear then I will cover the question on your behalf. Time is limited so it's unlikely that we'll be able to get through every question, but these will all be collected, and we will look to ensure they are all covered as an addendum to the post meeting transcript. The session will run for approximately two hours. Following a 15 min presentation from NPG, the hearing is split into two thematic sessions with a very short break in between. The Challenge & Customer Engagement Groups will open the questioning for each session and then we'll come to the Ofgem panel and wider participants for their questions and finally, just a reminder that the focus today is on NPG and their business plans so not the wider Ofgem regulatory framework or the Challenge Group or the CEG reports so please prepare your questions on that basis. Hopefully that's clear, I'll hand over to Jonathan Brearley for some introductory remarks.

Jonathan Brearley- Ofgem – CEO - opening remarks:
Thanks Steve and thanks to everyone for coming to the next of our Open Hearings. Just to say thanks to the Challenge Group for all the work they've put into this, clearly, thanks to Northern Powergrid and the Customer Engagement Group as well. This is a really important part of the process in making sure we set up the regulation and indeed the spending on our local networks over the next five years from 2023 to 2028.
Now just to step back a bit and to think about the context of these price controls, I think it's fair to say that the energy sector is in a great deal of turmoil and I want to start, as I started the last meeting, by saying that our thoughts are absolutely with the people of Ukraine and what is happening in Ukraine right now but equally that the consequences for the energy sector are fundamental in terms of prices that customers are expecting to pay and the impact that this will have on all of us, both as domestic and non-domestic

users of energy and really, when we think about the current situation and all the work that Ofgem, with government and the industry are doing to mitigate against some of these impacts and we think about our strategy going forward, it's clear that our supply needs to diversify; that we need to transition away from the current reliance we have as a country on gas as a fuel and on the international markets as a result. The reason that I bring that up is that there has never been a more important time for the role local networks play. If we are going to make that transition towards Net Zero further and faster, then the evolution of our networks is fundamental to that and so therefore these price controls in my mind are of critical importance to all of us and I'm really glad to see such a large number of people engaging with these Open Hearings. Equally though, bringing ourselves back to today, in another area, Storm Arwen has told us that there are lessons for us all to learn around how we respond to questions of resilience and how we respond to extreme weather events to make sure that customers are protected and looked after.
So, if I were to account for what Ofgem is looking for, broadly, I would highlight, really, four things. So first of all - efficiency has never been more important, so as we make that journey to Net Zero, we want to make sure the system as a whole is efficient, so we want to see local networks that are treating that DSO function with importance and carrying out what I describe as whole system planning, so thinking beyond simply what the network does, to what the electricity system does and indeed, the impacts on transport and more widely. Secondly, we want to see as part of that efficient network the use of flexibility and new technologies to manage costs for customers.
Thirdly, we do all need to have a collective conversation about the resilience of our networks and about how we make sure that we are protecting the assets that we manage on behalf of customers.
And finally, and you would expect me to say this, we want an efficient network. We want one that's efficient in terms of returns to shareholders and efficient in terms of the costs that we are prepared to meet.
And indeed, with all of this, there needs to be an overarching, sort of, sense of protecting our customers and making sure we're supporting our customers, particularly the most vulnerable.
Now, as I've said before, this price control is in 2023 to 2028. That is a critical time for the evolution of our energy system, a critical time for the way we set up local networks, and indeed a critical time for our customers given all of the context that I described earlier, so I'm delighted to be opening these open hearings and look forward to hearing from Phil and his team to take us through their company presentation. So over to you, Phil.

Phil Jones – NPG
Jonathan, thank you and good morning everybody. Thanks for the opportunity to spend some time with you. I'm just going to share my screen if you'll just bear with me for one second.
Steve, if you can just keep me honest to make sure that I've not shared my shopping list or something.

Steve McMahon – Ofgem
Good to go Phil. That's fine.

Phil Jones – NPG
Thank you.
Again, Jonathan, just to echo your comments, so in terms of those high-level principles, they're all things that resonate very strongly with us here at Northern Powergrid and so if I can just say thank you again for the opportunity to take you through this plan that we regard as a great privilege and responsibility as a company and the steward of a piece of hugely important nationally significant, but particularly, regionally significant infrastructure in what is obviously an internationally significant piece of policy development in the coming years.

As we built our plan with stakeholders, we have many, many times in conversations, boiled it down to two things that we heard loud and clear. Number one - deliver on decarbonization and number 2 - balance some ambition with affordability so again, it resonates with the things that you've said.
And as you say, as we look into the current situation that we acknowledge ourself, who could have imagined that we'd be having this conversation in the middle of the kind of global situation that we see and the pressures that that's bringing on people and our thoughts, as you say Jonathan, are also with those folks in the Ukraine, and indeed internationally, who are affected by that and it's not as though it will not have an effect on the discussions and the implications that we're going to talk about in the coming weeks and months. And so with that said, we're very proud to be bringing forward a plan that, as you say, Jonathan is a five year plan, but it's solving problems that are kind of – they're with us now and they're 25 years in the solving, so getting things right early we think is hugely important so if I can take you to slide two that you should be able to see on your screens now headed ‘key points’. If the only thing I manage to do or communicate in this time with the message on this slide - I hope to do a little more than that - but these were the things I hope you will take away from our discussion today and I make no apology for using the word transformation several times in describing this slide because I think it sets the context perfectly. I mean, for a start we're into a transformation of the energy system that itself is not just nationally significant, but international significance, so that is the context. It's a transition like we've never seen before.
Inside that, the initiatives that combine in this plan to create an outcome where the sum of the whole is greater than the sum of the parts, I should say, is itself a transformation in the landscape of what we see ourselves delivering for our customers. So, our outputs, if you will, get transformed and they have to be enabled by a set of transformational operational changes, not least, and most significantly, the establishment of a standalone independently-minded DSO function along with all the digitalization and flexibility that goes with that and we'll address those points in some detail in our presentation and, I'm sure, in our discussion.
Worth highlighting that the UK has already got, by far, the biggest flexibility market anywhere in the world, and we see these changes that are coming across the industry as taking that to the next level and we're excited to be a part of that and it can't happen without the kind of digital transformation that we're forecasting.
We are determined to take everyone with us, and we think there's some very tangible things in these plans and in the industry proposals more broadly that we think make some very tangible contributions to that. Our support for our more vulnerable customers is going to a level it's never been before, that is for sure - that's happening across the sector, and we're proud to be part of.
And also the way that the investments are being proposed and the nature of them and the way that they'll be funded, we believe, will lower participation barriers for folks who find it more difficult to participate in some of the transition to low carbon technology. For example, the socialisation of some of the costs around service upgrades and LV reinforcement will change the way that we think people can access those things.
And then we do want to draw attention to some of the things where we have particularly strong views at NPG about how that should be achieved and to Jonathan’s comments around driving efficiency and whole system efficiency, we think the way that the combination of ex-ante and incentives is brought together is crucial and we want to raise that discussion today. So those are the key things that I would highlight if I can take you back up to the top level if you will now and just talk a little bit about our plan.
We accepted the challenge of necessity - that's a huge piece of planning exercise that one of the biggest things that people like us ever get involved in our careers in terms of pieces of work, so necessarily they're very large pieces of work and enormous. I don't want to think about how much time goes into them, and

I'm so grateful to my team and the Challenge Group, the CEG, the people who've engaged in it and put their time and effort into it to create a product that we're very proud of.
We accepted the challenge to try and get that down to a very small number of pages and in fact this is it on a page. So, for the purpose of today's conversation, I just want to draw a few key things against the backdrop of that transformation.
What I don't think is vague in any - ought not to be vague anyway, in anybody's view, is the four things that will be the big landmarks at the end of all this. What will be the difference?
And those four searchlights pick them out, I think, very, very clearly. There will be in any version of the truth - and we all don't know exactly what the future holds - but a significant growth in customers connecting and our network and our business will be enabling that to happen. One of the most important features of that, I've already said, is the establishment of a standalone, independently minded, Distribution System Operator that we think will be very vivid and it's already starting to happen now.
When we get to 2028, this is a bit more abstract, but it needs to be very real when we get to 2028, all of the pathways need to remain open.
We don't know what which one we will be on now. We don't know which ones, by then, we'll stay on, but we certainly need our options and that's been a hugely important piece of our thinking as we've gone through this.
And then fundamentally, as you say, Jonathan, there's more to it than just decarbonization, resilience, reliability - all of those things improve as does customer service taken into the 90% range and higher - levels that were unimaginable only a few years ago that are now the norm in our sector, and we see ourselves being part of that push to the next level of excellence.
Now I'm proud to be bringing this proposal to you and I'm glad to be able to do it as a company that I would say, without any hesitation, has got a track record that we believe is second to none in the sector in three key areas.
Number one, I think this is a company that is renowned for being a straight shooter. We deliver what we say we will do we, we said at ED1 what we thought needed to be delivered. We've exceeded those commitments, we've brought forward benefits that were not foreseen at the time, and we are doing it within what we said it would cost. I would not trade that reputation with anyone.
On efficiency, no other company is in a position where it can point to over a decade of being amongst the leaders on the total cost basis.
That is true about only one company, if you measured it that way. Everybody has their own view about how they credentialise themselves - that is ours. You can go back before DR5, and you would see a company now with over a decade - and it looks like this plan is set to extend that streak on a total cost basis. No one else can say that, and in terms of getting ahead on key issues, which is a key focus for us today I want to point to the fact that we were the only company in DR5 who brought forward a specifically targeted smart grid low carbon networks proposal that Ofgem funded and we're delivering, that is lowering the cost of our transition to DSO now on a relative basis into the next period. So, we think we bring a very strong track record. We think we bring a transformational ambitious plan that does balance ambition with affordability through four key things; an enabling of net zero with outstanding service off the back of great value driven off efficiencies which are very clearly set out in our plan. I have yet to see a more clear articulation of that anywhere else with significant investments.
If I can take you to the next slide, the most important thing in all of this, and I'm sure we'll get into debate on it today, is that approach to flexibility.
I've heard it said that we seem to be at the low end of ambition. I think we - I'm not sure we're being understood properly in that respect. I want to call out two key numbers off this slide – £465 million, which is what we believe are the future efficiencies that are set up by forcing synergistic investment into the 2023 to 2028 period.

In other words, as we build out, as we renew the asset, as we do the asset resilience investment, we do all of that with a Net Zero commitment in mind and the savings that it creates in the post 2028 period are enormous for customers and we need to make sure that we capture those.
I want to draw your attention to the £108 million of reinforcement savings that are linked to energy price driven customer flexibility, and in this respect, I think we stand out as one of the companies that are backing those who say that much of the flexibility benefits, and they are significant, will come through customers responding to price driven signals that are not necessarily - in fact, probably almost certainly not - network prices, most of that benefit we think will accrue to customers as a saving in the distribution costs as a result of their participation in the whole system process that you talked about Jonathan, and in that respect, we are erring on the side of the customers.
So, the fact that that leaves us with lower amounts of flexibility in some of the other pots is a function of a number of things that I'm sure we'll talk about, not least where our network is at and where the demand is at in our part of the country, but most significantly, we think those people who say that the flexibility will come through the supply and responding to, effectively, ultimately the whole system cost of generation will be a very big driver and we think the customers will get a double benefit in that respect as we approach that. And then finally I just want to point to open data at the bottom of that slide. We think that whole digital transformation in the DSO, that visibility, that is what will drive the confidence in the market. The transparency is the ultimate key, not the placebo of some legal separation or registration at Companies House, the fundamental clarity of what's actually happening and our commitment to make to open and available is unwavering.
Jonathan, with that I just need to give two or three items that I think are going to come up in debate and that we want to just summarise our position.
On firstly on slide five, this issue of where to put the ex-ante allowance. We have put a lot of time and effort into considering the risks of falling off the other pathways and the message on this slide is very simple. The grey bar shows you the range of pathways that are plausible in the eyes of the CCC, in the eyes of the DFES scenarios and if we assume low take-up and invest on low take-up it doesn't mean that can't happen, it may well, who knows? But it is also extremely plausible that that is a way to get on an impossible-to-deliver pathway beyond 2028 and that debate and that consideration is crucial.
The higher the ex-ante diamond, the lower that risk. Of course there's quid pro quo the other way, but we are clearly in the camp of believing that there should be a clear signal of investment with clear regulatory strings in terms of correction mechanisms and outputs that are expected of it, but we think that's the best answer for customers.
The other side of that coin, on the next slide is the balance on incentives and one of the deep concerns we have is that some of the uncertainty mechanisms that are being talked about as frontrunners now involve effectively paying companies to build copper, and we think that we cannot look customers in the eye and say that we are looking at the lowest possible cost transition if incentives in both categories of funding - if ex-ante incentives and uncertainty mechanism funded incentives are not very, very strong. We think that it is very difficult to be clear conscience and suggesting that we are on the lowest Net Zero path.
We need to make sure that the incentives are sharp on both sides of the line, and we think that debate is crucial in what's left of the price control review period.
And then finally, Jonathan, as we did say earlier, there's more to this plan than just decarbonization. If we think about your second theme, there's a whole host of performance benefits that we are looking to bring forward for our customers that I talked about on the earlier slides.
The most prominent one, I think, that stands out is our proposal around reliability, where we are clear and transparent that we think there's a gap to close to our peers.
It does have a relevance albeit a passing one, albeit I think, in storm resilience that this particular proposal, which would close the gap in terms of our ability to do some of the faster restorations. Our network, put

