

DSO Conference, Penrith
29 October 2025
Questions & Answers

Thank you to everyone who submitted questions on the day either in person or online. Below is a complete list.

Q: Ofgem has signalled a move away from their 'flexibility first' approach. Have you changed how you are looking at new connections or are you still taking a flexibility first approach?

A: Although Ofgem talked about the need to build more networks and appeared to shift away from flexibility as a solution, NESO had also done a paper on Clean Power 2030 which pointed towards flexibility, so I think we will all be using electricity differently in this data and digitally-driven world. It may happen without us even knowing though with things like EV batteries being topped up or used, and all managed for us, so actually flexibility has a massive role going forward. I think there needs to be some reclarification as Ofgem's stance has been misunderstood. As you can see from Harrison's presentation though, SP ENW is ramping up the flexibility that we're looking for and that will keep happening. We have massive ambitions to secure more flexibility, dispatch more flexibility and get value for consumers. It helps us connect people faster, so if one person is reducing their use, we may get another on the grid faster and while the term 'flexibility first' may be on the shelf, we're filling our boots with flexibility, so for us, it's still the first thing. (Paul Auckland)

A: Similar thoughts, and I think that in the moment in Ofgem's ED3 it was to be an 'and' not an 'or' so it was to still have flexibility but alongside proper investment in the network and ensure value for consumers. (Harrison Leaf)

Q: I understand that NGET is planning to build a new substation near Carlisle as part of the Cumbria Cross Border Connection project. Will that substation also provide SP ENW with a new grid supply point?

Q: I also understand that the Cumbria Ring project will provide 230MW of new (not yet contracted out) export capacity and will complete in 2029? How can I grab some of that capacity?

Q: NGET suggests in support of their Cross Border screening application that the demand for electricity capacity in Cumbria will increase by 50% in the coming years. Does that line up with your estimates?

A: National Grid is investing to replace the existing grid connection point substation at Harker. This includes the replacement of the super grid transformers and the associated switchgear. SP ENW, as part of this work, is also investing to replace the 132kV switchgear that it owns. This investment will increase the capacity for demand and generation at the substation. To deliver this increased capacity to Cumbria SP ENW will be increasing the capacity of the 132kV circuits that form the 'Cumbria Ring'. I'm not sure if it's a 50% increase, but I know it's a significant increase in capacity both ways, in demand and in generation. (Ian Povey)

A: Please do apply if you want a connection. There's a big change in terms of connections reform, along the 'first ready and needed', so that's working out what projects are required for Clean Power 2030 and the nation's energy needs going forward, so that's reordering the queue a bit but do keep talking to us. (Paul Auckland)

A: I mentioned also that one of things that we put out is our grid supply connections queue so when you apply, you can see where you are in that queue. (Ian Povey)

Q: How can I find out more about Smart Street Rural?

A: All outputs and reports from the project will be published on [our website](#) and the ENA Smarter Networks Portal as soon as they are available. If you have any direct questions, please send them to Innovation.Team@enwl.co.uk (Geraldine Paterson)

Q: Could a charity-owned outdoor centre be considered as a community energy group?

A: Theoretically yes; it would depend upon the ownership model, as well as if the outdoor centre's assets are being used to manage energy. If you would like to speak to us about how the outdoor centre could participate in flexibility competitions or you would like support in being registered as a community energy group, then we would be happy to have a further conversation. Email us at: DSO@enwl.co.uk

You can also get advice from associations such as [Community Energy England](#). (Paul Auckland)

Q: Price signals and Time of Use tariffs rely on having the energy supplier on board. In the example of your terraced home street, multiple suppliers might be involved. How is this resolved?

