

Scottish Affairs Committee

Oral evidence: [GB Energy and the net zero transition, HC 459](#)

Wednesday 4 March 2026

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Members present: Patricia Ferguson (Chair); Dave Doogan; Mr Angus MacDonald; Douglas McAllister; Susan Murray; Elaine Stewart; and Kirsteen Sullivan.

Questions 445 to 532

Witnesses

I: Julian Leslie, Director of Strategic Energy Planning and Chief Engineer, NESO; Steve McMahon, Director for Network Price Controls and Head of Scotland, Ofgem.

II: Guy Jefferson, Transmission Managing Director, SP Energy Networks; James Basden, Founder and Director, Zenobe; Scott Somerville, Director of External Affairs, E.ON UK.

Examination of witnesses

Witnesses: Julian Leslie and Steve McMahon.

Chair: Good morning and welcome to this meeting of the Scottish Affairs Committee, where we are looking at GB Energy and a just transition. Welcome to our first panel this morning. Could I ask you both to introduce yourselves and very briefly say your role, please?

Julian Leslie: Good morning. I am Julian Leslie, director of strategic energy planning and chief engineer at the National Energy System Operator, which is responsible for the long-term strategic planning of the whole energy system for Great Britain.

Steve McMahon: Good morning. I am Steve McMahon. I am Ofgem's director for network price controls, so I oversee much of our regulatory arrangements for the electricity and gas networks. I am based in Scotland, so I help to support the operation of the office up in Glasgow, where we have just over 800 staff.

Q445 **Chair:** Thank you both very much and welcome again to our meeting this morning. I will kick off with a question to both of you. I will start with you, Mr Leslie. What are the main drivers behind the need for significant upgrades to Great Britain's electricity grid?

Julian Leslie: Thank you for the question. There are two main drivers. The main driver to date has been to move away from coal generation, which we successfully did in October 2024, but also to think about the role that gas plays in the energy system. Then we respond to the policy directions of the various carbon budgets, but also the Scottish Government's targets for offshore wind, onshore wind and solar.

Obviously, there is great renewable resource in Scotland, so we have seen a large propensity of developers wanting to connect into Scotland to take advantage of ScotWind, INTOG and various other Scottish Government policies. They come through with the connection offer application to NESO, and we then work with the Scottish transmission organisations to work out what is the most cost-effective and efficient way to connect that generation.

That drives a lot of the investment and the transmission investment that you are seeing to date to allow that energy to move to where it is needed. That is to facilitate decarbonisation and the economic growth for Scotland, but also, as a GB-wide essential resource, to support the decarbonisation of the Great British electricity system.

The other driver is the demand side. Demand has been reasonably flat for a number of years, but we are starting to see demand turn as people start to electrify heat and transport and industry is starting to decarbonise. We see this trajectory continuing to grow out to 2030 and then really take off between 2030 and 2035, as we get to a secure, low-cost, low-carbon energy system. That will not only include the existing



energy users, but attract new energy users, such as data centres and hydrogen electrolysis, and create new economic growth opportunities for Scotland.

Q446 **Chair:** Would you like to add anything, Mr McMahon?

Steve McMahon: Yes, briefly. Julian has covered the main things. We see three elements. The first is the huge amount of renewables that we have to connect. That is clear.

The second, as Julian said, is on the demand side. If you go across the country, there are lots of customers who are looking to connect into the electricity grid. If you do not have that capacity there, you are delaying those investment decisions, or, worse, they will go elsewhere. It is important to have that capacity as well for industry.

The third element is the core operation of the networks. We invest, and have done historically, to make sure that these are maintained to very high standards of reliability and resilience. That is something we have been proud of in this country. To maintain that, you have to increase that investment over time. That is the third element that I would draw out.

Q447 **Chair:** Mr Leslie, I understand your organisation has estimated that electricity demand could rise by about 11% by 2030. What underpins those projections about rising electricity demand?

Julian Leslie: The way that we forecast electricity demand is to do extensive stakeholder engagement with a whole range of different stakeholders, but also to look to Government policies—things such as the warm homes policy that was issued just a few weeks ago. That sets an ambition for the minimum of air source heat pumps, for example.

We are working with the motor industry to work on its projections on EV take-up, as well as working with industry and, through our new regional energy strategic planning processes, getting engaged with local regions and local industry to understand what their decarbonisation plans are. That all comes together, and we are then able to make those load forecasts out to 2030 and much further beyond.

We are moving to a much more strategically planned system. We are looking fully out to 2050 and then working back from 2050 to say, “If that is where we are ending up, what do you need to do now in that context?” The electricity demand last year, for the first time in a very long time—I cannot quite remember since when—increased by just under 5% when you look at it across the year. We are starting to see this growth of electricity consumption on the system already.

Q448 **Chair:** Presumably you take account of things like planning regulations that mandate the use of heat pumps and the like as well.

Julian Leslie: Yes, absolutely. All those policy decisions feed into this.



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The other side of this, of course, is energy efficiency programmes. There are still a lot of consumers out there transitioning from filament bulbs to LED bulbs. Your A-rated appliance today is far more efficient than an A-rated appliance even four or five years ago. There is a counterbalance; our consumption demand is falling, while we are then buying new technologies, which then causes an increase.

Chair: That is interesting. I think that there is a supplementary question specifically on that.

Q449 **Dave Doogan:** Yes, there is. Mr Leslie, how long have you been involved in strategic planning within NESO?

Julian Leslie: I have been with NESO or its predecessors since 1989.

Q450 **Dave Doogan:** You will be well placed to understand how we have got where we have got, in terms of grid planning and infrastructure.

Julian Leslie: Yes.

Q451 **Dave Doogan:** Why is it that we have a massive mismatch between generation and transmission in GB? Whose fault is that?

Julian Leslie: In 2010, there was a requirement and a need recognised by Government that we needed to push for a renewable, low-carbon future. At the time, we had a target of 20 GW of renewable by 2020. With the planning process and the ability to build the network, there is something called "Connect and Manage". That is a Government-led policy that came into place that allowed the generation to connect, and we would manage the outcome. That has worked tremendously well for a long period of time, and we have met the renewable target. We would not be in the position we are in as a nation today without "Connect and Manage".

Q452 **Dave Doogan:** Talk to me about the success involved in the amount of money that bill payers have to pay in abatement charges and then to replace the renewable energy that is turned off from abatement with dispatchable power from gas.

Julian Leslie: It was recognised as part of that policy that we would be in this position. We have been working with Ofgem, as the regulator, to understand what network investment is required and by when. Those total constraint or balancing costs account for 3.6% of the energy bill for GB. Although it looks like a lot in terms of pounds and pence individually, in the grand scheme of the energy bill it is still a very low proportion.

Q453 **Dave Doogan:** Does that percentage include the gas that you have to introduce to replace the renewables?

Julian Leslie: It does, yes. There are plans now, and the regulator has approved all the plans. We have 88 major grid reinforcements coming between now and 2030, and that will get those constraint costs back down to a level. With the strategic planning and the Ofgem new



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anticipated strategic transmission investments, we are able to give the transmission owners that clear signal to invest ahead of a strategic need. We will get on the front foot as we get to 2030 and beyond, but the constraint cost today is a small proportion of the overall energy bill.

Q454 **Dave Doogan:** The trouble is that 3% of an enormous number is still a very big number.

Julian Leslie: It is an enormous number, yes. We work very hard; we work with the transmission owners and with our market colleagues within NESO to look at other ways in which we can bridge the gap. Fundamentally, the network is playing catch-up with the amount of generation that is connected. All those plans are coming, which is why it is really important that all the network plans that Scottish and Southern Energy and ScottishPower Transmission have are able to go through the planning process and start the process of being built, because that will then get these constraint costs under control.

Q455 **Chair:** I understand that Octopus Energy has questioned whether this scale of investment is required. How would you respond to that? I will put that question to both of you.

Steve McMahon: Taking up that point, if you look back, there is no doubt that there was under-investment in the network. We can see that. Julian made the point about strategic planning, and that was the key point. The whole system under-invested in infrastructure. We did not have a strategic plan, so it was not like something existed and we did not fund it. It was the case that a lot of the individual projects at that time were brought forward by individual developers or transmission owners, and there was more of a debate on whether something was needed or not.

The key question now is how confident we can be. We have those plans, and they are really clear in terms of what the market looks like, where your renewables are going to be and what is the infrastructure that is required to respond to that. We settled the regulatory arrangements for the new transmission price control at the back end of last year, so that comes into effect from 1 April.

Within that, there is quite a lot of adaptability. Yes, we know the projects that need to be delivered, but they will come through a pipeline of investment over the next five years in particular, so it can respond and adapt to changing circumstances. That gives us confidence in terms of accepting the needs case at the moment, but also in approving the actual cost for those projects only once they are more developed and we are sure that that is what the system absolutely needs and is at the right price.

Julian Leslie: To answer your question around Octopus Energy, that was an argument when zonal pricing was a potential opportunity. Obviously, that is no longer a potential opportunity for GB. We are working with



Government on reformed national pricing to look at what those locational levers are. When you look at the scale and capacity required on the network, encouraging growth of demand in Scotland—decarbonising the whisky distilleries, economic growth, hydrogen electrolyzers and bringing all that to Scotland—is the right thing to do for the network, with reformed national pricing alongside the strategic planning work that we are doing within NESO.

I hope that the outcome will be the same and we will get that investment in demand growth within the Scottish region, which would negate the constraint costs, but can also avoid or delay some further transmission investment. We are playing catch-up at the minute, so the network that is currently in plan between now and 2030 is a no-regret thing. We are already getting those high constraint costs because the generation is already there or about to come on to the system.