bluntly, has got less remote control and automation on it than the peer group, and the targets that we're setting are assuming that we can close that gap and that's the reliability proposal. Now, interestingly, we've been challenged as to whether we should have been even more ambitious in that respect, and I will tell you now we would love to be, but that balancing of ambition and affordability - this is where our detailed stakeholder engagement landed the optimal position. I'm not saying it's perfect, but I am saying we've thought very, very carefully about where we should strike that balance.
We'll be delighted to take challenge on any area of our plan. I've just sought this morning to highlight three or four areas where I think we do stand out, as perhaps having a different perspective on the use of flexibility and where we think that's coming from, on the need for a very clear investment signal to avoid the worst possible risk, which is that beyond 2028, it's undeliverable and the numbers involved in that eyewatering - and we can go into that in more detail, Jonathan, if that's where the questions go. The need for it for incentives is crucial and now is not the time to abandon those things.
We've seen it deliver for customers in spades over a 30-year period and getting that right is absolutely crucial if we should - if we’re to do the job our customers rightly expect us to do.
And then finally we want to see those service enhancements, which customers rightly expect and would expect if there was no debate about decarbonization. We are 100% committed to those and are excited about being able to deliver it.
So, if I just wrap up, I'm not going to re-talk to the to the key points, Jonathan, I said what they are at the outset. I hope that I've managed to put some flesh on the bones, if you will, but I'm sure the debate will do lots more of that, but I would say that as an industry, companies and regulator, the most important thing we can do is get the signals right for investment, right for efficiency and investment, right for whole system, right for optimising and discovering those solutions that are out there.
We think that's the crucial thing and with that, as I say, I'd love to just turn it back to you and the questions and we're keen to get into the debate. Thank you.

Jonathan Brearley – Ofgem
Thanks, Phil. So, first of all I'd like to introduce Bob Hull from the Challenge Group, who is going to give us some comments from their perspective and ask any questions he'd like to ask.

Bob Hull – Challenge Group
OK, thanks very much and good morning everyone.
So, I'd like to ask some questions, initially, about your totex bid, and particularly your totex bid is about 30% up overall on the previous Price Control or current run rate, and in that your bid for load-related capex is up about 250% from current levels, which is the highest of all DNOs. Investment too far ahead of need may lead to inefficient investment, investing in the wrong thing or foreclose the development of flexibility markets.
So why have you not included - so why are you out of step and why have you not included this expenditure increase as an uncertainty mechanism to be triggered when needed?

Phil Jones – NPG
I guess there's a few layers in that, Bob, so if I can just get through the first ones - the early ones first and I’ll come to your fundamental point, which I think comes down to the ex-ante positioning, if I'm hearing you right - basically ex-ante versus UM.

Bob Hull - Challenge Group
Yeah, and I think, you know, why are you so different from everybody else?

Phil Jones – NPG
Well, the first thing is, I'm not sure we're so different from everybody else, but that's a subjective view. So, if I start with the fundamental, in terms of the overall scenario and obviously some people will be closer to this discussion than others, as we look at it and benchmarking these things is notoriously difficult, particularly in a world where the scenarios that people have picked are not the same - I would make that observation. So, what's crucial in making any comparison of the type that you're making where I think you're measuring it off of the percentage movement from one period to the next, which is not a silly thing to do, but obviously if that's what you're doing then you need to be careful that you understand the numerator and you understand the denominator, so I'll comment on both first.
We are one of the lower spending companies in this period on reinforcement, I think that is not a debatable point, that's just a fact - so we are sitting here with a relatively efficient starting point, relatively low cost in that respect, and we make no bones about it either, a network that's in a particular part of the country that obviously used to serve a significant amount of heavy industry that's not there so consequently to get to this point we have spent less than some may have spent in reinforcing their network. So, we start with a lower number, therefore, even if what we had going forward was the exact same position, then we would be out of step on that basis if we were one of the lowest, lower to begin and headed to the same place.
In terms of our view of the future, if we see, for a moment, see through the difference between ex-ante and uncertainty and just look at the best view overall cost of the scenario, everyone has taken a view in the same sort of ballpark as we have, is our perspective. We don't have the same information - access to information that you do but what we've been able to see of people plans, generally speaking, the view of where companies have positioned themselves around the combination of the cost of the pathway - we're not an outlier. So, that brings me to the sharp end of your question, Bob, I think, which is - therefore why have we split that proposal where we split it and fundamentally I would take it to the slide we showed you - the answer, I think, is there so in a sense I'm repeating myself, but I will unpack it in a bit more detail.
We are deeply concerned at the level of analysis that has gone on so far, and we're seeking to raise that issue and force it into the agenda, about what is a possible downside scenario of deliverability risk in the future price controls. If I look at our ex-ante position that we've – that you've correctly characterised as being about 30%, that involves moving around about £200million of investment into the price control period relative to a world where the bottom of that grey bar were to occur, OK? So, if you imagine system transformation, which is - that's the plausible scenario at the bottom of that grey range I showed, if we were to our ex-ante position that does invest 200 - conceivably, with our estimate, is that would invest a place about £200 million of investment.
Notice that if I showed you that slide again - I will if you want, but I hope it's simple enough to recall - the diamond position we've pitched there, Bob, is lower than all of the plausible scenarios are in the early to mid-2030s, so it's not – it's, as you say, it's a question of bringing the investment forward and the present value of that investment which we've set out clearly in our plan - I'm not just throwing these numbers out randomly now - it's in the published documentation that we put out there to be challenged and to be debated - but the present value of that cost is £15 million.
Now that does not sound like a particularly expensive piece of insurance to me, I would say. So, if it's - to answer your question narrowly, why have we done it? It's because we believe that that risk on the one hand is better than finding ourselves in 2028, needing to move to a situation where we have to increase and again, we've set these numbers out clearly, if we had to get towards the government's plan, the dotted line that I ran through that our planning scenario is very close, let's remember, not to something we've made up but to the government stated policy of ambition. Now, I am not saying that we'll get there perfectly by 2028, but I am saying if we get to 2026/27/28 and have to go from the bottom end of the range where some companies are suggesting - perhaps they feel as though they need to pitch lower

because of track record or something, I don't know, that's up to them, but I know why we think it's a problem. We think that to shift the gears and add an increase of a - potentially a billion pounds - over that period in the post 2028 period – add it, not just do it - add it, we think is almost already implausible. So what I would say is this; deliverability risk, not managing it properly, not being in a position to make sure that the investment ahead of need is pitched correctly, might be (a) the fastest way of failing in the whole thing and b) may actually be one of the better ways of finding one of the higher cost pathways if that then has to lead to a stampede of investment in the post 2028 period, so fundamentally we have tried to wrestle with a very difficult problem. We're not saying we've got the answer perfectly right, but we are challenging - I'll be honest - Ofgem as well as our peers in the industry to say we need a very serious debate about how much of that deliverability risk is left on the table, because I'll summarise it this way, Bob.
If you bet low you'd better be right because ahead of that pathway lies some potentially very difficult periods if we're not careful. That's why we did it.

Jonathan Brearley – Ofgem
Just to interject here - so just to lift it up a bit and bear in mind we got 150 people here, all of whom aren't in the detail of all of this - do you accept that you have a much higher baseline than others? And are you saying that that is because they are wrong because they are underestimating delivery risk?
Or can you explain - do you not accept that? Or how do you explain at a high level, the difference between your plan and others?

Phil Jones – NGP
I think fundamentally Jonathan, that is it. I think the high - there is no high-level difference between what all of the companies think it will cost on those - on the kind of pathways we're thinking about.
I think the difference is where we think we can afford to harvest benefits by going early, yes.

Jonathan Brearley – Ofgem
Yes, as in you think – so the difference - the question is less about the aggregate, but more about what's baseline and what's uncertainty. So you're saying that you think the others are underestimating the delivery risk. Or - how do you explain that difference between the two?

Phil Jones – NGP
I think they are under - I don't know they're underestimating it. I would say they're undervaluing it, yes, but we might be splitting a hair there, Jonathan - they may have the same estimate as me and think they can deliver it. I guess we're just taking the view on what we think looks plausible, and we've tried to put forward some parameters that I haven't seen discussed elsewhere yet.
And I think that's a huge debate that Ofgem should be seizing upon and making sure that when you make your decision in the end, you know how you've sized that risk.

Jonathon Brearley
Understood. Bob, sorry I jumped in.

Bob Hull – Challenge Group
No, no problem. I mean, I think this is a key area that, you know, we would suggest Ofgem needs to look very closely at. Just offer one comment - I mean, the peak demand forecast that you've put in your plan, I note that in 2028 it's 10% lower than it was in 2012, you know, so I'm sure that that will be a factor that will be taken into account.

Phil Jones – NPG
It is.

Bob Hull – Challenge Group
I mean, perhaps if I could move on to a further question. You mentioned your DSO in your opening remarks.
Your plan shows that you're investing about £90 million over the ED2 period to deliver the savings you've identified, sort of from DSO, but only about £12 million or so of these savings are due to contracts for customer flexibility. I think you showed it in your slide as £14 million for deferred investments.
Why is your ambition to seek non-network solutions so limited compared to other DNOs? Is this because you're investing in your assets and locking in your asset returns for shareholders instead?

Phil Jones – NPG
No, in the sense - I'm unpacking the answer the second time now, I'm unpacking the answer that I hinted at earlier. Our ambition, I don't think, is low, this is where I think we're being misunderstood.
We are willing to take a position where we think the customers will bring - deliver non-network solutions and that's where the monitoring capability - the 10,000 LV monitors that we showed on the slides kicks in because provided we can see that flexibility emerging in response to signals that are not DNO contracted flex, just people responding to very - potentially peaky price signals, in other words, put bluntly, we agree with the - I was at an event only a week ago with Greg Jackson from Octopus. They have a very clear set of ambitions of what they think they can harvest as a set of flexibility responses from their customers, and we agree with them, and we think they will accrue and save network reinforcement, and we don't think we'll have to pay anybody anything to do it, other than put the monitoring capability and the digitalization transformation in place to be able to do it.
At that point, I think we're being more ambitious. What would you prefer - that I come and say give us a big cheque and I'll go, does it - why does that make me ambitious? It just means I'm spending money. If I can do it without it, I think that's even more ambitious.

Bob Hull – Challenge Group
I think my question was on the £12 million of deferred investment compared to other companies. Other DNOs are offering much greater benefits than yourselves. Why are you different from others?