A: Essentially, for the Net Zero Terrace Project (NZT) we need to work with one supplier, so when people sign up to NZT, they also agree to be part of the energy club and to all use the one supplier. It's a bit like collective switch where you get group bargaining power. One of the issues we've got with suppliers, and this is one of the issues that Dr Mary Gillie of Energy Local has faced over the decade she's been working with energy clubs, is that small, local arrangements such as NZT don't give the volume that energy suppliers need and want to do great deals for customers, and it's hard for them to do bespoke solutions. However, the government is looking into this, plus a lot of energy suppliers are still not using things like Kraken Flex (Octopus Energy) using digitalisation to be able net off in real time (to match demand with supply, helping to manage the grid's volatility). So, it's about making that system slicker, and data use, but currently that is a blocker in terms of the appetite of energy suppliers to get involved in small, bespoke projects but I think it is something that will get addressed. (Kate Gilmartin)

Q: Do schemes like Net Zero Terrace get discounted DUoS (standing charges)? If so, does SP ENW not lose out?

A: At the moment, we don't have differentiated tariffs and tariffs have been set this way for 20-30 years so, from my experience, maybe some change is needed. The energy sector moves slowly, and reform is needed in these areas so that energy local is far more effective. Ofgem, our regulator ensures we operate fairly, but they are about to do a review of energy systems charges and where issues of fairness will get raised. Standing charges are a hot topic at the moment and there's some recent research that showed, from a consumer perspective, standing charges aren't seen as fair. About 20% of an electricity bill is related to the network, far more is for policy costs and wholesale costs of electricity. We may see more of a shift towards unit rates' reforms and how tariff regulation works. All suppliers will be asked to offer a more unit-based choice to customers so people can shift away from traditional standing charge tariffs if they wish, but more change is needed. (Paul Auckland)

A: So, a P441 is a proposed change to the UK's Balancing and Settlement Code (BSC), and this consultation is open until 14 November if you want to put a response in. It's been brought forward by Dr Mary Gillie and the Energy Local team to enable local energy tariffs to have green levies removed, as well as maybe DUoS charges reduced if they're able to show the benefits. It's not a silver bullet but it's a step in the right direction to giving the value of local, to local. Energy costs are only going to go up as we electrify more so we have to ensure we're not doing a whack-a-mole and reducing costs over here but then pushing prices up over there. It has to be done in a transparent and fair way, and as Paul said I think a lot more light is going to be shone on how we can make savings, and efficiencies, and that comes back to that digitisation piece. (Kate Gilmartin)

Q: Is there an optimal number of properties in local nodes? For example, in the shared Net Zero Terrace Street project, how would this approach work in rural situations where homes can be much further apart?

A: We're looking at a cluster-based approach so that you can get the economies of scale. On street level though, ideally, we need at least 30% of people to take up the solution so that you can then put a shared ground loop in. We are looking at fabric retrofits too on a phased approach according to how many people have taken up the solution. (Kate Gilmartin)

Q: Is the dam on Kate's last slide the one used in the Star Wars spin-off TV show Andor, as the Empire's Garrison Base?

A: Yes! It's the Cruachan Dam in Argyll, Scotland which serves as the imperial garrison on the planet Aldhani. (Kate Gilmartin)

Q: Is SP ENW looking for flexibility across its whole network or just in a limited number of pockets?

A: To tie back into our current tender, the map on the website is updated with what we need, where we need it, all the details in terms of granularity of the size of flexibility we need, months of the year, times of day. There's a bunch of requirements as it's our biggest tender to date and lots of opportunities for a range of personas and flexibility service provider (FSP) profiles to take part. (Paul George)

Q: If SP ENW is now the second biggest UK Distribution Network Operator (DNO), who is the biggest? I think before SP bought you, you were the smallest?

A: National Grid Electricity Distribution (NGED) is the largest DNO in the UK. And yes, prior to SP's acquisition, ENW was the smallest in the UK. (Paul Auckland)

Q: Is there a minimum size/connection voltage of FSP that can contract with you at SP ENW?