Chair: We are coming on to constraint in a little bit.

Q456 **Mr MacDonald:** You paint a good picture about how important this is. I am the MP for Inverness, Skye and Wester Ross, and the energy sector has lost the support of the people. Our community benefit last year was £9 million. We were told in 2011 that this was the Saudi Arabia of renewables. You open your window and look on to turbines, yet you are paying four times what people in the city are for their gas to heat your house, because we are using electricity.

Scotland uses 2.5 GW, and we are currently producing 18 GW. I have seen a figure of 60 GW being in planning. We are producing Britain's electricity, and there is nothing in it for us. The support of the people in the highlands has gone. It is worth you guys bearing that in mind, because people down here sit at their desks and do not realise the downsides of this to people in rural Scotland who are producing our electricity.

Steve McMahon: We absolutely understand the strength of feeling. I predominantly sit at a desk in Glasgow, and I have been out and about in the country, meeting the very people who this infrastructure will impact. We absolutely have to understand their perspective. We are building a huge amount of infrastructure in their areas, and fundamentally that is something that they disagree with.

Ultimately, we have a model. Most of our renewable power is in Scotland, and we have to be able to move that from Scotland to down south. The key thing for us is respecting those local democratic processes, engaging with stakeholders and communities, and engaging with the planning authorities to be realistic in terms of what the options are and look at what it is that these communities are looking for in return, including in community benefits or in the early work around the site and the infrastructure. As far as reasonably possible, we have to reflect that back in the actual engineering and optioneering that we see being brought forward.



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Q457 **Mr MacDonald:** I hate to say it, but these things just get voted through. I was on the Highland Council planning committee. We may object to a particular line, substation or wind farm, but it then goes to the Scottish Government and gets signed off. There is no local democracy on this, in my opinion.

Steve McMahon: From our point of view, we understand that and respect that process. The main thing for us is making sure that consumers and the local authorities understand the costs of delay. When we look at the model we have at the moment, the constraint cost that Julian set out affects everybody and has grown over time. Building out this infrastructure will help us to reduce those costs. Again, it is about looking at the community benefit scheme that has been set out by Government and working to understand how that can be discharged to best effect. We recognise that that will not solve all the problems, but we ask, "Can we do something in return?", over and above the things I mentioned in the previous response.

Q458 **Elaine Stewart:** This is for both of you. How confident are you that the 80 transmission programmes identified by NESO to meet clean power by 2030 will be delivered on time?

Julian Leslie: DESNZ has set up a monitoring process by which we have created a portal, and the transmission owners submit all the relevant information into that portal on a monthly basis. We then have regular meetings directly with the transmission owners, DESNZ, Ofgem and ourselves as NESO to understand what the barriers are, if there are any. We then get the whole weight of the clean power unit and DESNZ to help to unlock some of those barriers to delivery.

We track every one of those projects on a monthly basis. We have a RAG status against those, and we understand the risk and opportunity with those. Things that were a barrier include being able to procure ahead of need and having the strategic transmission investment so that transmission owners have the certainty that they are going to get the regulatory funding. There have been lots of activities, and some of those are responding to the report by Nick Winser, the transmission commissioner, on the acceleration of transmission infrastructure. There is a whole raft of 38 core actions that we, the Government, Ofgem and the transmission owners are working through to ensure delivery.

Steve McMahon: From our point of view, as Ofgem—as the regulator—we are doing everything we can to enable Clean Power 2030. We have approved significant investment, whether through the ASTI programme that Julian mentioned or the new investment that is coming as part of the next transmission price control. We have really sharp incentives on the transmission owners around delivery, recognising that delays will cost consumers, so it is very heavily incentivised around that.

We have the advanced procurement mechanism. One of the big challenges that we have in terms of infrastructure build is the supply



chain, so how can we make sure that we have this critical equipment that we need to deliver these projects? Last year, we allowed the transmission owners to book that manufacturing capability and capacity in advance, which again was about trying to de-risk those elements of the process.

Planning is still a big risk—I think that everybody understands that. That is probably the key outstanding thing. How do we get these projects through the planning system and do that quickly but effectively, in recognition of the community engagement?

Q459 Elaine Stewart: On the back of that, what specific upgrades to north and south transmission capacity are urgent to address bottlenecks?

Julian Leslie: It is a network, so they are all interconnected. The design that we have pulled together allows you to enable that clean power system in 2030. Some 88 of these projects have been identified; some have been delivered already, and we are working through those. You cannot say that any one is more or less important than the other, because they all work together in a meshed, integrated grid system.

I was going to add to what Steve said. Because of the certainty in the advanced procurement mechanism and the fact that we have this longer-term plan—we also have plans out to 2035-36—companies such as Sumitomo are investing in Scotland to build a cable manufacturing factory. We have another cable manufacturing factory near Hunterston, which has everything ready to go; it is just waiting for an order. You can see that giving this longer-term strategic certainty on investment is allowing the transmission owners and offshore wind farm developers to build manufacturing capability in GB. There are two examples there, and both of them are in Scotland.

Q460 Elaine Stewart: What specific actions do you need the Government to take to meet the clean energy target by 2030?

Steve McMahon: I am from a regulator, and I mentioned all the things that we are responsible for. There are other elements here that go beyond transmission build—for example, long-duration energy storage—so we are establishing the regulatory frameworks for that. The key ask is probably around the planning system and making sure that these projects can be delivered on time. That would be the key thing for Government.

Q461 Susan Murray: Mr Leslie, £1.5 billion-worth of curtailment costs were passed on to consumers last year, and NESO estimates that these costs will continue rising through to 2030. How satisfied are you with the current rate of constraint management?

Julian Leslie: That is something we take very seriously. As part of the strategic planning, we have been strategically planning this network for a long time and have identified a whole range of investments that should be in place by today. However, those are not, for various reasons,



including planning, consenting and regulatory uncertainty that we used to have 10 years ago and do not have anymore.

For many years now, we have been looking at alternative ways. For example, we have a local constraint market. We can look at a local region, see all the generation and demand that is in there and create a market, so that people can benefit from taking advantage of the low-cost excess renewable energy.

We also have demand for constraints. We have a factory that makes the maltings, where it can switch from biomass to electric boiler to manage the constraint. It gets an economic benefit from doing that. We have increased working with the transmission owners. We have increased our ability to get more power before you get the fault on the system through something called an intertrip scheme. That is allowing a huge increase in power transfer across the boundary.

Ultimately, we need something like another 10 GW, or 10,000 MW, of capacity across that boundary. These market solutions and the intertrip schemes are not going to get us the level of capacity that we need. Therefore, the infrastructure requirements are also there, and we have to build the infrastructure.

Q462 Susan Murray: We keep hearing about 2030, and now we are hearing about some delays that are coming in the planning and delivery of those plans. How confident are you that, by 2030, this will get to the place that you are expecting it to get to?

Julian Leslie: As we said earlier, certainly from a transmission investment point of view, we have the whole weight of Government, the regulator and NESO to ensure that these projects get delivered. The supply chain, the skills and the opportunities are in place. I have seen companies such as SSE and ScottishPower grow and develop their skills base. SSE got a new office in Aberdeen employing about 3,000 people, so this is triggering all this economic growth.

We are in the best place possible. Ultimately, the challenge is the planning and public acceptability of this infrastructure. Once that planning is done, I have every confidence that the money, supply chain and skills are in place in order to deliver these assets.

Steve McMahon: I will go back to the incentives point. We have set really strong incentives on the transmission companies to deliver this. It is calibrated against the system value that we get by delivering the infrastructure and reducing those constraint costs.

Q463 Susan Murray: You have to work within existing policies. We have heard already about community benefit. Do you think that if communities could see more benefit from having the infrastructure on their doorstep, it would help with some of the potential delays that are coming to building this network?



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Steve McMahon: I think that it would, frankly, as well as being honest in that conversation. This goes back to that point about being honest about the costs. If we delay this infrastructure, what is the cost to you individually and to society more generally? Having that conversation is how we can use the community benefit scheme to the greatest effect for these communities. That would help to accelerate progress.

Q464 **Susan Murray:** You recognise that there is a Scotland-England bottleneck at the moment. When do you expect that bottleneck to be relieved? Will that remove some of these constraint costs?

Julian Leslie: In the plan that we have, which we published four years ago and that gets you to 2030, assuming that those assets and the generation gets built, the constraint costs get down to a reasonable level that you would expect on a network like ours. You will never get to zero, because if you get to zero you have massively over-invested in the system.

However, post-2030, we need to keep going, because there is more. The Scottish Government published just a short while ago that an additional 40 GW of offshore wind is needed by 2040. That is on top of what is already there today. More and more infrastructure is going to need to be built in order to collect that great renewable energy from the seas around Scotland and move it south.

That is what we are responding to as the National Energy System Operator. We respond to UK, Scottish and devolved Government policies to ensure that our plans align with the devolved Government's policies on these things. We will get to 2030, but we cannot stop there. We have to continue to build more infrastructure, because there is more and more wind coming offshore.

Q465 **Susan Murray:** Do the curtailment costs happen all over the UK? What proportion of that falls in Scotland?

Julian Leslie: That is a good question. We can come back to you. My gut feeling is that it is around 50%, but we can write to you. We can get the details of that.

Q466 **Susan Murray:** Finally, what role do you think that community energy schemes have in reducing the demand on the national grid to move power around?

Julian Leslie: If it is the demand side, obviously that helps. If there are ways in which communities can increase their demand, that helps. Things like the demand for constraints programme of work that we are doing or these local constraint markets give the economic signal to do that.