Phil Jones – NPG
That comes on top of £108 million that comes for free, so we get that first.
That's how we - we see ourselves - we've assumed in our proposals that we rinse first £108 million before we have to start looking to spend customers money on buying flexibility.
Let me make another observation on quotes 'contracted flex' - those numbers don't include what we call active network management here, where when the connectee higher up the system comes on, we build them a connection that includes the - and we do it often, and I've made several connection offers this week on that basis - where at the point of connection people are effectively contracting for a connection that's more sophisticated and they get the connection cheaper, and at that point we get a huge amount of flexibility baked in, and the rest of the customers pay nothing for it.
So, I think the comparison is flawed. Put bluntly, I think the comparison is flawed.

Bob Hull – Challenge Group
OK, but I think it's a question we can, sort of, raise with other companies as well, but again I would suggest that this is, you know, an area for further investigation by Ofgem. It does, sort of, look as if there is a significant difference here.

Phil Jones – NPG
I don't dispute that, Bob, on the face of it, the numbers are - that you've quoted are accurate and the debate you've pointed to is extremely important. I agree.

Bob Hull – Challenge Group
I think I've taken up my time so thank you very much.

Jonathan Brearley – Ofgem
Alright, thank you Bob. We're going to move on to Justin from the Customer Engagement Group.

Justin McCracken - Customer Engagement Group
Thank you, Jonathan - morning everybody. I will make a couple of comments and then ask a question. First of all, I mean, I would say the CEG, the Customer Engagement Group did see lots of evidence from stakeholder engagement that supports Northern Powergrid's approach of balancing these twin ambitions of delivering on decarbonization and maintaining affordability, and I think the recent changes that Jonathan referred to in the environment, if anything, make both of those ambitions more important.
But what they also do is they add, I think, considerable weight to the question about how to turn the ambitions into a coherent and efficient set of plans.
We've just been talking about managing the uncertainties around demand projections and those are obviously critical to devising an investment strategy that balances the two objectives appropriately, and protects customers interests. But whatever the demand, I think there's common agreement that the need for network reinforcement can be substantially reduced by effective system operation on it and full implementation of the flexibility first strategy as Northern Powergrid's proposing in its plan. So, making this happen is another key element of ensuring the network supports customers interests. But part of implementing the flexibility first approach is facilitating the development of an effective market for flexibility services and this depends on potential players in the market having confidence in its fair operation.
There is a risk of a conflict of interest, or at very least a perceived conflict of interest between the DSO's role as a purchaser of flexibility and its role as a neutral facilitator of flexibility markets. That risk, of course, needs to be balanced against the benefit of operational efficiencies that might arise by having a tightly integrated process between procuring and deploying flexibility. So, my question for Northern Powergrid is how are you going to manage this balance and demonstrate that you're managing it in the interest of customers?

Phil Jones – NPG
Thanks, Justin, and just to take this opportunity to thank you and your colleagues again for all the time you put into scrutinising things that you're accurately referencing in your remarks. I'll just very briefly comment and then I'm just going to draw Jim Cardwell, who as many folks in this fraternity would know, leads for us in in this area.
I think the fundamentals, and I touched on them in my remarks, for us the fundamental is openness and transparency. We think that the amount of information and data that we put out into the public domain is the most important confidence builder to deal with what I would agree is a perceived conflict of interest. I

personally do not believe there is a real one and I'll briefly say why that is. Often people say, well, you'd rather build copper, wouldn't you, that you'll always seek to do that?
If that were true, I've yet to have it explained to me why there'd ever have been an underspend - ever - it's the same when we decided to use a short-term maintenance-oriented solution instead of a capital one, and I've been around a long time now and spent most of my career working with people to figure out how to do exactly those kind of things.
So, I just see flexibility as another way of optimising the total cost spend, so I think just to suggest that that is a particularly unpleasant form of substitute doesn't make sense to me. It's actually one of the most exciting and sensible forms of substitution.
So straight out of the gate, I want to just try and give people some sense of - we see that as just another tool in our toolkit to optimise the total costs just in the same way as we have done all sorts of other things down the years to optimise the cost of building the asset and running the asset.
But you're quite right. What this is a much more sophisticated form of optimization because of the involvement it needs with other people, because of the dependencies on their confidence, and it's not something that I can control as an engineer by parameterizing it and doing the mathematics and then just specifying it in a standard, it involves relationships, it involves intangible confidence that we have to build.
So, our fundamental, is a stand-alone business unit for sure. I'll ask Jim to just unpack that for now; we do not believe that legal separation adds anything to that in and of itself. It's just a registration at Companies House and a set of statutory accounts in the same company so from that point of view we don't see that. We do see significant operational dis-benefits, with it being seen as something other than the efficient operation of a network going forward. But fundamentally we think the way that that business unit is set up and how it engages with its stakeholders, the information it provides, the way that it conducts its business, the way it subjects itself to external audit, will be crucial. Jim, I'd perhaps bring you in at that point?

Jim Cardwell – NPG
Yeah, thanks Phil and thanks for the question, Justin. I think, I mean just so the next level of detail, I suppose, is that optimization, Justin, that I think is where you're getting at.
You know we talk in our plan about a monitor, manage and then reinforce kind of cycle that we go through and so as has already been signalled, we're going to do a lot more monitoring, both in terms of our own network monitors. Phil mentioned the 10,000 additional LV monitors on top of the roughly two and a half thousand that we're going to have by the end of the ED1, as well as external data sources, smart meters and all other sort of publicly available information, you know, electric vehicle registrations, all that sort of thing you expect us to blend together in terms of understanding what's going on out there. But managing is really about the flexibility first policy, which is make sure we can manage and only reinforce if there's last stage, if you like - where we've got schemes and projects where it's definitely required, and it's definitely the right thing to do. So, that kind of system optimization is going to be more and more visible to people, I think, because that's not new to us in terms of those kind of processes, but it's just going to be extended and made more transparent.
So this is this whole point that Phil talked about transparency, and that's where I'd go to the DSO business unit that we're setting up.
I think the extra bit that came into our final plan and came through the sort of discussion with our stakeholders last year was to make sure that we stand up this separate DSO business unit to really spearhead these DSO capabilities, and the way that we develop them inside the organisation, so that brings accountability on the executive team in terms of - so that the outside world, and indeed the internal world, because it's a lot of culture exchange here as well as, you know, pushing these things through our organisation. We've got some really clear accountability there and it also in that DSO business unit is the

market engagement. We saw it there Justin about that kind of external engagement and trust outside, so we've got very clear accountability for going out to the external areas.
And then as well as doing that, it's that kind of checking and audit, as well as spearheading it's actually auditing and providing that transparency to the outside world as well on that decision making, so going back to that monitor, manage, reinforce - we'll show more and more clarity to the outside world than what we're doing internally, to give that internal vision.
So I think all those things coming together, Justin, are the things that we hope will achieve the balance that you're describing that is inherent in your question or explicit in your question.

Justin McCracken - Customer Engagement Group
OK, thank you. I mean, I understand the point about a separate internal business unit in terms of the practicalities. I think in terms of the perception, it's not going to cut a lot of ice outside the organisation having an external business unit and I think it is how you will demonstrate to the outside world that is really the key element here, but I have a feeling from what I've seen about the questions coming up that other people might want to explore this area as well. So perhaps rather than me pursuing this now, Jonathan, I should hand back and give you a chance to bring other people in.

Jonathan Brearley – Ofgem
Thanks Justin and look, I encourage you to chip in as we get into that debate because that feels like something that I think we will be spending a bit more time on.
I'm now going to move to Ofgem questions, so I'd like to introduce Myriam Madden, our Non-Executive Director, to ask her whether she has any questions, then I have a couple of my own, so Myriam.

Myriam Madden – Ofgem
Thank you, Jonathan, for that opportunity and I will be guided with you in terms of the choreography around themes etc. I was particularly interested in references to plans to support vulnerable consumers. If this isn't the point at which we're discussing that, I will stand corrected, Jonathan, and happy for that to be taken later.
But I mean, certainly, you know there is, I think, laudable aspiration in your plans but I wondered if you could maybe expand on some of the detail in terms of how you plan to scale up your capability, I think you referenced some of the partnerships you've developed in ED1, and I wondered if you could just provide more colour actually, in terms of what you plan more specifically to support vulnerable consumers.

Jonathan Brearley – Ofgem
Sorry Myriam, just to jump in, I think we're going to cover that in the next session where I think we'll get the Consumer Engagement Group to come back on so if there any other questions you have on infrastructure build or Net Zero.

Myriam Madden – Ofgem
No, I'm really interested in the just very recent discussion with regard to transparency and accountability around the DSO.

Jonathan Brearley – Ofgem
Absolutely, and I'll pick that up, Phil. So, you know that as we get to the next phase of this transition, life is becoming much more complicated locally than it was before.
So you know, you had you had a pipe with big stuff in and you were taking it to lots of different customers and now you have a huge mixture of what's happening locally.

And the system optimization task, I would argue is much broader than simply looking at network efficiency. We need a system that's going to optimise between generation, between customers managing their demand - can you bring to life what your DSO function is going to do, and coming back to the last question, I'd like a clearer answer on the governance of that function. So how will we know, compared to other companies that are putting in quite, you know, quite significant arrangements around their DSO - that this genuinely won't end up in an area of conflict of interest and without debating the merits of the conflict of interest argument, I'd just like to know how you're setting it up, how you think about it and what you're putting in place to protect customers interests.

Phil Jones – NPG
I think fundamentally I haven't - I guess maybe I wasn't clear enough – I haven't seen anything in the fundamental proposals, and I'd be happy to be challenged on this, where I wouldn't say we see an analogue in what we are proposing in terms of the fundamental nature of it other than the one instrument that I called out of legal separation, but in other words, what – so, what are those ingredients?
Will there be a clear executive accountability? Yes, I think we've made that clear in our plan.
Will there be external scrutiny and oversight of that? Yes, we already have - and in putting together these proposals - we've had an independent technical panel as we call it - Science and Technology Oversight Board - that reports to our board in the company, chaired by one of our independent non-execs who is well qualified to do so, with a range of experts in these - in this area who challenge our people on a - it's a monthly cycle on quarterly reporting to the board.
So, the fundamental ingredients of external scrutiny, we see that as a key part of the future role of the CEG, that we're talking to Justin, the CEG, about now.
So, is there an independent scrutiny angle? Yes, there is. Fundamentally, we still come back to saying we think that in the end trust is in the eye of the beholder i.e., the transparency and openness of the data, all of the regular reporting, the fact that we'll be audited independently, we'll bring that in, we'll publish that report. So, I think all of those fundamental agreements - elements, we see as being in place and we just don't see them with a certain badge in a certain flavour.

Jonathan Brearley – Ofgem
OK, I suppose what I've seen elsewhere in addition to legal separation, Phil, are separate boards, clear accounts of where the DSO and the wider DNO disagree and those being made public, are those the elements of what you're planning on putting in place, and then second question, just - I'd like you to expand on how you see the DSO function, so how do you see it and what's its job?