A: We measure in terms of threshold, so how many kW can be offered to us to participate. Low voltage would be 5kW and above, and all other products, 10 kW and above. So for example, if there was a bunch of EV chargers in a car park, say five that could give us 3kW turned down at a certain time, you can participate, so we've tried to make it inclusive, but obviously the bigger, the better, but both domestic and commercial flexibility is what we're looking to tap into, so EHV, HV, and our biggest LV requirements to date in our autumn tender. I would encourage you to look at our website and have a look at those details. (Paul George)

Q: Are there any plans for your ECR to include 'Gate 2' status for accepted to connect schemes?

A: We are working closely with the National Energy System Operator (NESO) who is re-ordering the connection queue through a process call Gate 2 to Whole Queue (G2TWQ) though it's too early to say how much more the queue will actually change in the SP ENW region at this stage. (Steffan Jones)

Q: Has SP ENW looked at all the Gate 2 to Whole Queue (G2TWQ) applications submitted for your patch? Do you think the grid queue for your network will change much after NESO has re-ordered it?

A: We have worked closely with our customers and the NESO on the connections reform sites to register sites for connections reform; a key part of this process is to review that status of these connection offers. In the lead up to, and as a result of the connections reform work, we have already seen some historically accepted connections offers be cancelled, as well as sites where the transmission constraints have now been removed. There is a high chance that there will be changes to the queue positions as a result of the connections reform, however, until we see the finalised list from NESO, we will not be able to assess the full impact of these modifications to queue positions. More info can be found on [our website](#). (Steffan Jones)

Q: I thought there were too many batteries in the grid queue and that was one of the problems that NESO is trying to resolve, but it sounds like SP ENW would like batteries on its network?

A: We see our job as being able to connect customers to the electricity network and ensure a safe, secure and efficient network. There is a vital role for electrical energy storage within the network of the future to help to manage the peaks and troughs of the mix of demand and generation technologies connected to the network. The role of the NESO is to manage the fair balance of technologies connected to the network to ensure that Great Britain can meet its ambitions to achieve net zero in the fastest and most efficient way; which is why under their powers given for Connections Reform they are able to specify where there is too much or not enough of a single technology.

A key location where electrical energy storage is important to the transition to net zero is within the lower levels of the distribution networks. At this level it has the most overall whole system benefit – being able to store excess renewable energy during periods of low energy consumption and then being able to discharge to the network when demand increases. Batteries currently are the most common form of electrical energy storage, but other technologies do exist that can also provide useful energy storage e.g. heat storage technologies. Small-scale electrical energy storage allows asset operators to manage their own onsite energy balance, provide flexible services to DNOs and the NESO, maximise the benefits of utilising renewable energy, reduce their energy costs by utilising electricity when it is cheapest, as well as participating in peer-to-peer trading. (Paul Auckland)

Q: How does the ECR help work out viable connection points or viable project locations?

A: To work out a viable connection point you need to understand the network and its capacity to connect generation and/or demand. The network capacity and its connectivity is provided through various publications i.e. Long Term Development Statement. The ECR details what generation and/or flexible connections are connected to the network, or are accepted to be connected, thus allowing potential connectees to determine the available capacity and therefore viable project locations. (Steffan Jones)

Q: What is missing in terms of innovation to make flexibility the norm?

A: The SP ENW DSO team has actively been working in partnership with the Innovation team to guide the delivery of innovation projects that provide benefits to DSO stakeholders. The majority of the innovation projects that have been delivered by the SP ENW innovation team during both ED1 and ED2 have had a DSO focus and have been well supported by the DSO team. Examples include Smart Street, Celsius, CoolDown, Transition, BiTrader, Net Zero Terrace, Fractal Flow, LDES Nodes and Retro Meter.

We are keen to partner with a greater number of FSPs and curtailable flexible connections customers who are able to actively engage and participate with innovation projects that SP ENW is operating live trials on. A key element of ensuring innovation projects deliverables deliver the required outcomes are through live testing and feedback from trial participants. A greater range of FSPs and flexible connection customers to actively test our innovation projects will ensure that we are able to widely test the deliverables of innovation projects and ensure that they work with a wide range of different stakeholders and operating scenarios. If you are an FSP or customer who would be interested in getting involved in live trials, then please [contact us](#). (Geraldine Paterson)

Q: There have been several references to other SP ENW colleagues in the room. How can we meet them?