We recognise that community energy for generation is also critically important, because that helps to get the community buy-in to this transition that we are in. We are working with the Scottish Government, Ofgem and the transmission owners to work out what the process is,



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because it is a policy decision. We are working on the process and then working with Government to work out what the policy is regarding community energy and how we get it on to the system. For every megawatt of additional community energy that we bring onto the system, it triggers or uses this infrastructure that we are trying to get built and would exacerbate the constraints currently on the boundary.

Q467 Dave Doogan: Mr McMahon, you talked about public acceptability. In this scenario, somewhere on the east coast of Scotland, somebody sits in a cold house looking out across the sea at all the wind turbines generating very cheap, zero-carbon electricity. They then look inland and see the spot that is going to have a really big 400 kV pylon on it. Their radio teleswitch meter has just been switched off. Their smart meter has come in, but it does not work, and they cannot get the energy company to do anything about it. The energy company blames the people who do the signal for the smart meter, and the people who do the signal for the smart meter blame Ofgem.

All those scenarios are in a regime that your organisation is responsible for regulating. It looks to many bill payers—not unreasonably, I would say—like a regime in failure. What is your anticipated view of how bill payers across GB, not just in Scotland, think Ofgem performs? Do you think bill payers think that Ofgem is on their side?

Steve McMahon: They should, because we are. That is the most important point. Every decision that we take and everything that we are responsible for comes through a consumer lens. We look at what it does for consumers now and in the future. On everything that you mentioned there, where it falls within our regulatory remit, we are trying to improve standards. We are trying to improve the things and the services that consumers get. For example, around smart meters, there is the new arrangement we put in place last month in terms of the service standards on suppliers offering smart meters and the automatic compensation that would come in place if those standards were not met. On RTS, that is clearly a big issue. We have the switch-off in June this year, and there is a managed process.

Q468 Dave Doogan: Is it a managed process?

Steve McMahon: There is a managed process.

Q469 Dave Doogan: It is a badly managed process.

Steve McMahon: There is an ongoing process. We had the initial phases last year. It has been carefully managed, because we understand the disproportionate impact on Scotland. Phase 3 of that will start soon when we get the better weather coming north of the border. We are making sure that we understand and can manage any implications coming out of the system on that.

Q470 Dave Doogan: If, as you suggest, bill payers should be grateful, I do not think that we should confuse effort with effect. I am sure that Ofgem is



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busy doing a lot of stuff, whatever that is, but in your scenario, people should be grateful and hold Ofgem in high esteem. If Ofgem was not there, how much worse could it be for bill payers? We are already paying some of the highest energy prices in Europe. Commercial customers, some of whom are going to the wall because of their energy, are paying the highest commercial energy prices. What difference would it make if Ofgem disappeared overnight?

Steve McMahon: We are there to protect consumers. We have lots of things that we do that are protecting consumers now. We see that even through the price cap and the announcements that were made last week. The key thing for us is whether we are doing the best job we can to protect consumers. It is a legitimate question to ask. We understand the affordability challenges that are out there across the country. We speak to customers every month directly to understand their point of view, what more they would expect from us and what we can do for the things that we regulate in terms of the supply side and the network infrastructure.

The best thing that we can do for them, and the best thing that will lower bills, is building out the new system, which is what we are doing. You have seen over the last few days the volatility that we get in wholesale gas prices because of events in the middle east and geopolitical events when you have an international market. If that is sustained, it will have a high impact on prices and exacerbate the situation. Over time, what we are doing is building a new energy system that will give us more control and help to lower those costs for all consumers, whether in Scotland or the rest of GB.

Q471 **Dave Doogan:** You understand how that sounds a bit "jam tomorrow".

Steve McMahon: There is an element of, "What can we do now?" There was a significant reduction in the price cap.

Q472 **Dave Doogan:** You are responsible for where we are now.

Steve McMahon: We are. If we look back, there are probably decisions that we would have taken differently. The decision on investment, for example, is a really good one. In hindsight, we under-invested in the networks. I mentioned having a strategic plan, and that is important. We were able to connect a phenomenal amount of renewables from 2010 to 2020, but the pace of investment never stayed on course with that, so now we are catching up. That is absolutely the case.

Q473 **Kirsteen Sullivan:** Mr Leslie, we have heard about the relatively high curtailment costs in Scotland. Battery storage sites could have a role in reducing curtailment, but it has been reported that some storage sites have been bypassed or skipped up to 90% of the time. Why is that? What role do you see battery storage sites having in reducing curtailment costs?

Julian Leslie: That is a really good and really complex question. Batteries generally today are two to four hours in duration, but the wind



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profiles that we see are 24 to 36 hours. That is why, as Steve mentioned earlier, the long-duration energy storage is the answer for curtailment. They can do a minimum of eight hours of storage, but they can hopefully do 20, 24 or 36 hours of storage so that they can cater for the full weather fronts that are coming across the nation.

If you have a two-hour battery, it helps for the first two hours, but then they try to sell that energy back into the market when it is already constrained off. In some ways that then exacerbates the constraint costs, because they are full and want to empty them to cycle again. It is a really complex situation.

In terms of dispatching them to do that, we are changing the way in which we work in the control room, the tools that we use and the advice tools we provide to the dispatch engineers, so that they can dispatch multiple of these devices all at the same time and get that big benefit. Again, it is very short-lived, so short-duration storage in Scotland for constraints is not the answer. It is a short-term answer for a couple of hours, but it does not provide you much benefit beyond that.

Q474 Kirsteen Sullivan: What kind of long-duration energy storage work is under way?

Julian Leslie: Steve might want to come in in a moment. A year to 18 months ago, we went to the market to say, "We are looking for some long-duration energy storage". In the Clean Power 2030 plan, we have up to 7,000 MW required by 2030. Working with Ofgem and the industry, we said, "Here are the technical requirements. Submit your applications", so we have a whole mix of new pumped hydro and the extension of existing pumped hydro. Also, the cost of lithium-ion batteries is now such that they can move away from just a two-hour or four-hour scheme, put more shipping containers in a field and get to that eight to 10 hours.

We are running through that economic environmental process now. I do not know when the decision is going to be made. In the next few months there will be an announcement. There were over 70 projects that were eligible for assessment, so there was a huge oversubscription again. We are working now on which ones offer the best value for the consumers and which ones can actually deliver by 2030 or 2031. Ultimately, Ofgem makes the final decision as to which of those go forward.

Steve McMahon: Last September, I think, we confirmed that 77 projects out of the 171 projects that applied were eligible. I think that 23 of those were in Scotland. That follows the UK Government confirmation of the cap and floor regime back in 2024. We are establishing the regulatory arrangements, and we have done that. We are going through the project assessment and looking at project costs, the expected revenues and deliverability and the wider economic benefits as well. In due course, we will set out the next phase of the assessment for those.

Q475 Mr MacDonald: I am afraid that I am going to come back to this bit



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about the affordability of energy in not just rural Scotland, but rural Britain. Rural Scotland produces, I would guess, well over 100 times more electricity than it needs. The price of the grid connection is going to go up by £108 by 2031 for the average user. We have the highest level of fuel poverty in Britain where I live.

I want to touch on the standing charges because, Mr McMahon, I know that you guys are doing a pilot on this. As I understand it, the standing charges were the cost of taking electricity from, say, the old coal-fired power station at Longannet up to Wick or wherever. If it is 67p a day, that is £226 a year. Do you think it is right that people in rural Scotland and the rural highlands should be paying in order to send electricity down south? That is what we are doing. We are paying a lot of money in order to give our electricity to other people. Do you think that that is just?

Steve McMahon: Going back to your numbers, the £108 that you referenced is the increase in network charges on bills by 2031 as a result of the new regulatory arrangements that we have coming in from 1 April. That does not mean that there is going to be £108 extra on bills. That is the additional network cost, but you get benefits from the lower constraint costs, as we have been discussing. Also, if you have more renewables coming on the system, that is setting a higher share of the price, so that reduces the wholesale cost. We calculate that the net impact will be about £30. That, fundamentally, is building the infrastructure.

When it comes to the distributional arrangements, the market arrangements are set by Government. They looked recently at how they might reform that in terms of whether you move to regional pricing. They decided against it, so we have a reformed national pricing that will be progressed now. We have to work within the arrangements that are set by Government. The key thing we can do is make sure that the costs of the infrastructure are efficient—and, as far as possible, in line with the policy drivers that are set—and make sure that those costs are distributed fairly.

Q476 **Mr MacDonald:** You are doing a pilot on standing charges.

Steve McMahon: Yes, on standing charges, absolutely. Again, this is a huge issue. On standing charges, we had the biggest-ever response that we have had to any of our consultations. We have a pilot that will run from April. That is with four of the major suppliers, so that is 150,000 customers. That will give us more information about some of the practical impacts when you reduce standing charges, but you obviously have to recover costs, so you are increasing the unit rate. Is that the right thing for all customers?

We have to do that very carefully, because there could be unintended consequences. If you have a high proportion of low-income customers that might be on electric heat, for example, it might not be the best



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solution for them. That is why we are doing the pilot and taking that quite carefully.

Q477 **Mr MacDonald:** Do you think that there is a case to be made for the areas that generate the electricity to pay lower or zero standing charges?

Steve McMahon: We have to work within that policy framework that is set by Government. They are the ones who set out how that works and how the charging signals that we have to operate within should be applied in terms of our regulation.

Q478 **Mr MacDonald:** It all seems to be downside for people in rural areas generating Britain's electricity.

Steve McMahon: I can understand that. I personally live right next to the biggest onshore wind farm in Scotland and the UK. I can also understand that in terms of the prices that are paid reflecting where the energy is being produced.