Phil Jones – NPG
Yeah, I mean, I think fundamentally - look, this is something that's developing as we - as these debates are going on, right? So, I'm not trying to say we've got a perfectly minted version of this but, Jonathan, it does remind me of two and a half/three decades ago, when the distribution companies were first set up, and as it happens, people like me and others who I know around the industry were first put in a position to start to drive the organisation through the decisions you made about your asset, and the conversation we have internally really amounts to saying – I am 100% committed to the idea, I think in these - in the model we're now in the DSO is the prime mover of the network company of the organisation.
It is the window on the world, it is the interface on the world, and it is the prime mover in the decision. Now it can't be the entire decision maker because accountability has to rest with the people who say - if we put the network together in that way and rely on those flexibility contracts, the lights will stay on, for example, or it will be compatible with safety, so you have to balance those tensions and in the end, that's one of the most important bits, I suppose, of mine and the board's job, as two executive - conceivably as

two executives come together and one says, I think we should go one way and one says, I think we should go the other.
That's - as you say, that's a normal part of business and we need to be transparent about that, but if I go into the DSO itself, I think it becomes the prime mover of our organisation. So, to try and say – well, what changes about what's happening now? Well, if you look at our plan and we'd recruit into those positions now, this year ahead of that because we think it's - whatever the outcome of the price control we think that's there.
The ability to a) handle the information - I keep banging on about that but we are starting those digitalization proposals now because they have to be there.
So the ability to put that information, to take all of that at a technical level, for instance, instead of just controlling the network at a HV level, so to speak, at the 11,000 Volt level - it will need to be capable, as you say, of responding to the same kind of interactions but down at the low voltage level, which is - explodes the number of data flows. So, in practise it needs substations that used to be equipped with analogue radios to be equipped with internet addressable protocols that are secure. That was a big part of what we started doing with our smart grid proposals, which is rolling out now.
So there's a technical layer and an infrastructure that's got to be changed, but in terms of what - how that comes to life to the outside world is all of that information then is accessible to us and can be made accessible to the world so they can see where the demand patterns are happening in a way that the moment, Jonathan, bluntly, is invisible to us, never mind invisible to everyone else. But as we put that out there that allows an enormous amount of innovation to happen outside of our block boundaries, outside of the network boundary, outside of even the electrical system boundary, as we see whole system debates start to spark.
Then on the human side of it, as we've been clear, we see ourselves adding a business unit that doesn't exist with skills and capabilities that are not in the business right now, particularly with people whose job it is now, we don't - we have it in a very kind of embryonic form, but as it grows out, these will be the people that interact – they're often described as the local area planners, the energy planners - the people will be that huge facilitator and that active ingredient in the dialogue with the people who make those issues, particularly the local authorities. That came up, I know, in other discussions and it's true for us, that's why we've got 6 to 30 of ours versus whatever it was – 30 to 120 in UKPN for instance. That changes the day-to-day dialogue about the way we make decisions so, bluntly, in our organisational model, the prime mover becomes the DSO as far as we're concerned.

Jonathan Brearley – Ofgem
OK, understood, can you just - just one point of clarity, Phil. So, when you've got those two executives in front of you, the DSO and your wider DNO team disagreeing, and you go with something that DSO disagrees with, are you going to make that public?

Phil Jones – NPG
Yes, absolutely.

Jonathan Brearley – Ofgem
OK, I'm going to hand over to Steve. I should say we spent quite a lot of time on this session and I think our revealed preference is, actually, there is more in this session than the next one, so I suggest, Steve, that I'll leave it up to you to decide when the threshold of questions have been reached.

Steve McMahon – Ofgem

Yeah, absolutely. And I think there's a few questions just building on this discussion. So, I think first up we're going to go to Rachel Fletcher at Octopus so hopefully Rachel has got her camera enabled and we can bring her in just on the back of some of that flexibility and DSO discussion.

Rachel Fletcher – Octopus Energy
Thanks, Steve and hi, Phil – good to see you.
Yeah, so I mean, obviously we're really interested in the flexibility first approach. We see it as absolutely essential to achieving Net Zero quickly and as affordably and critically engaging customers in this and allowing them to have another tool to manage their energy costs.
I mean, you've covered some of the criticisms around, you say, the false perception about you making less use of flexibility and less ambitious than others, and I just wanted to pick up on your - some of what you've said, which I think I understood as saying actually because of your monitor and manage approach, you are actually going to be making more use of implicit flexibility that arises as customers respond to other price signals and then on top of that you will have your own flexibility market. And I guess my observation is that actually the current price signals, whether they're coming through the wholesale market or whether they're coming through network charges, really do not reward customers for shifting their energy consumption. So, I'm quite interested in how you've arrived at this sense that there's about £100 million worth of, I think you said, of free flex, even before you need to, sort of, offer flexibility market access. Thank you.

Phil Jones – NPG
Thanks, Rachel, and look again we - first up, we have arrived after much serious thought but it leaves in it much serious uncertainty and so I'm not going to hide - I'm not going to say - oh yeah, we figured this out and we've got the absolute right answer, we've stopped thinking about it - not at all. But we have - and again I'll bring Jim in in a moment who was instrumental in this work for us, but as Jim, myself and a number of the team really worked this issue as part of this plan, we have explicitly and we made the assumption that bluntly, you guys and your peers will be in a position to have time of use tariffs.
We have made the assumption that that's what will be happening. If it's not, then we wouldn't - we would need to rethink that position, make no bones about it, but we have assumed that that will be part of the equation one way or another, and what would it be - almost 15 years since we started talking about the smart meter programme?
I don't know how bold that is, but I just couldn't bring myself to make the assumption that we would have a 2023 to 2028 period where that is not accessible to customers in the retail market, and once you start to think about that and think that what drives us is peak and I'm sure you know what I'm about to say now, so I'll be brief - that we think that that peak flattening just around peak pricing that we see in shoulder periods and all the rest of it, itself - all the evidence says, and we agree with those people who say it will, that brings an enormous amount of flex.
So, for us to suggest that the ex-ante funding for our company should be predicated on that not happening, seemed to us like the wrong answer.

Jim Cardwell – NPG
The key three things that we think will bring this will be smart meters, market wide half-hourly settlement - we're engaged with that programme with Ofgem. Obviously supply led and - but we think that's going to make a big difference in terms of having cost reflective tariffs out there in the energy market and allow customers then to, for, well, companies like yourselves to bring forward propositions that allow people to reduce bills or reduce carbon, whichever they're interested in, or both, and I think what - so, we've been pushing that message for a long time since we've been doing our stakeholder engagement on our plan

since about 2019, we stuck out our DSO strategy documents and we were certainly sharing those messages and they've been reinforced by those discussions with stakeholders like yourself.
We think that's meaningful and what we've done just to sort of, you know, how have we done this? I think I saw one of your questions in the chat, which was about how have we, you know, sort of formed a view of that? How do we quantify that? Well, our modelling and analysis has taken some of the most significant technologies, particularly electric vehicles, I guess, and had a think there about how some of those customers' behaviours will change, how those peak usage patterns will change on the network and allow us then when we take our forecast of energy futures and take those regionalized views of those, it allows us to compute that and then work out which of our - the circuits they're going to come under, could come under stress and need intervention from us in the future, so that that's the way it's been worked through the system.
So it starts out the policy, it's then got the stakeholder engagement angle, and then it's absolutely through to the analysis and modelling that underpins the numbers that are then getting into our plan.

Rachel Fletcher – Octopus Energy
Jim, I think it would be great to take this offline and have a further conversation, because I think, you know, do customers respond to price signals? Absolutely, and we and others have shown that. The problem is that we've shown that through time of use tariffs that are currently - are entirely synthetic, they do not reflect costs that come through the system because, you know, we don't have a wholesale market which is geographically granular, and we don't have - frankly, we don't have dynamic distribution use of system charges either.
So I think it would be really good just to kind of examine the assumptions because I'm worried that your assumptions are based on, if you like, what we and others have seen around demand responsiveness, which is, you know, is based - predicated on a lot of tariffs that frankly are not commercially sustainable but that are in the market currently as proof-of-concept tariffs, and it's not the place to talk about it, but obviously I know with the Ofgem is looking at DUOS charging reform etc, etc. But none of these things, as we all know, happen quickly, so it would be good to circle back on that.

Steve McMahon - Ofgem
OK thanks Rachel. I think just following that we've got Helen Stack from Centrica that will follow up, now CLASS is mentioned in that - CLASS is something Ofgem set its view on shortly I think ahead of the price controls, but maybe just focusing on the active network management part of that, Helen?

Helen Stack – Centrica
Yeah, absolutely. So, there are couple of things in NPG's DSO strategy that I'm concerned about where they plan to operate in the competitive electricity markets. And so first is, as you've mentioned indifferent to CLASS - I know that's subject to an Ofgem decision, we're really concerned that they're planning to use active network management to provide flexibility services commercially to the ESO, and could you explain how that squares with the DSO acting as a neutral market facilitator? And perhaps if I could add - my other question is that also in the same strategy - although Ofgem said in its sector specific methodology statement that DNOs should not be aggregating flexibility directly through to the ESO, NPG's proposing to actually aggregate response - is actually proposing to do that through its own platform. So, my question on that is why is NPG not proposing to...that should be over an independent platform to ensure neutrality, as I think UKPN is proposing?

Phil Jones – NPG
Thanks, Helen. I think I struggled to catch some of what you said, but I definitely got the gist and I'm going to let Jim dive straight in because all of your questions are at the level he makes a lot of the calls for us, so Jim?

Jim Cardwell – NPG
Yeah, sure, hi there Helen - good to see you. I think we're more in step with you than you think, and I think I would like to have a deeper conversation with you - so thanks Rachel for your offer because I would like to share with you that one but also with yourself, Helen, because yeah, we are fully on board with being a neutral market facilitator.
We haven't walked away from that, just to be really clear, and we also recognise and respect the difference here between the sort of the regulated arena and the competitive markets operators like your good self, yeah, operating in that.
So, I think the area where we have explicitly said that we can see opportunity for us to interact with the ESO is on active network management - is on where we, as I think it was Phil saying earlier, where we curtail at the point of connection. So a customer comes to us and to avoid a large reinforcement cost and where flexibility is not an option in terms of contracted flexibility, then we can go with a curtailed generation capability and that of course - that constraint might be on the transmission system, or it might be on the distribution system, that peak that's the problem with it, the generator output, and we've already got, you know, 430 odd megawatts of curtailed generation, Phil just described there. He's signing these things off all the time.
We expect that to rise to about 540 probably in the next year, it's probably going to triple through the course of ED2, probably about 1.2 gigawatts is our, sort of, best view but it's very highly dependent on our connections customers and their ambitions and what they want to bring forward.
But the point is, Helen, is about where the constraint is. So, if you're a generator connecting to our system and the generation constraint might be on the distribution system, or it might be the transmission system. I guess our point is that if you're connected to our system then it needs to be - if there is a curtailment flexible connection there, then it needs to be us who's triggering that, but it might be to the benefit of you as a customer, because you're saving on some transmission reinforcement costs, so that's what we're talking about there, and I think we're not - we're not talking here about aggregating customer flexibility in the broader sense to then sort of sell that on, if you like, to the ESO, if you like. The only other area where we’ve called it out and you, yourself and Steve mentioned it there, is on the CLASS initiative where we'll use network assets, potentially here to optimise on our system which allows us to give a regulated service, but that all depends on Steve's policy when Ofgem give a policy verdict, if you like, for ED2 because there isn't one at the moment, but we said that we could offer that service albeit I would just link to - because we've said that actually with the voltage optimization proposal we've got in our plan, we think there's more benefit for our customers to use that network voltage that we can change to give people savings on their whole energy bill, there's a kind of whole system initiative that we think has got much more value in it than actually us providing CLASS services through the ESO.
So they’re the two areas Helen, hopefully that helps to clarify, but happy to dive into a bit more detail offline if you like.
I'm really interested if there's bits of our plan where you've got a different view of that, but that that is our position.

Helen Stack – Centrica
I think that perhaps if I could just come back briefly on that. I think, the feeling that we have is that perhaps the DSO governance and separation isn't as deep in your plan and that therefore creates a perception

when reading some of these things, some of these other parts - sections of the strategy and secondly on an endpoint, I think that if those services have been provided to the ESO, then that really should be developed into a market as I think they're trialling with UKPN and WPD.

Steve McMahon – Ofgem
OK, thanks Helen.
There's a few questions in the sidebar that are probably more linked for the second session, so if I could just follow up on this DSO theme directly so, Phil or Jim - you're spending, or you're proposing to spend over £90 million enhancing your DSO capability. We've talked about the balance between your traditional reinforcement and flexibility and whether you're doing enough to exhaust those opportunities. When you look at those DSO capabilities and how you target investment in the right places – is that going to come quick enough or are we saying that the benefits of that are going to come further down the line?

Phil Jones – NPG
Steve, do you mean the benefits -

Steve McMahon – Ofgem
- from DSO, so the investment in DSO, so we talk about the likes of LV/HV planning models that you've got in your plan. Are these giving you the information that you can make good investment decisions now?