A: If you'd like to get in touch with any of the DSO team, please email DSO@enwl.co.uk with your query and we will ensure the person / area you would like to meet with gets in touch within 10 working days, if not sooner. (Paul Auckland)

Q: We know that the smart meter rollout has had problems trying to get buy-in and trying to get people, so I wondered how when you've done things like NZT, how have you got people on board and how we could do that on a wider scale?

A: It is all about how you address the solution because it doesn't matter how good the technical solution is if no one wants it. It's all about empowering communities and giving them agency so it's not done to, it's

done with. I should say we've only done three houses so far but we're about to start engaging on a pilot of 200 homes in three areas, and we've done soft-market testing although we haven't yet gone to 200 homes to get them to sign up! We work with local community anchor organisations and it's embedded in a democratic local governance model, and if you want to sign up to connect, you become part of an energy club and that energy club actually has a golden share in the asset company that owns the infrastructure, so you have oversight of both the smart system and the infrastructure. It's based on trust, local governance, community groups and energy champions. We also take learning from other projects such as broadband rollout for Rural North, Sythians project in Cornwall which saw a Shared Ground Loop rolled out (to connect 31 coastal homes with ground source heat pumps) and Living With Water in Hull which saw terraced homes fitted with sustainable urban drainage and things like that. I'll tell you more next year! (Kate Gilmartin)

Q: How is the challenge of Cumbria and its rural location impacted by rolling out flexible services?

A: Cumbria is a very difficult nut to crack traditionally, and we mentioned that there are strategic partners that we are speaking to either at a regional level or technology focused which is key for us for flexibility participation. Cumbria, as we all know is a very rural part of the world, it can be heavily impacted by storms, some aging infrastructure, which is creating the perform storm for us which is reflected in terms of needs in the tender headlines. I think we are doing a lot better with the number of people we're engaged with, that we're contracted with, both domestically and commercially, it was really important we spread our risk, but it's getting that right mix of providers, so I think things have improved but there's always room for improvement. A big thing for us in Cumbria that we'd like to see, so a call to arms, is the big industrial commercial users and local authorities, so we can do more in that space. We've already started to engage with local energy projects, so it's about getting the right blend and mix across the whole value chain. (Paul George)

Q: Are there any plans to change the Ring Main Unit (RMU) specifications for 11kv substations now that ENW has joined SPEN?

A: Currently there are no plans to modify our RMU specifications as a result of joining Scottish Power. Currently SP ENW is still operating as a separate legal entity to SPEN, and as such have separate policies (including equipment specifications). As the businesses become more aligned, we will look to share best practice. (Paul Auckland)

Q: Given political uncertainty around net zero and economic growth, and your plans for ED2 and future plans for ED3, how are you factoring this uncertainty in?

A: Please be assured that where you've already signalled your needs and have applications in, we are carrying on as planned. Further ahead there is uncertainty about the direction, and more questions have been asked, but we don't feel that at the moment there is any major change. There's still a consensus and urgency around net zero and green growth and lowering energy costs through renewables, so our plans are for a cleaner, greener, more prosperous future. But you know we can adapt if we find ourselves in a different world, so in the same way if there is a massive step-up needed to meet your needs against energy policy, then of course there can be course corrections. But at the moment, we're fully aligned to making capacity available when you need it. (Paul Auckland)

Please feel free to contact us at any time by emailing DSO@enwl.co.uk

KEY

Kate Gilmartin, CEO British Hydropower Association

Harrison Leaf, Acting COO Electron

Paul Auckland, Head of DSO

Paul George, DSO Commercial Lead

Ian Povey, DSO Data Manager

Geraldine Paterson, Innovation Manager

Steffan Jones, Infrastructure Solutions Manager