Q479 **Chair:** Mr Leslie, how do you factor consumer affordability into your strategic energy planning?

Julian Leslie: We weigh up many factors in our strategic energy planning, and one of them is economic. We look at the whole-system costs. You will see from our Clean Power 2030 analysis that we looked at whole-system costs. We think that the cost of achieving that by 2030 is roughly neutral. It is roughly what it is today, depending on your assumptions around gas price, which a week ago was very different to what it is today. It is part and parcel.

The transmission owners give us a whole host of options to invest in the network. Our analysis looks at the economics of that and the environmental and community impacts of those infrastructures. We are playing all this trade-off the whole time. We have a robust framework and methodology. We have consulted with key stakeholders to understand that methodology, so that, when we come to do our assessments, it is trying to put the right balance of economic, community and environment alongside each other.

Q480 **Chair:** We seem to be living in an increasingly volatile world, and geopolitical shocks will have an effect on our energy supply going forward, at least until we get to the point where we are self-sustaining in that regard. Is that something that is factored into your planning?

Julian Leslie: Security of supply is the core—it is the thing we never talk about, because it is taken for granted. We would never plan a system where we do not believe that, whatever the weather or the geopolitical shocks, we could not operate the system. That is the beauty of moving to this energy transition, because we become much more self-sufficient in our own energy, which is not subject to the global price and the global market and is more resilient.



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There are things that we have done as the system operator to make the system resilient to this low-carbon future. We have realised now that the system is more resilient and stable today than it has ever been, as proven by an example last year where we lost four generation units all at once. The last time we had a big power outage, in 2019, we lost a million consumers across Britain. For that same fault—the four generation outages last year—had we not made the changes we made, a million customers would have been sat in the dark for a while, but that did not happen. No one noticed outside of the industry, because of our embracing the new technologies, embracing batteries to provide very strong, very rapid frequency response, understanding inertia and creating new markets for new innovations, many of which are in Scotland.

Scotland is the only country in the world that has five batteries with grid-forming inverters, providing grid stability services. Scotland is the only country in the world that has a dedicated grid-stabilising device, made at GE in Rugby, which is providing grid stability services for the north-east of Scotland. We are moving all these great innovations, recognising the great resources that Scotland has and the strong political will we have had now for over 20 years to move to this decarbonised future. We have built and invested in the network in Scotland to make it robust and resilient.

Q481 Douglas McAllister: Levels of consumer debt are at their highest since records began. It is now sitting, as I understand it, at £4.4 billion-worth of energy debt in the UK. Can you tell me what the figure is for Scotland?

Steve McMahon: We do not have a figure for Scotland. You are right in the sense that the total debt in arrears—arrears being the debt that is not in repayment plans—is just over £4.5 billion now. That has increased in recent years.

The reason we do not have a figure for Scotland is that, when we look at our regulatory responsibilities and where we would intervene, it would either be at a market level, which is a national market, or a supplier level. I do not have a specific figure for Scotland. The best that we would have available is if you look at Consumer Scotland. I think that its survey data from last year suggested that 15% of Scottish consumers were in energy debt. I think that that equated to around about 380,000 households, but Ofgem does not have its own figure.

Q482 Douglas McAllister: Why can you not establish the extent of the debt in Scotland? It is a figure, for instance, that Citizens Advice in Scotland was interested in obtaining. It gave evidence to this Committee earlier. You started this hearing by saying that you have an 800-strong workforce in Glasgow and across Scotland. You are the head of the energy market regulator in Scotland. Is that a figure that you can look to establish?

Steve McMahon: We can take that away and look at it. I can say that we do not have that just now. It goes down to the way that we regulate



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the national market or look at a supplier basis, and there are obviously going to be regional variations to that.

Q483 Douglas McAllister: If it is something that you can take away and look at, we would greatly appreciate that. Is that perhaps something that you could provide to this Committee in writing in the future?

Steve McMahon: I can follow it up. I cannot promise that it will be available, but I can certainly follow up in writing. I will check with my colleagues.

Q484 Douglas McAllister: Thank you very much. I understand that you are designing a new debt relief scheme to take effect this year across the UK. Can you explain to the Committee what the structure of that will be and how it will be administered?

Steve McMahon: Yes. That has been ongoing for some time. We are working with Government in terms of the final approval. What you are effectively looking at here, at least in the first phase, is dealing with the stock of debt and a reset around some of that energy debt that has been built up since the energy crisis, in particular for the most vulnerable customers. We are nearing the point at which we can put those arrangements in place. I can come back to you about the specifics. In terms of the volume, I think it is worth around about £300 million-plus, and it will be for over 200,000 customers across the whole of GB.

Q485 Douglas McAllister: Do average customers across the UK currently pay a sum on their bills that goes towards debt recovery costs?

Steve McMahon: This is why it is important that we deal with debt. First, there is the impact that it can have on the individual customer who has the debt. Secondly, it is in terms of the operation of the system and the supplier itself.

Q486 Douglas McAllister: What about customers who do not have that debt?

Steve McMahon: Yes, exactly. The third thing is the impact that it can have on customers who do not carry the debt. You need to recover the costs, and those costs for schemes such as this would be funded through wider energy bills.

Q487 Douglas McAllister: At the moment, what is that cost per year to customers who do not have debts?

Steve McMahon: I cannot say that, I am afraid. I would need to follow up.

Q488 Douglas McAllister: You do not have that figure. There is some suggestion that it is maybe £60 a year.

Steve McMahon: That is not a figure I recognise.

Q489 Douglas McAllister: You do not recognise that figure.

Steve McMahon: I can follow up in writing on that.



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Q490 **Douglas McAllister:** The new debt relief scheme sounds as if it is going to add more to energy bills.

Steve McMahon: In principle, the cost would be recovered over the wider consumer base, yes.

Q491 **Douglas McAllister:** That is from all of us.

Steve McMahon: Yes, from all bill-paying customers.

Q492 **Douglas McAllister:** How much do you think your new scheme is likely to add to our bills, if it is almost ready this year?

Steve McMahon: I cannot give you a precise figure. It is not something I am directly involved in at Ofgem.

Q493 **Douglas McAllister:** But you know that it might recover £300 million this year.

Steve McMahon: We can come back in writing with a precise figure. That would be the stock of debt that would be written off. That is that figure and the number of customers who would be eligible.

Q494 **Douglas McAllister:** How much of that write-off is added on to consumer bills in the UK?

Steve McMahon: It would be all of that. The value that you take off the debt stock would be added.

Q495 **Douglas McAllister:** Could you work out how much that would add to a bill?

Steve McMahon: They would do it through the network charges so that it is recovered over a period of time. I do not want to speculate, but I will come back to you with a precise number.

Q496 **Douglas McAllister:** £300 million towards £4.4 billion sounds like the tip of the iceberg or a drop in the ocean, and that £4.4 billion is rising. Is it going to have any effect?

Steve McMahon: That is not to say that that is the only thing that will be done. This is the first phase. The precise number is not just that £300 million; it could be higher than that. I will confirm that in writing. There will be other things.

Q497 **Douglas McAllister:** Do you think that that is going to reduce the £4.4 billion?

Steve McMahon: It will reduce that. There is a question in terms of how far you take it over and above that. This is the first phase, in terms of those customers who might be on means-tested benefits. You will have elements of the rest of the debt stock that can be recovered through the customers, which is through sustainable repayment plans, but clearly it is something that we have to get on top of. That is part of the obligations



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on suppliers as well, to make sure that they have early engagement with customers to prevent the actual stock of this debt increasing over time.

Q498 **Douglas McAllister:** It really sounds as if it is about the price of energy and making energy more affordable, rather than a debt relief write-off scheme. It sounds as if that really should be the aim.

Steve McMahon: There is no question in terms of how that debt has been built up and the increase in energy prices that we have seen since the crisis. You will have some of that debt that is with people who can pay who just will not pay. It is important that we separate that out.

Q499 **Susan Murray:** Citizens Advice also mentioned social tariffs. Is any work being done to look at social tariffs?

Steve McMahon: We are on record, and our chief exec is on record, in terms of our general support for social tariffs, but for us that is something for Government. It is not something that we are directly involved in. It would need Government to make that determination of whether that is something they wanted to pursue.

Q500 **Susan Murray:** Given that the total pricing structure by suppliers is including the cost of the debt, going forward debt prevention would seem to be a sensible thing to do in the total system that might not necessarily put costs up for everybody if the suppliers were pricing in a way that included a social tariff. Is that part of the discussions?

Steve McMahon: The Government would have to make a decision on the introduction of a social tariff. For us, it would be about how you give effect to any of the regulatory arrangements and obligations that would fall on the companies themselves.

Q501 **Elaine Stewart:** Mr Leslie, NESO published revised timelines for grid connection after missing its January deadline. Why did you miss that deadline?

Julian Leslie: We have just gone through a change of a generation. The connection queue, as you know, was 800,000 MW when we need about 200,000 MW, so it was four or five times over subscription. Every country in the world is facing a very similar challenge. We are the first to make a change to this. It has been a massive reform programme, with huge impacts across all the industry.

We published on time our revised connection queue in December. That moves from us to the transmission owners to say, "Here is how they are connecting people. They have passed the gate 2 to whole-queue process, so now you need to work out what their connection date is and what the assets to be built are." They then need to send us a contract back to NESO, which we then need to send out to the customer. We underestimated the scale and challenge of that.

Also, there have been some surprises in the gate 2 to whole-queue process in that there is still a four-times oversubscription on batteries.