Phil Jones – NPG
We think so. I mean, we - there's a reason we've decided to start early, as I said earlier, so some of the things that we know we're going to need, we're already setting up. We're not waiting for the price control proposals to decide where it stands, as we do, as we, inevitably, we would with many decisions that go with the price control final determination, so we think so.
Does it mean we'll always find ourselves leisurely ahead of the curve? Of course not. This is going to be a very uncertain...and that's part of the challenge and the excitement for us. So, no, we think the start we made in ED1 with our smart grid proposal that is being implemented now has given us a significant leg up in that respect. We do need to make - we do need to make progress on the LV monitoring fleet for sure because that, as Jim says - we think we'll end with about 2,000 and we need to get up to the 10,000 mark. And again, the quicker we get those out there the better, but again it gives us the platform to do that. So, there's the fundamentals and then the other piece that comes with it as an input measure. Steve, if I'm understanding you're question right, is around the digitalization programme and that again - that's something that we have started the ball rolling on already in terms of some of the longest lead time items. Even this week, we've been spending time on that discussion internally around the network management system that I described earlier that would need to be able to reach all the way down to the bottom of the of the network and integrate all of those other sources and, I'll say to you - the next generation of those systems will do the same thing for third-party assets as well as the ones the ones inside the DNO fence. So there's a huge amount of change to come but yeah, we have - we've spent a lot of time thinking about it, we've got the road map. We've got to deliver it, but yes, we think it gives us enough time.

Steve McMahon – Ofgem
OK, and just - if I may, just changing track slightly just to looking at your non-load spend and asset replacement. We look at the scale of reinforcement that's been proposed - if you analyse that – ED1 against ED2. It's quite a significant increase and deliverability comes in, but if I look at your - your non-load spend - and I know that a lot of your network is overhead wire maybe compared to others but the run rate on LV wooden pole replacements is significantly up on ED1 - so these things just don't happen

automatically on day one of the price controls, there's a huge amount of logistics that will be involved in that. So, is that actually deliverable, or is it another area where there's quite a big risk that you underspend and you don't deliver it?

Phil Jones – NPG
I don't think, well - we don't think it's a big risk, Steve, we've acknowledged that it's a cyclical problem.
So if I just again put the two things - breakout the demand from the on the ground capability we have been - we have seen this coming. If you go back to the end of DR5 and our longer term asset management plans we were always saying that we thought the 2020s would be the - kind of, the decade of the wood pole construction overhead line as opposed to if you look back previously, our themes – you'd have been asking me questions about EHV assets that were again - they were at their peak and now it's time - now it's the turn of that asset. So, we have been gearing towards that. If you're looking in our deliverability strategy, we've been very upfront about that with our providers and they've had sight of all of those things. The message from them always is: give us clear sign of pipeline.
Now, for them long term commitments, in that respect, typically one year is not long, three years is getting long, so we think we're in the hunt. Would we go straight to a linear run rate from day one to the end of Year 5? Of course not, there'd be a ramp involved, but we think it's doable and we've been there before at those sort of peaks.

Steve McMahon – Ofgem
OK, just very briefly Phil, looking at - obviously you sustained quite a bit of damage with Storm Arwen recently. So, how much is that replacement work that you've done over the past few months affected your ED2 programme? Is there any significant change there?

Phil Jones – NPG
Not significant, I'm not going to say none but no, not significant. Clearly it's drawn attention - and obviously those conversations are ongoing - does it have policy questions for us and I know that I don't want to get ahead of that issue, because obviously that - we're not very far away from reaching a landing on some of those reports that Ofgem and BEIS are doing, but it clearly begs some good questions about – Ok, what does it mean for age profiles? And so is there a tweak to the policy around what we should target in terms of those resilience spend but for us, we see about a billion pounds - it's still our biggest spending area, is resilience, let's not forget that. For all of the step up that we're proposing here, the biggest spending area in our 12 areas is still resilience.
It's still a billion pounds over the five years that we see ourselves spending in that space, and it's more than this period. So, yes, it will give us some fine tuning, I think, of our selection criteria. If I think about some of the very significant damages we saw in some of the more exposed regions.
Of course, it will cause us to think again around tree clearance policies in that part of the world and exactly what the constructions are in some of those parts of it, but does it fundamentally change at the five-year aggregated level? We don't think so.

Steve McMahon – Ofgem
OK - Myriam, I don't know if I want to come back - do you want to follow up on this DSO point and then we'll maybe wrap up the session after that subject to anything final from Jonathan?

Myriam Madden – Ofgem
Yeah, just very finally, Steve, thank you. So, you've set out that you've landed on the standalone business unit as your structural option, so presumably your board have gone through the pros and cons of the

trade-offs of that option, as opposed to other options - for example, a separate legal entity. Could you share with us some of the deliberations and some of the pros and cons that your board weighed up?

Phil Jones – NPG
Certainly, I can and again, I'll just draw Jim into that conversation, you might not be surprised to know he's had a lot of analysing to do in a very significant request for information that we responded to with Ofgem since the plan was submitted as well and that's not in the public plan, and it's not been published for very good commercial reasons across the sector.
But there's been a lot of work since these plans were published in December on exactly the kind of questions you asked.
So first let me clarify, the separate legal entity in and of itself - I mean, right now in regulated business land, two separate legal entities are talking to you now, Myriam in the Yorkshire and North East licensees.
So, the idea that simply we set up a legal entity and allocate the cost to it is an accounting and legal construct at its narrowest.
A set of separated behaviours, for example, around - with or without legal separation, is really where we think the distinction comes, so the kind of things that came in the discussion with Jonathan.
So, we think that's what makes a difference. So in terms of the pros and cons, we think that the fundamental problem with ultimate separation, taking it - seeing them as two completely different things - they're not two parts of a very important healthy tension that has to be brought into balance, they're just put at arms - complete arm's length from each other, and effectively are in two separate - really two different companies and conceivably two different ownerships. We think that loses a significant - well, the evidence is pretty clear; the benefits of, the dis-benefits of separation are very, very large.
Again, can people analyse that with absolute precision? Of course not. So, as we were presented with that information and decided what to - what our position would be in returning back to Ofgem on it, it was clear towards that - the duplication of systems, and most importantly, the lack of optimization. The big win for the DSO as a visibly transparent, independently-minded part of a DNO, if you want to think of it that way, is that it forces us to internalise that trade off that Jonathan described earlier, where sometimes everyone will agree, and other times different people will see it differently. But in the end, a company who's on the hook for the whole thing to work has to internalise that benefit on behalf of customers.
And we think that is the fundamental reason to choose the independently-minded standalone business unit and not incur the costs and of separate – of duplicating systems, and incur the ultimate cost of everybody being able to say it was not me, it was the other person who said we should do it. I think we think those two things together are the are the biggest factors in the consideration.
Jim, would you add anything to that?

Jim Cardwell – NPG
I think I run the risk of repeating everything you said, Phil, so I might just say one thing, Myriam. So, Phil's just laid out, I guess the costs and the benefits and our view that we think that increasing levels of separation brings increased cost and diminishing benefits, so that's not a good thing to do for our customers.
And at its heart, we think that keeping the DSO and DNO functions with that sort of regular routine, fluid flow of information albeit with additional scrutiny, transparency to earn the trust, we get it - there's no kind of answer here which doesn't mean that we mustn't maximise the transparency. We think it's the best way to deliver all those benefits and reduce the cost that Phil's just outlined there, which I will not repeat.

Jonathan Brearley – Ofgem
OK, can I just have one last supplementary question and then, Steve, we'd better wrap up and give everyone a break and move on to Section 2, unless, Steve, there's other questions you want to highlight. Guys, I'm not really clear on your answer here. So, are you saying legal separation is just an accounting and legal construct and therefore doesn't matter?
Or are you saying it's a fundamental change that means you have to duplicate costs and ultimately you're going to have no coordination because I'm not sure which of those two worlds we're in.

Phil Jones – NPG
OK, then I'll try and be even clearer, Jonathan. If legal separation inside the DNO entity i.e., it's a subsidiary of the DNO, I think that doesn't matter very much, if at all. I think that's accounting, and I could - we could have the registration done by the end of the week at Companies House and the accountants would have another set of accounts to publish.
And the licence is still singular, the obligations would still rest on the DNO, it would still be the same group of people who hold a duty and the board of the DSO in that respect would owe a duty to the DNO.
So if you tell me that's an independent - lack of conflict of interest, I don't believe you.
If you separate the ultimate ownership, I think it's a disaster for customers because of all the reasons we just outlined.

Jonathan Brearley – Ofgem
So, OK - just to play back to you; if collectively we thought that there were merits in legal separation, that's not a problem for you, because there isn't much change, is that right? But if we separate ownership, you think that's a bigger step?

Phil Jones – NPG -
I think that's right, yes.

Jonathan Brearley – Ofgem
OK understood. Steve, is there anything else you want to –

Steve McMahon – Ofgem
No, I think that's covered it from this. There's probably a few things or questions that we can pick up in the next session, so I suggest we take a five-minute break.

Jonathan Brearley – Ofgem
If there's anything else you want to highlight we have a couple more minutes but I'm just very conscious of time.

Steve McMahon – Ofgem
No I think we're OK.

Jonathan Brearley – Ofgem
Alright, listen, Phil and Jim thanks very much I think that was a full set of questions and I suggest we take a five-minute break, so I'll see everyone back at 20 past. Thank you.

BREAK

Jonathan Brearley – Ofgem
Ok, I think we're all back, looking around the virtual room, so let's move on to the second session where we're going to focus on delivering world class services and ensuring no one is left behind. So first of all, I'm going to ask Jenny from the Customer Engagement Group to offer remarks on the company business plan and any questions you might have.

Jenny Saunders – CEG
Thank you. So, Phil, as you know, we supported your ambition to insist a greater number of customers in vulnerable situations and welcome the significant increase in spending that you proposed but we also expressed some reservations that we want to probe a little bit on today.
So firstly, in terms of interpreting the data that underpins the targets that you set, I think we were looking for some assurance that the targets are - that you've decided on - are meaningful and realistic.
So, you've got 50% of people across your region deemed to be vulnerable in some kind of way, two and a quarter million deemed to be in need of the most support during a power outage and around 20% living in fuel poverty. So, we're kind of wanting to explore how confident you are, that you've, you know, you're able to identify these people and prioritise your services to them.
Secondly, in terms of delivering your social programmes, it looks like you're relying quite heavily on community groups, on third-party delivery agents and we're concerned, I suppose, about the collaboration, the coordination that you'll have to manage in respect to that to maximise benefits to people. So, I want to ask a question about that, but firstly, can we focus in on Storm Arwen. So, we recognised obviously that your business plan was produced before the storm hit, but clearly, you know, you're thinking about an action plan, things that will need to be enacted, and after the lessons learned from that incident.
What I want to ask is specifically what lessons have you learned that you're now going to be applying to the business plan? Are you going to be making any changes to your outputs or your outcomes? Thank you.

Phil Jones – NPG
Thanks, Jenny.
As to whether - I'd have to just reflect whether off line – Jim may have a view on this - as to whether they would trigger a regulatory outcome or output change, but if we could have - if we're comfortable that the people who need this help are probably not going to be too hung up about whether it is or isn't in one category or another in a regulatory mechanism, are we're going to be changing what we envisaged, can I put it that way, as we're in the dialogue with yourselves? The answer is - it's certainly, yes but more than - I think I'd say more than that, it brought it into a much clearer focus for us.
I think the experience - and I can just speak personally, obviously that was one of the most challenging periods I can think of in terms of operational response and what it allowed us to get up close to and I know that experience was repeated for many, many, many of our colleagues as we were involved in that unprecedented situation for us.
I think what it did better than say - oh, we've got our plan wrong - it just was like it was those - it was those things we're seeking to do on steroids, if I can put it that way, because it showed us much more visibly.
So in a sense it was just a very high definition case study, if I could describe it that way, of what it becomes like to have that level of clarity - to your point on data which we will come to - and knowing where those people are and knowing how what we're doing overlaps with them, where the risk is, how we can best help some of those things and I think – so, if I come to some practical examples, I think what it showed us and the things we've already been doing in the storms since then - it's not just one storm, we had seven on the bounce. So, knowing where our most exposed communities are as the weather forecast is coming - I mean, we wouldn't just, kind of, send out the fire engines, if you will, to every property. You'd have a view like - this is where we think it's going to hit. Pre-setting some of those community hubs either with the

generator from our point of view, or a property that - I don't know, a school or public building - those kind of things, to make sure that they're available. We did more of that, proactively for some of the 3rd, 4th, and 5th storms.
So those are good examples of where we're actually deploying - because we've got people on the ground, and one of the exciting and positive things about that is just how much impact that can have - I know I don't need to lecture you about that, but just how much impact that can have was a real eye opener for our people on the ground.
And it doesn't need armies and armies of people. It needs some preparation and it needs us to know that in this case, these are the places that are most exposed and if we dispatch these six facilities to these places - and the local partners are very, very good at that - so, the active parish councils. But I'll be honest with you, some are better than others and I think what we'll see is that that will itself create a best practise dialogue, if you like, through the LRFs, which themselves, I think, will become one of the - again, we've already seen it in the four or five storms since Arwen and Malik. The local resilience forum’s been much more tuned to what they need from us and what they can do and again, those dialogues are open now, so we see that as this year’s business, not the ED2’s business to put some of those lessons into practise.
So, for us inside the DNO, everybody who's followed this at all knows for us it was a challenge around the - communicating a more sophisticated message around worst-case scenarios and how we get that message out to the people that are affected most significantly coupled with how, then, we deliver into the communities in real time. Now the baseline proposals that we've got in our plan here are not talking about the kind of resources that are needed when the sky falls in like that, but that's where we turn our organisation into 100% storm response and people are trained to do those other things, which is what we've been doing during the recent storms.
So, does that answer your question Jenny in terms of the sort of the bringing it - it brought it to life, if you see what I mean, and it has been in real time since December.

Jenny Saunders – CEG
Yeah, thanks, Phil. I suppose to push you a little bit further on data identifying people, you said it exposed some things.
You know, is your Priority Service Register - you're going to be doing more on that but, you know, what more do you think you need to do? What kind of communications? How are you going to compensate people quickly? You know, there are things that we've heard have come out of this, but are you going to change some of your business plan to reflect that?

Phil Jones – NPG
Yeah, as I said, in our minds – we can’t go back and rewrite that document that was minted and published on the 1st of December, but have we already changed our approach?
Yes, we're already doing it, we're already making those commitments in public around communities, village halls, LRFs and I'll say it again today. So, for example, have we changed the way we communicate during storms? Well, yes, and I don't just need to say that people were affected - we've got that feedback from customers in those storms saying this was much better, thank you. Do we need to learn the lessons from some of the early compensation Arwen lessons? Yes. We already - we sat, we talked about that last week as a management team, the enduring process for getting as much of the automatic payments out as accurately as possible to start with, I think, has taught us a lot, and there's a good balance to strike between those things.
And again, we've done it for the more recent storms, and it's gone - it's going pretty well. Are we've finished article on that? Of course not. Have we had time to industrialise that in our company yet? No. Will we have done that by the end of this year? Yes.

So, do I think of that as an ED2 business plan thing? Well, yes because it will be part of the fabric of how we run the business by – well, it already is.

Jenny Saunders – CEG
OK, thanks and going back to the delivery of some of your social programmes and working with delivery partners. Do you have concerns about how you're scaling up and, you know, how you're going to coordinate with those agencies that are already stretched?
I mean, that demand's going to be huge. This is a big problem; affordability, understanding what people can do to cut down the bills, reduce carbon, all of that leaving no one behind. But do you think some people have said that you're maybe not ambitious enough on this?
But it always - it already is such a big step up for you so how are you sure you got the balance right on that?

Phil Jones – NPG
I think you gave me the hint of - or you pointed at what I think is the answer in the close of your question. Will we ever be able to do enough to have no concerns, no. As you say, even if it wasn't the exaggerated concern that we would have now as a result of what we've seen in prices and just generally that, you know, in the last three or four months.
If we just, for a moment, optimistically say to ourselves, look - in time that will pass, it will still leave a step up that, as you say, is off the scale compared to where we've been before. So, for, from our perspective, we saw it is much more important that we could deliver a manageable step up - a significant one, but a manageable one - and then will that be the - I suppose one way to think of it is - will that be the end of the story? No, I'm sure it won't. I'm sure we'll learn a great deal about that.
I think there are some legitimate questions about what are the things we're best placed to do, and I think we'll learn more about that, and I think we've been challenged in that area, both positively and I'll say in the right sense, everything's positive in the challenge sense, but there's some of the challenges - you shouldn't be doing that, you're not the best place people to do it, you should be leveraging someone else - so data sharing with other utilities is something that's active right now, for instance. Information sharing with the LRFs and their key agencies, we think, is the most significant – well, I think from my experience over the last few months - is the most significant gain that we can see.
Do I think we've pitched the balance right? Well, we think so. because we think we've stepped up to the point where people were asking us questions; are you sure that's better - not done better by someone else? OK, then we need to bring some people into our organisation who have got different experiences and different expertise and think differently than we do about some of those things, and then I think that'll build a platform from which we - I imagine we'll build again going forward, but we think we've balanced - again, we've balanced ambition with affordability, and in this case balanced it with deliverability. We would - the last thing I would want to do in this case is paint a picture and then find it was too ambitious and actually it was the second phase, really, of what really is a two - perhaps a two-stage journey.

Jenny Saunders – CEG
OK, thank you, those were the sort of areas I most wanted to explore, but I'm sure other people want to come in.

Jonathan Brearley – Ofgem
Thank you, Jenny. I'm now going to hand over to Helen from the Challenge Group.

Helen Parker – CG
Great - thanks, Jonathan and good morning, everyone. Phil, I'm going to concentrate on a couple of questions around reliability and vulnerability, and forgive me in advance if I circle slightly back over ground we might have touched on already, but you know they're both crucial areas, aren't they? So, I think it's worth it.
So maybe, sort of - context for this; obviously we had the opportunity to look at all the plans, and I suppose when we saw your plan both in the area of reliability and vulnerability as we said in our report, your activities that you proposed there represent, you know, really important - let's call it catching up with other DNOs - reflecting what was probably comparatively poor performance in both areas in ED1. So, for that reason, these proposals are really welcome and also necessary. So, on reliability, where I'll start – I mean, you say - and you touched on this earlier - but you say yourselves, your own words from your plan are that it will take you two price controls or 10 years to deliver what you call a modernised reliable network.
So, you know, in the context - you've talked before about the balance, but in the context of what you've experienced, you know this torrid experience you've just had in the storms - how have you reassured yourselves – how have you and the team reassured yourselves that that still represents an acceptable and appropriate response?

Phil Jones – NPG
Thank you, Helen. I think, well, I did say earlier but just to remind folks, I think in my comments around the reliability proposals that were on that slide. They do help, they're not irrelevant in a storm response but they are at the front end of the storm response, they just enhance our ability to do a little bit more of the quick restoration, they're not – having the ability to operate a network that is on the floor remotely is no help to anyone, obviously. And again, if you look at our performance in those storms, our early phase response is right in the normal sweet spot of what you'd expect to see coming back after 12, 24, 36, 48 hours. It will get a bit better with these proposals. The real distinction is – that it gives you is in the routine performance and we're talking about marginal gains now. The whole of this sector delivers world class reliability and availability, and we're one of the companies who are in, we've consistently been in the leading pack this period of companies who've performed relative to the targets set for it.
So, I don't want to mislead anybody, we don't see ourselves as a backmarker in that respect, our customers are getting what they've been paying for and they're seeing us deliver against the targets set but there's inconsistency across the sector and all we're trying to do is say we want to close that gap.
So, in storm terms, will it make a difference? A bit, yes, because it'll mean there's more availability to do quick restoration without sending someone out to site to do those things and that helps but it's not really going to change – as what you accurately describe as the torrid challenge that we had of very significant damage where a lot of repair was needed – people were off for a long period of time, it doesn't help you with that. It's much more about the day-to-day, week-to-week response, and, bluntly, delivering for our customers what they – what they can see in some of the comparisons you've talked about. The 10 years point – that is simply us – think about the numbers we talked about in the first half of this session. 65 million doesn't sound very big compared to some of the telephone numbers that have been talked around in the context of investment for decarbonisation - so is it a money thing? Is it a capability thing? No, it's much more out of the very detailed stakeholder engagement we did around - well, what's the balance? Would people really value it so much that we pushed a 130 million into the next five years? Well, our evidence was that it wasn't quite that strongly valued so we just thought we'd struck a balance. If someone said – we'd like you to go twice as fast – we're not closed to that. But we do think there's – and again, it was the big message; balance, affordability and ambition and that's what we saw ourselves doing in that respect.

Perhaps, just invite Alex, I know you were right in the middle of all that, if you think there's anything we should add to that comment, please do so now because I think it's a crucial point we want to make sure is made.

Alex Jones – NPG
Yeah, thanks Phil. I think just, Helen, the only thing I'd add to that is just the additional feedback that we had from stakeholders around targeting that investment at the poorer performing parts of the network so clearly that £65 million automation program is critical, that we put that in the places that it's going to deliver the most value for customers and that was really something that we heard very strongly coming back.
We've obviously got our proposals of just over £4 million for the fairly narrow definition – Ofgem's fairly narrow definition of worst served customers, but our wider reliability plan is - has a number of other facets to it that try to just go wider than that and try to address the concerns that customers have around longer running outages, so six hours where customers, you know, rightly, you're getting into another meal time, for instance, that affects the experience and then multiple interruptions as well where we've got, sort of, you know more than five interruptions a year coming.
So, we've got a series - a package of measures but I think the key is that we target our investment where it's going to have the biggest bang for its buck.

Helen Parker – CG
OK, understood. I mean, just a couple of things to come back on that one. One comment, I suppose - being agile in your ongoing engagement with customers, I guess, will be really important for you because you know stakeholder engagement is not an event, it's a process, and it's ongoing.
So, constantly listening to that as you go forward, I would encourage and challenge you to do that because people will probably feel differently today than they did six months ago and in six months' time there will be a different view, so keeping alert to that sort of changing position, will be really important.
The point I wanted to come back with a further question on, Phil, was you talked about the targets, so you talked about, you know, you've been exceeding your reliability targets in ED1 and, you know, I think I'm right in saying there's a general - you know, which is great - but there's a general concern that maybe those targets were too soft, were too easy for DNOs to achieve, so I suppose what I would say - you know my experience of setting targets in the past is you want them to be realistic for teams, but you also want there to be a sort of meaningful chance of failure, if I could put it like that, because otherwise they won't drive transformational change, and obviously you're being rewarded, you know, very richly for your delivery on your reliability targets.
So I suppose my question in all of that is, can you reassure your customers that you'll only be asking for, you know, many millions of pounds more reward for reliability if you deliver a transformational change in your delivery approach in that area.

Phil Jones – NPG
Absolutely we can.
It is a fact that the proposal we've put forward - they're tied to the targets we've published and they themselves – in other words if we don't, if we - we're happy to be challenged on it, but the analysis stands up and we present it in a lot of detail. Without that capability that benchmarks comparably to other companies, there's no surprise that targets that themselves are related in some way to what's achieved elsewhere in the industry requires the kind of capability that we can see, and we illustrated in the gap. So, without the investment, you don't hit the targets and if we don't get there, we don't make any extra money.

Helen Parker – CG
OK, and I guess it's not just technology, is it? It's mindset and approach and doing it sort of as cost effectively as possible. So, do you feel like it's a kind of whole system change you'll be adopting there, not just sort of buying and sticking in some technology that perhaps you haven't done in the past? You know, my crude way of putting it, but you take the point.

Phil Jones – NPG
I do indeed, and I think we've - and I'm glad you said it because it does allow me to say something I didn't think would necessarily come up today I feel as though we've been given virtually no credit for one of the most innovative proposals I think I've seen for a very long time, which are the micro-resilience microgrid proposals, that themselves are - we think they're the next generation of reliability. Now, that won't transform the sector in the next five years but a world where we can see that deployment of microgrid type technology in the far - in the further flung regions, which we've got plenty of - in the long term, we could see being a game changer. It won't change the CI/CML numbers that are reported in macro at company level in short order, but in terms of that change, then yeah, there's much more to it than just the flagship £65 million automation programme I've shown you, but that is the fundamental driver of the equation but around it, there's everything else as well, yes.