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We have 80 GW-ish of batteries in the whole queue when we need about 23,000 MW by 2030. We have spent a bit of time, leading up to Christmas and since, working out our policy position on that and working with the transmission owners to say, "How do we treat technology where there is such a big oversupply?" That has led to a little delay. We are going to publish all the transmission-connected offers by mid-April and all the distribution ones by mid-May.

Q502 Elaine Stewart: NESO has also shifted plans so that the offer releases will stagger by area. What are the delay consequences of this approach if you are staggering your connections across Britain?

Julian Leslie: We are dealing with the ones that need to connect in the short term first. We have thousands of offers to create. We have got rid of thousands. That is what the whole process was—to get rid of thousands—but when you look at the whole queue that is left, there are still thousands of offers to be made. We are doing the right thing by prioritising those that are connecting this year and next year, which is what is coming out by mid-April and mid-May. We will then move on to the next ones, which have longer. That is not so pressing, because their connections are later.

We are just having to prioritise. It is a massive amount of work that we are pushing. We normally take three months to do one of these offers, and we are trying to do two a day currently. The scale of the change and the implication of what we are doing is massive, so it is going to take us time. That has always been the case; we have always said that it is going to take time to implement.

Q503 Kirsteen Sullivan: Mr Leslie, what are the most significant impacts of NESO's connections reform on Scotland's community energy sector?

Julian Leslie: As I said earlier, we recognise the need for community energy because it gets that buy-in and commitment, as Angus was saying. People can see the benefits and get closer towards understanding their energy and where their energy comes from.

On the process in connection reform to date, we have set caps and limits. The Government have set caps and limits through the Clean Power 2030 action plan. Our connection reform is then saying, "You need this much solar, onshore wind and offshore wind in those regions". Using the process of connection reform, we have gone down the list and said, "Yes, you are ready. You are capable of delivery, so you get the connection offer".

We are working with the Scottish Government, the UK Government and Ofgem to think about how we treat community energy schemes, because they are generally smaller. In England and Wales, there is a higher barrier before you get captured by the connection reform process. The network in Scotland is very different; it has been developed for a different purpose. It was developed originally to capture the



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hydrogeneration and move it along the valleys, so it does not have the same meshed interconnectedness that the rest of England and Wales has, just because of the history of where it has come from.

We are working with policymakers, the regulator, transmission owners and distribution companies in Scotland to understand what the requirement for community energy is. What are those policies and processes that we need to enable it? Through our regional energy strategic planning process, which, again, is new, we are strategic planning for the first time, looking at the whole system from the bottom up with the distribution companies. We will be within those communities, understanding what their needs are and how we can feed that through into a strategic plan.

Q504 Kirsteen Sullivan: Can you give me a bit more clarity over the factors that explain why transmission impact assessment thresholds remain significantly lower in Scotland than in England and Wales? I am sure you can appreciate that that is causing quite a bit of angst in many communities.

Julian Leslie: That comes back to the history of how the network has evolved. It is even as simple as the fact that transmission voltage in England and Wales is 400,000 V and 275,000 V; in Scotland, it also includes 132,000 V. The nature of the network and the way that it has evolved over the last 100 years is very different to the one in England and Wales, because it was designed for the specific purpose of capturing small run-of-river hydro in the valleys to bring it out to where the towns and the cities are. It is therefore at much lower levels of capacity. Just saying, "Anybody can connect a 5 MW community energy scheme into the Scottish network" would have a huge impact. In England and Wales that has less of an impact, because there is more capacity due to the way that the network has evolved over the last 50 to 60 years.

Q505 Kirsteen Sullivan: Are we going to get to a place where the network will have sufficiently evolved again for the thresholds in Scotland to be increased?

Julian Leslie: Yes. That is what we are working on with the transmission owners now. Is there something we can do now in the shorter term? As all this infrastructure we have been talking about this morning comes into play, the Scottish network is going to look much more like the meshed network of England and Wales, with lots of high-capacity transmission circuits. That will therefore give us the capacity to be able to explore community energy. As I said earlier, though, the network is already full in Scotland, and that is driving constraint costs. Every megawatt of additional generation adds to that constraint cost, so we also have to think about the overall cost to consumers.

Q506 Kirsteen Sullivan: Do you have a timeframe for that?



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Julian Leslie: It is not all within our control either. It is about working with the Scottish Government and their policy on community energy, as well as working with the distribution and transmission companies.

Q507 **Kirsteen Sullivan:** At a strategic level, do we have an aim or an end date in sight when we can have a bit more clarity?

Julian Leslie: Let me take that away. We will write back to the Committee on that.

Q508 **Kirsteen Sullivan:** That is great; thank you. Another source of consternation with the community energy sector has been the fact that they have not been given a designation status for their projects to get grid connection priority. We have heard from Galson Estate Trust and other contributors to this inquiry. They are really quite alarmed at that, and it is going to cause them significant delays. Why was the decision taken not to include that mechanism within the connections reform?

Julian Leslie: It would not be a decision for NESO. Nothing is designated; it is all about cost, technology, location and time of delivery. Nothing has a guaranteed connection to the grid system. If it was the case that the Scottish Government, the regulator and the UK Government wanted to make that happen, that is a policy decision that we would apply to our connections and strategic planning processes.

Q509 **Kirsteen Sullivan:** I am fairly confident that this topic will have been raised with the decision makers. Are you saying that you are not aware of any conscious process that took place to evaluate whether that was possible or—more to the point—desirable?

Julian Leslie: I did not run the connection reform process for NESO. Again, we can take that away.

Q510 **Kirsteen Sullivan:** Is that something you could come back on? It is quite important to understand why that was not done.

Julian Leslie: One of our core licence objectives is to be non-discriminatory. We had a connection queue and people in that connection queue, both at transmission and at distribution. This has been a massive change. As I said, it is a once-in-a-generation change in the policy and process, and the legal risk and legal challenge has therefore always been at the forefront of all our minds. We have therefore had to be very clear in the policy and the application of that to ensure that we have been truly fair and non-discriminatory in our decision making.

Q511 **Kirsteen Sullivan:** I understand that. At the same time, we have the Government coming out with the local power plan, and community energy is obviously central to that. I am seeing a little bit of a disconnect here.

Steve McMahon: I am not sure that there is a disconnect. Julian is right in the sense that the technology capacities are set by the UK Government. When it comes to community energy, you would, first, need



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to define what exactly is meant by community energy and the parameters around that, and, secondly, how you reflect that into the capacity requirements. The local power plan has been published by the UK Government, and I think they are working closely with GB Energy around the implementation of that. Certainly, from a regulatory perspective, we could help to facilitate further changes to connections, but first we would need the UK Government to recognise and prioritise the new categories and the technology requirements that they set out.

Q512 Kirsteen Sullivan: SSEN told us that designating community energy is crucial to achieving the Government's target of 8 GW of community-owned power by 2030. What is your view of that assessment?

Steve McMahon: From our point of view, we care about consumer outcomes and any participant in the market fulfilling their obligations. If community energy can help to reduce costs and contribute to wider environmental targets and decarbonisation, for example, we can support it, but only within the remit of our existing regulatory arrangements.

Julian Leslie: As we have talked a lot about this morning, though, with the 8,000 MW, the peak demand for one half-hour in Scotland is 5,000 MW. The rest of the year, it is about 2,500 MW, as Angus said earlier. If you are adding another 8,000 MW of generation into Scotland on top of the 40,000 MW of offshore wind and also onshore wind, you are exacerbating the constraint costs and you need more infrastructure to export power, unless you have this huge economic growth in hydrogen electrolysis, data centres and decarbonisation of industry, which is the opportunity that this affords Scotland to do all of that.

Q513 Kirsteen Sullivan: Basically, the infrastructure has to match the ambitions that we are hoping will be delivered.

Julian Leslie: Yes.

Q514 Kirsteen Sullivan: I have one final thing. Community Energy Scotland has called for the presumption that community energy projects are guaranteed grid access at the end of their asset's lifetime. Again, this has been brought up by other parties as well. What is your view on the feasibility of that?

Julian Leslie: It is an evergreen right for transmission entry capacity. I would have to check for distribution, but certainly for transmission it is an evergreen right, as long as you are paying your annual charge for connection and you are not exceeding your capacity limit. You need to inform us, but let us say that you have 10 turbines at 2 MW today and you want to repower with five turbines at whatever the number is. I have forgotten the maths, but if your total export is still the same, repowering is not a problem. I would have to check for distribution.

Steve McMahon: Yes, I would need to check that as well.

Q515 Kirsteen Sullivan: The problem is if they bring in higher capacity or



something that has a larger demand because technology has moved on. That is perhaps where the issue is.

Steve McMahon: Yes. I will take that away and have a look at it from our point of view as well.

Chair: Mr Leslie and Mr McMahon, that is the end of our questions to you this morning. Thank you very much for your contribution; it has been extremely helpful. We are grateful to you for making the time to be with us today.

Examination of witnesses

Witnesses: Guy Jefferson, James Basden and Scott Somerville.

Chair: We are now going to resume with our second panel of the morning; I welcome the witnesses. I will ask you all to introduce yourselves very briefly and say what you do. Can I start with you, Mr Somerville?

Scott Somerville: Good morning. I am Scott Somerville. I am the director of external affairs at E.ON. We are an energy supplier looking after around 5.5 million customers across the whole of the UK, which includes about 370,000 businesses. In terms of Scotland, that equates to about 250,000 customers, about one in 10 homes, and we have about 5% of the business market.

James Basden: Good morning, everybody. I am James Basden. I am a founder and director of Zenobe. We started Zenobe in 2017 around the theme of making clean power accessible in the two most polluting sectors, which are power and transport. Today, we are the largest owner and operator of grid-scale battery storage on the transmission networks in the UK, primarily in Scotland. As Julian Leslie explained earlier, we provide about 90% of Scotland's stability services, which is inertia and so on. Most of our batteries are on ScottishPower's networks.