Helen Parker – CG
OK, thank you, let me move on, so my other question returns to vulnerability and Jenny already touched on your Priority Services Register. So, this list of customers, the way you've identified, and it allows people to access, you know, it's so crucial, isn't it? Because it allows people to access this enhanced and very necessary level of extra service in the case of a power cut.
So, I know you have a very large proportion of customers who are – live in vulnerable circumstances, and I'm sure that's even higher now because, you know, as fuel price hikes and energy price hikes really start to bite but, you know, the commitment that you were making in your plan to try and register 50% of those eligible customers by 2028, so you know, in sort of – the end of the price control, seemed to us very low comparatively with other DNOs, so some of them were committing to like 80% plus registration.
So, you know we're concerned by that, because obviously that is the gateway, isn't it, to these services? So, what have you done to kind of challenge yourself as a board, as a leadership team to really be sure that that's the very best you can do in this absolutely critical area?

Jonathan Brearley – Ofgem
Helen, can I just jump in? I just want to supplement that question, Phil.
Do you think it's acceptable that you only have 32% of your eligible priority service registered customers on your register right now, given the needs they have and the concerns they have, particularly when you have events like storm Arwen and I'd like a bit of an understanding as to why we're in that position today, and I'd like to supplement Helen's question with a question as to whether shareholders should be funding an improvement in that score rather than customers, given this really is a baseline expectation, we'd expect from our network companies.

Phil Jones – Ofgem
Jonathan, there's a lot in that and a lot of it comes to lots of information that's got lots of important distinctions around the baseline, so I don't really want to dive too deep into the weeds, around 30 versus 50 versus exactly what it is.

I think the - as to what - if it's a baseline expectation, then I think the fundamental is what is that? What's the cost of getting there? And I think that to my mind that's what this process is about, because I - I'm struggling. If you mean, ought that to be some sort of unfunded catch up – look, if there isn't - if there's an obligation, an expectation that we should have hit that we haven't, then that's a conversation we should be having with your team and -

Jonathan Brearley – Ofgem
Forgive me, Phil - I'm talking about a modern network company in 2022, taking its responsibilities around vulnerability seriously.
Now, Ofgem could have a list of targets for you and we could just rely on those. We could ask you to take a leadership position, take responsibility for your customers and to make sure you know who has special needs in a world where we see events that we're going to see much more of, like Storm Arwen?
So just as a leader in this industry, do you think that is the best place to be in?

Phil Jones – NPG
To be in the position you describe? Yes.

Jonathan Brearley – Ofgem
Yes, having only 30% of customers registered.

Phil Jones – NPG
Oh right, sorry - well, Jonathan, we're not going to be - we're not going to want to be the tail of a situation like that, that is for sure. And if that's the situation, then as - if that is demonstrated to be the situation and we're clearly off the pace, then I know you won't be shy in continuing to challenge as you just did, and I won't be shy in continuing to close that gap.
But I'm not going to sit here now and say, OK, that gap is exactly what it looks like at its face value, there's nothing more to it than you just said so, you can put us down for that number.
We put out a set of ambitious proposals that were challenged in lots of detail by lots of people who cared a lot about them, and broadly, the feedback came back, said this is very positive and very ambitious. I start from that point, I don't finish at that point, to Helen’s observations. It's not the end of the story, it's the beginning, but I start on a position that says I'm surprised we're coming under fire for a set of proposals that have largely been welcomed by the people who are on the receiving end of them and have been tested very significantly by the CEG, and indeed reviewed by the Challenge Group and we're not in that sense -
Now, if there's some gaps for us to close those things - that's how incentive regulation is meant to work. So, am I a fan of that? Yes, am I - would I relish being at the back end of the pack? No.

Jonathan Brearley
OK, thank you – sorry, Helen, I jumped in but I thought I’d just supplement the question.
You may want to continue.

Helen Parker – CG
Absolutely and I - let me just say a kind of closing comment on that.
I think, Phil, it's the, you know, the ambition to improve is absolutely welcome. It's a combination of the low starting point and making it deliverable, but actually with your endpoint still being significantly behind the pack, so it would still be significantly behind the pack, and I think it's a left behind issue for your customers.

If they are not on that list you're leaving your customers behind because they cannot access these vital resources, so it has a level of importance, I think, that really lifts it up. So, I would encourage you and your board to look at that again and really keep focused on it and push it as far and as fast as you feel you can.

Phil Jones – NPG
Understood.

Helen Parker – CG
Thanks Jonathan, I'll hand back.

Jonathan Brearley – Ofgem
Thanks, Helen. Over to Myriam, our Non-Executive.

Myriam Madden – Ofgem
Thank you, Chair. Phil, I was struck in a review that Ofgem undertook with regard to Storm Arwen, there was one data point in there with regard to customers abandoning calls because of delays in answering. So, basically it was about 43% of customers abandoning calls. So, in terms of lessons learned and you know more systemic approaches in addressing that. So, of course, there's always underlying issues in communications and holding the most up-to-date information for customers, etc. But, I mean, in terms of response time, that seems very disappointing. Could you comment on that further?

Phil Jones – NPG
Yeah, I mean, it was one of - far and away, one of the most obvious learning points for us that we actually sought to address, one of the big - the biggest root cause during the week that that followed the immediate impact, so it was a capacity issue for us and so in other words, just to be clear that no amount of escalating humans to go and try and answer the phone would have dealt with the problem we had, it was - most of that was the onslaught of the initial storm and the collapse of our web-based technology at the time. That's what caused so much of the traffic to head towards the phone lines which themselves were overwhelmed not on our side, but on the BT side just because of the size of the event. We've run through, as I've said, numerous storms since - not as big as Arwen, but Malik itself was big and our technology has stood up through those things with some changes which I won't bore people with on this call.
But the reality is, the number one was to do that. Again, if I point people to our plan, Myriam, we talked about - in there - in terms of our track record, we talked about some of the extra benefits that we've invested in, in ED1 and two of them that we call out in the plan that was published or certainly put in public during Storm Arwen - two of them are telephony capability that is about to be renewed. We go live in April/May with that, that's in our plan, and that again closes a technology gap that we perceive we've had with some of our peers or all of them, I think, in that case and an overhauled website, which itself is under test right now. So, those lessons which were very clearly brought into visibility in Storm Arwen were already part of our understood improvement plan and they're going in during this year, funded out of the ED1 – some ED1 efficiencies that we felt we needed to deliver for our customers more quickly. So, we've already moved to do that.

Myriam Madden – Ofgem
Good, thank you.

Jonathan Brearley – Ofgem
Thanks Miriam. Look, given the time I'm going to hand over to Steve to open up for questions.

Steve McMahon – Ofgem
So just following on this theme, I think there was a question earlier in the chat from Adam Scorer, at the NEA who's at the sharp end of some of this fuel poor stuff, so I don't know if Adam's there and wants to maybe reflect on the discussion that we've heard and pose an updated question to Phil?

Adam Scorer – NEA
Yes, thanks and Phil, you've been around this question a couple of times in response to previous, kind of, points.
You know, you submitted your plan when you did. We could see where energy prices were going, but even you couldn't be expected to anticipate the impact of Ukraine, so it's significant.
The basic question is how far you think your vulnerability strategy remains fit for purpose, especially on the energy affordability issue, but in responding to Jenny, you made a reasonable point which is - where are you best placed to intervene? So on the basis of what's in your plan where are you best placed to do more and how far has your thinking gone to build on the plan so that you can address affordability issues? Whether it's, kind of, the upfront costs of uprated connections for fuel poor households looking for heat pumps, things like that?

Phil Jones – NPG
Yeah, so let's take them in, perhaps, three buckets, Adam. The things that really go to that fundamental affordability where the money changes hands between us and the customer, that they always ought to be the ones that we're on the spot for and that's where I think there's the biggest change. So, a hugely important piece, I think, and it's a decision that we are participating in with the industry, so we're not trying to say it's our decision and we'll take credit for it, but to move to a world where all service upgrades are part of the overall – they're funded by the overall - everyone pays, contributes towards it. We think that's got huge potential, particularly some of our most disadvantaged areas around - imagine the situation in, for example, rental properties. Again, I don't need to lecture you on this, the landlord doesn't have to pay for the upgrade.
It's a lot more - it's a lot more easy to get that done for people who then have still got to - we get it - still got to get over the hurdle of the heat pump, if they're paying for it, or certainly the EV, which they almost certainly would be.
But at least in that situation, the additional, let's say it's £1000, which is going to be off putting to somebody in that situation, that's gone, and so that we think that's quite a big contribution to the whole piece, and indeed everything at the low voltage end of the spectrum, so there's quite a lot of money shifted in terms of that pressure. In terms of affordability of bills, I mean, clearly that's a huge question at the moment and it hasn't - and it's gotten even bigger in the last month or so and most of that is money that changes hands that's not relating to us and in a world where our average charge is about £100 and depending on whose view you take - even on the proposals we're making with our view of all of the other parameters that get folded into this, we're talking about an eight quid increase and I'm not trivialising that, Adam, I'm just saying that is the limit of what it - of where we're at in this game on £100 a year of a bill, so in terms of our ability to take the pressure off the week-to-week, month-to-month price, it's limited, I think everyone can see that.
So, that means we have to be in the indirect space around the actual pain that people actually feel, which is the bill landing for the energy that they use, and in that respect we would say that we ought to be placed to help catalyse that conversation and that's where the vulnerability strategy, I think, still does remain fit

for purpose because I think all we can do - and it's very highly leveraged - I mean, the thing to remember it is - I'll come to in a moment with power cuts - they are very big numbers when you talk about it, but in a single power cut you could have 500 people affected by it, so one or two clear actions that we talked about can affect 200/300 people in one go, so we are able to get to people quite quickly.
So, for example, our community support vehicle we're not going house-to-house with every one of those, you can go and help 200/300 houses in one go. So, I do think it still is fit for purpose, Adam, I don't think the world got any easier, I think we can all see that, but I think the fundamentals of what we can do to take the edge off the money changing hands I think is quite - is very constructive as an industry and we fully support it.

Adam Scorer – NEA
Times tight, I won't follow up.

Steve McMahon – Ofgem
OK, thanks Adam. I think we've got Andy Manning from Citizens Advice. Again Andy, we've had some discussion just around some of the aspects you raised in your question, but do you want to follow up on that?
You need to unmute yourself. We could see you there a minute ago.
Can't hear you.

Phil Jones – NPG
I think he's saying he's got no further questions for us, it was so good.

Steve McMahon – Ofgem
I'll come to Ben in the Ofgem team. I think there's a follow-up question, just maybe related to the reliability point.

Ben Burke-Davies – Ofgem
Yes, I just wanted to ask about the - you talked about £65 million on HV automation that you're looking to spend in ED2.
Obviously, most of your peers have already embedded those sort of capabilities during ED1 and given that you've earned £150 million or so from the interruption incentive scheme, I just wondered why is it you're waiting until ED2 to start to invest in these capabilities?

Phil Jones – NPG
Well, we're not waiting to start investing, Ben, because as you can see, the line - our line's growing as well. So, we have been investing in that, quite aggressively, but in the end it all boils down to the overall set of benchmarks, which is a complicated subject that doesn't belong in the three minutes we've got left for this, as to what has been the equation for each company, what have each - what has each company's customers paid for, and what's service they're delivering, and fundamentally, when it comes down to it, if we've got a target to hit, we accept that, but we expect the deal to be a fair deal for us as a company as well to go and deliver it for customers.

Ben Burke-Davies
So, I guess my query is - could you have moved faster, and your answer is - you're linking it to the incentives.

Phil Jones – NPG
Well, if we had, we wouldn't have done some other things, Ben, is what I'm trying to say. So, there are other benefits that, you know - well let me pick one thing out, you don't then point to extra flood defences that we put in place as our choice, and we're glad we did. You don't point to some of the cyber event - investments that we made that we call out in our plan that we're glad we did. You're optimising constantly and we've been beating our targets, so I guess at that point we say we don't regret the position we've taken. If the targets are going to tighten still further, we're OK with that but if it's set by reference to other people who've been funded in different ways than we'd expect that to be matched and, by the way, one of the companies that is setting those benchmarks is - there's serious questions about the comparability of the cost benchmarks that have been used over time.
So, it's a detailed question that I'm sure you know is and we're already in dialogue with your team, but that's the high-level answer.

Jonathan Brearley – Ofgem
Steve, are we going to get Andy back for questions?

Steve McMahon – Ofgem
I don't think he could come off mute. I don't know whether the team have managed to resolve that, it doesn't look like it.

Ben Burke-Davies – Ofgem
If we've got one moment, could I just ask one further question, which I did want to ask in the earlier session?
Phil, you talked about DSO enablers investment of £92 million and then you referred to £156 million worth of flexibility benefit. Could I just be clear, does that £156 million include the £108 million that's been delivered through the price flexibility because what I'm trying to understand is, is that £92 million really delivering around £48 million of benefits directly by Northern Powergrid? Or is it actually £156 million that's directly being delivered by NPG?

Phil Jones – NPG
Yes, it's all of - it's the one that makes most sense. It - the 92 - delivers all the benefits. The 92 includes the monitoring and without the monitoring we can't harvest those benefits that come at no extra cost. So the straight answer is yes, it's all the benefits for all the costs.

Ben Burke-Davies – Ofgem
So, it doesn't include £108 million?

Phil Jones – NPG
Yes, it does. All of the benefits - all of the benefits, they're not - are in the benefits camp Ben, and the costs are in the 92.

Ben Burke-Davies – Ofgem
OK thanks.

Jonathan Brearley – Ofgem
So, first of all I want to say thank you to everybody involved in today’s session - particularly, thank you to Phil for fielding a wide range of challenging questions.

I think there were a set of things that were raised here so first of all getting under the skin and understanding the baseline versus uncertainty mechanisms and coming to a view on how that compares to others and what that might mean.
I think, Phil, you've laid out, in your view, there's an ambitious flexibility agenda, but I think that's something that we'll want to look at further in the price control.
Clearly the scope, the governance, the role, and the activity of the DSO role, I think was brought up and I think you mentioned that you didn't see a big change in legal separation, but equally you didn't see a big objection to that either, and so I think that's something that we'd be happy to reflect on further in this.
And equally, I think, Centrica raised that issue of separation and markets which, you know, I think you feel isn't an issue but something we probably need to work on together.
Then moving to the second session, clearly there's – you know this - there's going to be an increased focus on reliability and our response to extreme events like Storm Arwen and significant issues raised around vulnerability, particularly around the Priority Services Register but the strategy more broadly.
I do want to say a big thank you to all of you, and I recognise that was a pretty intense two-hour session, but it brings us to the end of the Open Hearing. I want to thank you all for your valuable contributions, and if you did submit questions today, then we will find a way to work with NPG to make sure that you get answers to those questions.
As you know, this is recorded and we will be publishing transcripts on our website and of course this is a huge input into our deliberations as we get towards our draft determinations.
So once again, thanks to all of you for coming today, and particularly thanks for NPG for fielding a wide range of questions as we went through this, so thanks everyone.

Phil Jones – NPG
Yes, thanks everyone. Thank you.

Steve McMahon – Ofgem
Thank you.

Unanswered questions

1. **Rachel Fletcher, Octopus: NPG has by far the lowest ambition in its plan for using flexibility in load management - in absolute terms (MW), expected benefits (£m) and as a share of demand on the system (MW). Why is this the case and how has NPG satisfied itself that this is least cost for customers over the ED2 period and beyond?**

- Our approach to flexibility first is a whole system view – where we will deliver flexibility while also supporting flexibility being delivered by others.
- Flexibility is about building less network, but it is mostly about utilising the power generated when it is available and avoiding the requirement to build more power generation and network.
    - Imperial College, London modelling shows 70% of the value to society comes from non-distribution network sources.
- Our plan is right-sized to maximise the benefits for customers from flexibility in ED2 as well as set up benefits for the increased need in ED3.
- At the time of our plan, we had less of a constraint problem on our EHV network than others, albeit customers are using up that capacity all the time. This means that we do not have the same need for high levels of network flexibility.
    - However, 50% of our ED2 schemes assume we will use flexibility as mitigation.

- Our plan contains specific costs and actions to scale up our use of flexibility through the ED2 period.
    - We forecast that the need for and availability of flexibility will be greater in the ED3 period.
    - For that reason, we are stimulating flexibility provision in the areas that we forecast needing flexibility in the future and innovating at the local level to maximise access to domestic level participation made available by increased volumes of electric vehicle charging and smart heat.
- We have engaged with energy system parties, such as Octopus Energy in the period when we were preparing our plan, and this continues.

2. **Polly Billington, UK100: To be fair and effective the energy transition needs DNOs to engage strategically with local government in ED2. And you have committed to the six local authority advisors (far fewer than some other DNOs). What will you be able to show in mid-2024 that demonstrates that strategic engagement is taking place?**

- We agree that success in ED2 involves cultivating an increasingly outward facing culture, pivotal to this is support for local authorities in developing their plans, this knowledge can then feed back into the production of our forecasts.
- We have committed to six people to work across the 35 local authorities in our region. This is around six local authorities per advisor.
    - We believe this is comparable to other DNOs.
- To further strengthen the customer voice in our work, and make sure that our organisation remains externally focused and accountable we will:
    - Maintain the scrutiny of the annual AA1000 audit;
    - Publish our commitments annually;
    - Report progress on our Engage microsite; and
    - Establish our CEG as a standing body to scrutinise stakeholder engagement activities and delivery against our promises.
        - This includes delivery of our four stakeholder engagement customer outcomes, 21 deliverables and tracking of 12 key performance indicators.

3. **Polly Billington, UK100: LAEPs and local government is as important to the transition as a DNO. How will both affect the role and function of the DSO as it optimises the system (given that must take account of housing, transport etc)?**

- A local area energy plan (LAEP) is the product of collaborative planning, involving a wide range of stakeholders to agree on the optimal long-term energy solution for an area. It considers the entire energy system and looks at what the best value-for-money approach is at the local level.
    - The entire energy system includes heat, electricity, transport, and the supply chain from energy generation to homes and businesses.
- The plans will be a key input to our network planning, feeding into our forecasting team within the DSO business unit, generating improved comprehensive local insights.
- In addition to local authorities, consistent with our whole system thinking, we will be collaborating more with other regional utilities or key projects to ensure that our plans are mutually compatible and any differences in forecasts are understood.

- Together, this work will ensure we meet our key ED2 ambitions to not only deliver the investment required to keep pace with decarbonisation requirements in the 2020s but also ensure we are on a pathway to net zero by 2050 or earlier.

4. **Polly Billington, UK100: very keen to understand the role of local. Mention of micro grids but not on engagement with the democratically elected leaders who shape their communities!**

- In developing our plan, we recognised we serve a diverse region, and our engagement programme has sought to uncover localised needs.
    - We are members of regional leadership groupings such as the North East England Climate Coalition and Yorkshire and Humber Climate Commission, alongside regular engagement with experts and stakeholder leaders un a series of localised workshops and panels.
    - Recognising that elected leaders within our region represent localised interests, we conducted an extensive engagement programme with councillors, MPs, and elected mayors.
        - We spoke with over 130 local government stakeholders representing a diverse range of communities.
        - 16 MPs attended our dedicated briefing sessions and we have directly briefed over 75 per cent of local authorities in the region on our plans, either through one-to-one meetings with council leaderships or regional presentations and discussions.
        - At each stage, elected stakeholders have been given the opportunity to ask questions, express their views and challenge our plans.
- This engagement will continue through the 2020s, we will work collaboratively with our region's stakeholders recognising their differing levels of ambition and understanding of decarbonisation.

5. **Andy Manning, Citizens Advice: Your plan says that Ofgem's working assumptions on cost of equity could deter investment. As a licenced network operator, with obligations to invest, what does that really mean in practice?**

- The cost of equity is in effect Ofgem's incentive for companies to invest, and distorting it downwards sends a damaging signal.
- Ofgem's current working assumption for the cost of equity is below the marginal cost of equity and risks deterring marginal and strategic investment in the distribution network at a time when the need for investment is acute.
- Ofgem must ensure that they do not deter investments that are necessary to enable the transition to net zero.

6. **Andy Manning, Citizens Advice: Did you consider providing any support for vulnerable customers via shareholder funding and, if you did, why was this not taken forward?**

- In terms of establishing the foundation of the services to customers, we believe the correct way to fund support for vulnerable customers is through the regulatory framework where we are clear about the obligations we must deliver at an efficient cost to our customers.
- The purpose of the business plans we submit to Ofgem in a price control review is to provide our proposed service levels and the associated costs.

- During the period of execution of the plan, we will be working to find ways to deliver the required outputs at lower cost. Where we manage to do that, we then have a choice to make about whether or not to reinvest some or all of any savings in additional benefits for our customers. Where we do that, our shareholder is funding those improvements.
- Equally, if we it costs us more to deliver against the obligations set out by Ofgem than the cost allowances we are granted, our shareholder must fund part of the difference.

7. **Steve Mason: How are NPG identifying renewable energy projects such as ours which are ready to go, financed and have existing infrastructure on the ground in place... particularly in the context of energy security and reducing a dependency on fossil fuels?**

- Our plan has decarbonisation at its heart. We are planning for a more decentralised, resilient, and green energy system that plays its part in achieving the country's net zero emissions goal.
- We have set out our view of future energy scenarios that explain credible pathways for our region to achieve net zero.
- These forecasts were built on the annual routine where we prepare our Distribution Future Energy Scenarios (DFES) in conjunction with our stakeholders and local intelligence on plans and expectations.
- The stakeholder input is taken from a range of sources that includes information on connections activity by developers of projects in our region.
- We share our views routinely and provide interactive tools to understand what we have assumed for sub-parts of our region for the different customer energy solutions.

8. **Judith Ward, Sustainability First: NPG total EAP spend is £135m. What percentage share have you chosen to spend on oil-leakage, PCB elimination, losses management, SF6 management and bio-diversity - and why that percentage on each? With NPG losses at 2TWh, & 94% of your total BCF, what has informed your EAP spend trade-offs?**

- Our Environmental Action Plan (EAP) takes a very significant step forward in all areas, we listened to our stakeholders and worked hard to balance ambition with affordability.
- Our plan was subject to significant optioneering with five fully costed options were presented in an ambitious stakeholder 'build your plan' exercise.
- The percentage share[1] of our EAP for each component is outlined below:
  - PCB elimination – 40.4%
  - Oil management and leakage – 35.7%
  - Visual amenity – 9.5%
  - Decarbonising our fleet 7.5%
  - Reducing contractor emissions – 1.2%
  - Waste services – 2.3%
  - SF6 management – 1.4%
  - Noise abatement – 1%
  - Office and substation energy use – 0.7%
  - Bio-diversity – 0.5%
- Within our asset resilience and decarbonisation expenditure we gain synergistic environmental benefits. This investment is not undertaken primarily driven by an environmental factor however we benefit from this secondary business output.
  - The most obvious example of this is losses reduction, the environmental action plan does not house any specific expenditure however our reinforcement investment

delivers a significant reduction in losses as we invest in larger assets & amorphous core transformers.

- Our losses strategy is wide-ranging in its scope and contains a broad range of initiatives beyond the more typical technical interventions.
  - We have several initiatives where we can quantify with high confidence, which in total will deliver a loss reduction of 101.5GWh over the ED2 period.
  - We have 28 initiatives where many of the benefits are difficult to accurately quantify however they make up an important part of our losses strategy and include:
    - Engaging and educating stakeholders to help them reduce their energy consumption which in turn enables lower losses;
    - Operating a smarter, more flexible network, which will be do in a losses-inclusive manner; and
    - Continuing to innovate and find new ways of minimising losses, such as our proposal to use smart meter data and LV monitoring data to proactively target energy theft.