We also have an electric vehicle fleet business, electrifying buses and trucks. We have about 40% of the electric bus fleet in Scotland. We have a second-life battery business, which is all about repurposing batteries when they come off their vehicles. From starting to get friends and family involved to get this business off the ground eight years ago, we have now raised £2.7 billion into the business, and we have invested over £1 billion into Scotland in the last four years.

Mr MacDonald: That is fantastic.

Guy Jefferson: I am Guy Jefferson. I am the managing director of the transmission business in SP Energy Networks. I am responsible for delivering the investments over the next five to 10 years to deliver CP2030 initially in central Scotland. Our patch covers the central belt of



Scotland—I always talk about the diagonal between Stranraer and St Andrews. We have a huge challenge and a great opportunity to deliver £11 billion-worth of expenditure to reinforce the network and bring the infrastructure required to deliver that CP2030 challenge that Government have set us.

Q516 Chair: Thank you very much. I will begin with Mr Basden, but this question is to all of you, really. How confident are you in the overall deliverability of the planned grid upgrades within the expected timelines?

James Basden: I would use the word “ambitious”. In all honesty, it is very worthwhile, but the challenge of delivering CP2030 is huge. From our perspective, grid and connection reform has been a good thing, but it has caused considerable delay. What you are seeing right away across the network is projects being delayed to 2028, 2029 or 2030. There is a huge bubble in that time period that really means it is very difficult to deliver. Although it is admirable that we are pushing for this, the Government have a huge challenge, and both NESO—we will probably come on to talk about NESO’s challenges associated with 2030—and Ofgem have some big challenges ahead.

Scott Somerville: I am absolutely answering the question. The grid is an important topic and one that we have to talk about. There is no question that investment in infrastructure at that level is required, but too often in the energy sector we are talking about big projects.

If I think about our customers, whether it is those in Scotland or other parts of the UK, those are the people who need the benefits of the transition not in 2030 or 2035, but today. We are showing that through consumer energy flexibility, you can manage that transition, first and foremost and really importantly, from that customer or business perspective, which is to save them money today. That means looking at everything from the traditional topics such as insulation and also talking about batteries, time-of-use tariffs and battery assets that we can steer.

Again, we will talk about big grid-scale batteries, but we have just launched a project in Glasgow to try to work with children who are living in poverty. We are working with the city council there to make a difference by delivering savings with a battery that we control and steer. We are guaranteeing savings to those families of around £400 a year. That is an energy transition story about flexibility and innovation, but it is about benefits today. We all know that energy is currently too unaffordable for too many people. That is the difference.

Yes, we need grid investment across the top, but, if we think about what we are doing in homes and business, perhaps some of the investment at the top of the chain does not need to flow through to consumers picking up that bill. There is a benefit in terms of reducing constraint payments, and there is a benefit in terms of pounds in people’s pockets. We absolutely need to invest in grids, but, as a company that is involved every day with millions of people across the whole country—as I say, we



provide energy to about one in 10 households in Scotland—that is where we think the biggest difference can be made.

Guy Jefferson: I remain optimistic. I would agree with James that it is challenging, and there are a number of risks that we need to mitigate, but we believe that, from a transmission delivery perspective, we can deliver against the expectations of our customers, Ofgem and DESNZ.

There are probably four specific challenges. The supply chain is stretched. We use the same supply chain as James does in his area. We need to try to make sure that that is developed and that we are giving support to that supply chain to allow them to deliver what they need to deliver. That is within our power, and we have already made great strides on that. There is confidence that we can mitigate that risk.

The second challenge is around skills and resources. Obviously, we need a lot of people. Across the UK, we need 140,000 people in total, if you look at both the TOs and the supply chain, to deliver against this by 2030. We have made a good start to that. We are all working together, which is really important in this. Colleagues from SSE, National Grid, DESNZ, Ofgem and the supply chain are all working together to develop and bring in those resources that will deliver against that challenge. Again, it is a risk and a challenge, but I believe we have good plans in place to mitigate that.

The third challenge is system access. The previous panel talked about the reliability and security of supply, which we are very proud of in our industry. We provide a fantastic service in terms of 99.999% reliability, and we do not want to compromise that. We need to make sure that the plans we need and the outages that we need to take in order to connect new infrastructure are deliverable. We are working on that again with our colleagues in NESO and Ofgem to make sure that is achievable.

The last challenge is consents and land reform—I think the previous panel said this was where they see the biggest risk. Again, progress is being made with the Planning and Infrastructure Act that went through Parliament at the back end of last year, which was positive in terms of picking up on a number of points that we have been putting forward for some time to allow us to move forward quicker in Scotland in particular, but more work needs to be done on land reform. There is more work to do to bring some of the commitments in the Planning and Infrastructure Act through the Scottish Parliament. We need a timetable for the legislation that we need in Scotland to enact a number of things that came through with that Act. Again, we are confident, but there are significant risks in there.

Q517 **Chair:** I think Mr Somerville and Mr Jefferson have answered this question, so I will maybe just put it to you, Mr Basden. Have Ofgem and NESO accurately judged the level and pace of the grid upgrades that are needed?



James Basden: I started this business because in 2016 it was pretty self-evident to me that, if you build a lot of offshore wind up in the North sea and you need to connect that into a transmission network, and that transmission network is not yet prepared or the regulator is not really putting pressure on that as to what the demand is going to be, you will need other assets on the grid to provide the flexibility required by intermittent renewables and the fact that the grid just does not have the capacity to move that amount of power. In 2016, we forecast that the cost of that would be about £2.5 billion, which is frankly not very far off where it is today.

We have been very slow to move. I understand that the grid is a complex system, but we really need to design our grid and our transmission network for what we require in the future. The pace of technology change is tremendous. It is very exciting. For example, in 2016 batteries were scarcely viable. Today, they really are probably the most efficient form of flexibility on the grid.

We have to look forward. Historically, we have not been good enough at that. It has not been easy for the transmission operators necessarily to do that, frankly, because it has not been a big enough element of their regulated return. They have not really been incentivised enough to look forward.

An illustration is that it would make a lot of sense to build more of an offshore transmission grid to move power from Scotland down to England—I understand that that is difficult. There are two eastern links that will be going from 2029-30 at the moment, which ScottishPower and the National Grid are doing together, but we needed those things earlier, frankly. That would have reduced the curtailment cost that consumers are having to bear today.

Q518 Chair: Are we now on the right track, given the technology that we know about and the technology that we have?

James Basden: We have a much better understanding as to what is required. Yes, things are significantly better than they were 10 years ago. There is always a dilemma about how much investment you put in. One of our concerns would be that there is overbuild of renewable assets put on to the grid and overbuild of transmission network. NESO is starting to do a spatial energy plan, which is due to come out next year, that says, "This is where we need these assets"—that could be, for example, offshore wind—"and this is where we can connect it and how we can get it to demand". Next year we will have greater clarity on that, but that is 2027. That will set the future for the next decade or so.

Q519 Elaine Stewart: This question is for everyone. In your view, what actions, if any, do the Government, NESO or Ofgem need to take to make clean energy by 2030 genuinely achievable? I will start with the optimistic Mr Jefferson.



Guy Jefferson: To repeat, I remain optimistic that we can deliver. I have laid out the challenges in my previous answer. I have to give credit where credit is due. Steve mentioned Ofgem in the previous discussion. Ofgem has opened the door to mechanisms that were not there before in terms of advanced purchasing mechanisms, which allow us to mitigate the supply chain issue that we had and book manufacturing slots in advance. It is prepared to fund that cost in a reasonable way. From a supply chain perspective, we have definitely been heard.

We have been heard in land and consents in terms of some of the conditions that went into the Act of Parliament that went through at the end of the last year, but the one area where we have significant concerns is land reform. We are working with DESNZ at the moment. We promoted 12 priority measures with regard to land reform. DESNZ has picked up four of them, but one of the key ones for us is the ability to purchase land on an efficient and timeous basis to allow us to deliver against our CP2030 obligations.

The other utilities in Scotland, whether that be gas, telecoms or water, have a process called notice to install, which allows a three-stage process. They have to demonstrate that they are going through a voluntary process with the landowner to come to an agreement. If that is exhausted, they can then apply for a notice to install. That gives an appropriate timescale, which gives the landowner appropriate notification of the timing and when we need to do that. After that notice to install is complete, we undertake to make sure there is fair compensation after that. It is a process that is in place for the other utilities. We have promoted that as potentially a solution for electricity to allow us to deliver on the 2030 timescales.

At the moment, we rely on compulsory purchase orders. That is a very long process. For example, in the south-west of Scotland we currently have a scheme that has received consent. It is a 132 kV substation and overhead line. It has received consent from a section 37 perspective, but we now have to purchase the land associated with it. We have been in that process since 2024. It is currently with the Scottish Government with regard to the conclusion of a judicial review. We are almost two years on, and we are no further forward with delivering that. That gives an example of the kind of timescales that we are talking about and the delay that could put into some of the schemes that we have. That specifically is one area where we need support from Government and Ofgem.

James Basden: Guy has covered a lot of good points, so this may be a slightly different point. First, there are a lot of things that NESO is doing that are really very good in terms of opening up new services around providing inertia, reactive power and so on. On a global scale, it really is at the forefront compared to other system operators. There is credit where it is due.



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One of the significant things, however, which I think was raised in the previous panel, is around not using battery storage when it is in merit. That is skipping, as you have said. This is a situation where we have a battery that is available to take power off the grid, but instead of doing that, the system operator curtails the wind farm and brings up gas, for example, in another part of the country to balance the grid. That puts much more cost on to the system and is environmentally not a good thing to do.

This is happening on some of our sites, particularly skips behind a constraint, 80% to 90% of the time. We are available. Just to give you an indication, last year on two of our sites, Wishaw and Blackhillock, we were available to absorb power off the grid and prevent that curtailment for 271 GWh. That is the equivalent of providing power for 100,000 homes, or the city of Aberdeen, roughly.

This is a really significant problem. As Julian Leslie explained, it is complex. He also said that it is a small amount relative to the overall cost, but the absolute number is a very large number, and it has a really negative impact on battery storage in Scotland. We build sites with a forecast economic return and a usage rate. If you are being skipped 80% of the time, it has a negative impact on us and it has a negative impact on consumers because they are paying much more. The problem with that is we then build out more assets, such as transmission lines, than we require. This issue around addressing skips is something that is doable in a short timeframe and would make a difference to delivering the 2030 results.

Scott Somerville: Clean Power 2030 is a hugely important mission, and it is one that we absolutely support. I echo a lot of the points that were made. I would maybe put it that we have to think big, but delivery needs to be at a small scale.

As I have touched on and as you discussed earlier, it is about your constituents. In order to get the permission to make the investments that we need at a national infrastructure level, we have to take people with us—I say that as a customer-facing business. We have to show the benefits quicker. We can do that, but it is about making sure that individual aspects and technologies are not overlooked because there is a bigger prize over here.

GB Energy, for example, does an awful lot of great work. It is great that such large sums are being invested, but let us make sure that, as part of that plan, there is a role for consumer flexibility and there is investment in domestic batteries and smaller batteries for business so that all the different bits of innovation and all the ways that energy has become a digital service can be unleashed. That is not an esoteric point or a concept or saying, “Isn’t it great that we are in the modern age?” As I say, that is the only way you will tackle energy unaffordability in the long run.



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Again, just touching on that, there is more that needs to be done to help people who are struggling. I am sure we will touch on that, but for Clean Power 2030 we have to make sure that every lever we can pull is pulled. It is not just about the huge big-ticket items, as important as they are. The individual pieces that can sometimes get overlooked add up to so much.

I will briefly touch on one project. We are running a solar-sharing community energy project in a school, which happens to be in London. There are a couple of hundred panels on that school. It generates enough energy to power 34 homes. What we have set up, working around the Ofgem rules, is an innovative approach whereby local residents can share in that solar output so that you can reduce the load on the grid and the transmission and distribution costs. That is generating money.

If you think from a Scottish perspective, there are a couple of thousand primary schools in Scotland. If you replicated that, think about, first, the benefit that we could deliver to local communities and, secondly, the cost savings that come through from looking at infrastructure by adding pieces together.

We talk about consumer flexibility. It is not just about an individual battery; it is about the work we do as E.ON Next to have the software running in the background that does the thinking, if you will. You essentially create a virtual power plant. We have all talked about coal-fired or gas-fired generation. When I started working in energy 15 years ago, it was, "Build the generation, connect it up and there will always be demand there". We have to look at it the other way around. That is the only way that we are going to tackle the problem of unaffordability.

Q520 Elaine Stewart: It is great to hear that. That innovation is happening in Ayr now; they are selling the electricity back to the schools, and the community is getting the benefit out of that. It is really great to hear that innovative things are happening. I would be keen to see about the stuff within houses in Glasgow. Is there battery storage within the houses?

Scott Somerville: Yes. Just for a second, I will talk about the evolution of it. We have projects across the country. I promise I will land on Glasgow, but I just want to talk through the evolution of it.

Chair: I am sorry. I will have to interrupt you, Mr Somerville. We are really beginning to get a bit short of time.

Scott Somerville: I will do it briefly. We will absolutely follow up in writing with greater detail, but, as I will just cover in the next 30 seconds, we are working with cities across the UK.

One example that I would pull out is Coventry. This project involves debt relief. These are households that are struggling, so the debt relief is important. We write off their debt and give them a level playing field. As we heard in the previous session, there are unsustainable levels of debt.



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We address that. We insulate the home, make sure there are energy-efficient appliances in the home and provide a battery and a time-of-use tariff. That is where it is cheaper overnight. We are seeing savings of £300 for people. If someone in the household is medically dependent, it can be up to about £650 or £700 as a higher user.

This takes me on to Glasgow. The next phase of these trials uses a battery. This is what we call a steerable asset. We provide a guaranteed payment to the household of £40 a month. We provide the battery and retain the ownership, but they get 100% of the benefit that we have calculated. We give them a bill credit of £40. They get the benefit. The wider system benefit is that we can trade that power; to the flexibility point, we can reduce the burden on the network. Again, that is targeting households with the city council for children who are living in poverty.

The really important part of that project, as well as the technology and the approach, is the use of city council, DWP and charity sector data. We know where the people who are struggling are. Too often there are too many blockers. Yes, it is about the technology, but it is also getting that data sharing in action that makes a difference.

Elaine Stewart: I would be interested in getting some more information on that.

Scott Somerville: Yes, of course.

Q521 **Elaine Stewart:** I will move on to my next question. To what extent has NESO's connection reform struck the right balance to provide a manageable queue without holding back valuable projects?

Guy Jefferson: We have been involved in working with NESO, as Julian commented on the previous panel. There is no doubt that it has made a significant difference. As he said, having about 800 GW of either contracted or connected generation was an unmanageable situation. In reality, they have halved that through the reform, and I think that is right.

Again, we are still at a point where we are still issuing new contracts to those customers. There is a degree of frustration from the customer base in terms of the time it has taken. From our perspective, the quicker we understand the impact of the new queue on our system, the quicker we can finalise our projects and get out and deliver them.

The genesis or the answer to all my questions is pace. It has struck the right balance, but has it taken too long? Potentially, but we need to get it right. I take that point. It is now about cracking on, delivering the new contracts to customers and making sure we understand the impact of any changes that have been requested.

James Basden: Just building on Guy's comments, as Julian Leslie said, they needed to be more draconian and much faster. There are still far too



many projects in the queue. Many of those projects are not financeable and not required on the grid.

We have what were classed as protected connections, i.e. 2026 connections. Some of them have been put back to 2029. To understand the impact on a local community that is concerned about a large battery connecting to that community, for example, it adds another three years. We may have committed tens of millions of pounds of equity into a project that is now going to be delayed quite considerably. That has a material impact on returns and frankly provides a lot more uncertainty for the transmission operators, which equally have to commit forward to long-lead items without certainty around a connection date.

Yes, it does have a significant impact. I am glad that we have done it; I just think that we needed to be more draconian and cut out a lot more projects.

Scott Somerville: Flexibility is the answer, as we have talked about. You have to make sure you pull every lever. It is great that the queue is being looked at, but let us look at what other ways there are as well. You could expedite those projects that have a real chance and will develop. We should be looking on that basis and making sure that there is real customer and business benefit.

At the end of the day, there is an end user. We have to make sure that, through the whole energy system, it is not just those at the top that are extracting the value; it has to be felt at a customer and a community level, as we have touched on.

It is good that the queue is being expedited, but let us make sure we are absolutely not leaving any stone unturned in terms of those smaller levers. They add up to an even bigger total than the queue.

Q522 **Kirsteen Sullivan:** I had a few questions around constraint management, but we have spoken about that quite extensively, along with the need for flexibility and to look at other options, including batteries. Very briefly, what approaches would most effectively reduce network congestion while keeping costs down for consumers? That is absolutely critical.

James Basden: There are two things—Julian Leslie mentioned them—that need a lot more time, focus and urgency. The first is around intertrip schemes, which enable you to move power between different parts of the grid.

The second thing is the constraints collaboration working group, which is run by NESO and supported by the transmission operators and about 30 people from the industry. We are involved with that. It is moving at an exceptionally slow pace. It just needs focus and drive. There are plenty of solutions there, but we need to get NESO on the front foot around these things. That would materially move things in a 12-month timeframe.



Guy Jefferson: I have one comment on that. One member of the Committee talked about jam tomorrow. I guess it is, but we now have a clear strategic plan for the next five years and beyond, with some of the bigger projects we have been allowed to move forward with. We just need to get on and deliver. We estimate that in Scotland it will deliver a saving of about £4.9 billion of constraint costs, which is the equivalent of £167 per customer, if we can deliver all that infrastructure change over the next five to six years. Yes, it is jam tomorrow, but it is a sustainable long-term investment for us that makes a sustainable difference to customers' bills.

Q523 **Kirsteen Sullivan:** If there had been that investment a number of years ago, we would not have to be looking at it as a matter of urgency now. We should have had that before now.

Guy Jefferson: We have been lobbying for a number of years to have anticipatory investment. To be fair and balanced, the context has changed considerably over the last five to six years. While there has been a reaction, it is easy to look backwards—we are all good at that. Given the changes that have happened recently, it is more important to look forward. What we have now is the right plan.

Q524 **Elaine Stewart:** Mr Basden, this question is for you. What regulatory or policy changes would allow storage providers to reduce network congestion at lower cost to consumers?

James Basden: On congestion, which is what batteries are terrific at resolving, the biggest change that could happen is, I am afraid, what I talked about before, which is having the assets dispatched when they are in order. One of the things that Julian Leslie talked about was battery assets lasting two to four hours, for example, and being able to resolve a constraint on the grid for that length of time.

This depends on how you want to look at a battery asset. In 2028, we will have a 400 MWh battery. You could say that that is a 100 MW 16-hour battery or a 50 MW 32-hour battery. We have lots of flexibility in how you can use a battery, and that is not really taken into consideration enough. The biggest single thing would be to use the assets when they are in merit order and to treat battery storage, frankly, like any other asset.

As another little example, you may know that the balancing mechanism distributes in 30-minute section settlement periods. What can happen is that gas assets are given notice a long time in advance because they need time to get warm in order to get ready to put power on the grid. A battery can put power on the grid in less than 100 milliseconds. What happens is that gas assets get given notification that they will be dispatched, and batteries are left to wait on the off chance that there may be a shortfall. Instead of getting something that would cover the opportunity cost to us, what is happening is that slower, older and more



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polluting technology is being prioritised over new emission-free technology. That has a significant impact on costs.

Q525 **Elaine Stewart:** That comes back to that skipping process.

James Basden: It does, but there is another thing happening at the moment, which is changing. NESO says it cannot dispatch batteries for more than 30 minutes because it does not know what the state of charge of a battery is. It does not ask a gas peaker how much gas they have in reserve.

We just want to be able to work on the grid for the length of time that is available and required. If we cannot dispatch, we should suffer penalties. Treat battery storage as equal to every other generation asset that is on the grid.

Q526 **Mr MacDonald:** I understand SSEN and how it operates in the highlands. I am less informed about ScottishPower, but give me a hearing. If you live in Ayrshire, are having transmission lines put up and wind farms everywhere and feel like there is nothing in it for you, and you google "ScottishPower energy", like I just have, you will see that it has £12 billion of capital investment planned. You will also discover that its community benefits are worth £7.8 million. That is not 1% and it is not 0.1%. It is 0.065%.

They are importing teams of workers. They are often not using local workers. You are using modular housing rather than leaving legacy housing—that is certainly what is happening in the highlands on a huge scale. Can you understand why there is quite a lot of resentment against the transmission lines and the major onshore wind operators in rural Scotland?

Guy Jefferson: I can understand it, absolutely. Just in terms of the numbers, the £7.8 million that you talk about is the first release of our community benefits programme. Against that £12 billion, we expect to have about £250 million of community benefits overall over that complete period. The £7.8 million is just the first phase.

We have already engaged with local communities on that, specifically where there is a build-up of assets. When we talk to our communities, one-off lines are still concerning to some, but it is where there are hubs of activity. For example, in East Lothian we have a converter station, which is the termination point for our HVDC subsea link, and a large substation that it connects to in a relatively small area. That attracts developers such as Zenobe and other renewable developers to that hub. You could have three or four different renewable developers in the same place, as well as a couple of big installations for SP Energy Networks. We have worked very extensively with that community.

There are significant community benefit funds available to invest in local programmes. We are down at community council level. We also talk to the local council, but we try to engage all the stakeholders in that area.



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With our colleagues in SSE, which has a renewables connection in that area, we have part-funded a full-time project manager to understand the best way to spread those benefits in the community. I know there are others on the west coast who have done that as well. We try to be as democratic as possible and get right underneath and understand the community's drivers so that we can use that money to invest wisely in the projects that they want to see happen.

I fully understand the concerns. We try to do the best that we can with the funds that we have to spend in that local community to make sure that people do see value in terms of those assets being placed in their local area.

Q527 Mr MacDonald: Can I just ask about the £250 million? Across Scotland as a whole, £100 million has been announced for forward transmission and community benefit. Is that not correct?

Guy Jefferson: I do not believe so. I can only speak for central Scotland, and that is the number that we expect to spend on community benefits against the five-year period. SSEN will have a similar number, if not slightly higher, because its overall investment is higher than ScottishPower. I would expect that number to be larger.

It is because it needs to be released against consentable projects. The way that you release it is that you need to make sure that you have consents in place or at least clear before you can release those moneys to the community. It is staged and it depends on getting those permissions. As with most things in life, it is not straightforward. It is a complicated process, but there is a significant fund available for the communities affected.

Q528 Susan Murray: Continuing on this similar topic, how confident are you that GB Energy's plans for community energy are well designed and deliverable?

Guy Jefferson: I can certainly speak first in terms of the local power plan that was released recently by GB Energy. It is ambitious. In reality, it picks up on a lot of the initiatives that companies such as mine already had under way. We have engaged extensively with community energy schemes. We have a number connected on our network both in the transmission area in which I operate and in the wider ScottishPower Energy Networks business, which also covers north Wales and Merseyside.

We have already provided technical support, because capacity is sometimes an issue with community energy. We have workshopped with the community energy schemes and initiatives to take them through the process for connection, the things that they need to look for and how to manage a project effectively. On our website we have guidance around that.



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A lot of those initiatives are being promoted and increased as part of the local power plan that GB Energy released in February. This is the right thing to do. Sometimes it is not only about the financing of these projects; it is about the actual capability that exists in the local community to deliver these projects locally and to understand the benefits and reap the rewards. We are very supportive, and we have demonstrated that by our actions.

In terms of the ability to connect to the network, that is really under NESO policy. I would not comment further than what Julian said in the previous panel, but certainly we try to support wherever we can in terms of development of those projects.

Scott Somerville: The work that they have done is a really good start. The ambition should be heralded; we cannot have too much. We often talk in euphemistic terms, don't we? We say, "It is ambitious". It needs to be because, again, there are challenges that we need to overcome for people. We certainly see the importance and the role that we take on, but what needs to be done more, perhaps, is the joining of dots.

Already in this session we have talked about different plans and different aspects. We need to be very careful, with industry and policymakers acting as one unit, as it were, not to work in silos. We need to make sure the different plans not just interact with each other in a consultative way, but actually flow through. Are the cost-benefits here being taken into account to the investment decisions over here?

That is where we have seen some real progress, certainly in the last two or three years. We work with a number of local authorities and cities across the whole of the country. I talked earlier about some of the work that is going on in Glasgow as an example. There are other examples that I will follow up with, because I am conscious of time.

We see public sector organisations working and understanding their communities. Having trust is really important to deliver these plans because, without that trust, nothing gets off the bit of paper. Working with private capital to bring innovation forward is really important.

Plans are great, but they have to be delivered. Again, that is the test not just for GB Energy, but for all of us; we have to stop talking about what is going to happen in five years and start delivering it today. I say that because I am optimistic. I see it in projects that we are involved with. Others will have their examples. We also see it in other countries where we operate across Europe.

This is not a theoretical future in terms of the energy transition and the difference for homes and businesses. There are examples where this is being delivered. There are examples where we are getting off that global market rollercoaster and putting people back in control of their energy use and making sure they are warm at home. We always talk about energy efficiency. Let us talk about people being warm in their homes.



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That is what we are actually interested in. If we can put more pounds in their pocket, that is all the better.

The work that GB Energy is doing is good. We have lots of great engagement with it. We are certainly a supporter of what it is trying to do, but we have to make sure, as I touched on earlier, that every lever is being pulled, not just the big-ticket items. That is not a criticism of them; it is just a watch-out for all of us. We need to make sure that we attack everything.

Q529 Susan Murray: The complexity of the system is clear. SSEN has described itself as a strong advocate for community energy prioritisation into the grid queue. You have been talking about projects that directly benefit customers. Would it be possible for community energy schemes to put power straight into those schemes, or does it still have to go via the grid for you to control it digitally?

Scott Somerville: There are regulatory tweaks that you can make. In the scheme that I talked about earlier with the primary school, a bill credit is applied. It is almost virtual; it is not changing wires or connecting in big new assets. There are variations that we can make. Again, we have made lots of great progress with Ofgem. We need its support to make sure those regulatory barriers are not in the way where those schemes are imagined. These are schemes that are common and in operation across Spain and Portugal, as an example.

There are still a few challenges, of course, but there are things that we can do. I talked about using levers and making sure that everything is being pulled. We have to make sure that there is not a rule somewhere stopping that. I think the energy supply code runs to 611 pages. There is some innovation; Ofgem does a great job, and we have good engagement with it. There are improvements that we can all make and there are things such as the connection queue. Forgive my repetition, but what other levers can be pulled?

There are projects up and down the country that can bring benefit. Too often, we look at the too big projects that are too difficult, and we forget to deal with stuff that we can change today. If we change that stuff today, we will get to the hard problems tomorrow. For your constituents and our customers, we will not get to tomorrow unless we take them with us and show that the benefits are flowing into their pockets, whether that is a business or a consumer. We talked earlier about the challenges in the industrial sector. There are changes that we need to make now, because otherwise we will all be sat here in 10 years having a similar conversation.

Q530 Susan Murray: What I picked up from NESO was that community energy generation schemes are an additional challenge for it, as opposed to a particular benefit. People's general conception about community generation is that they will benefit from it. They think they will get that power and therefore they will not need to take power from the grid. Is



that going to be the future? Could it be introduced more quickly?

Scott Somerville: Yes and yes.

Q531 **Mr MacDonald:** That was a great short answer. We have about five minutes left.

First, in 2014, the Scottish Government set guidance for onshore wind of £5,000 plus an index-linked increase. If you take that £5,000 and move it forward to today, it comes out at £8,000. Three weeks ago, the Scottish Government reset their guidance to £6,000, i.e. a 25% reduction in community benefit versus one that was done in 2014. Secondly, they did not include pump storage. For example, the highlands is expected to have in the region of 5 GW of pump storage for electricity. That is twice Scotland's demand for energy. Are we having a retrospective move? Is Scotland doing less well out of community benefit than anybody thought possible 10 or 15 years ago?

Scott Somerville: I will let others answer the very direct point. From an E.ON Next perspective, because of the projects we are involved with, in terms of being in customers' homes and businesses, rather than large-scale generation, we certainly very much believe in and see the advantage and benefits of making sure that those people you are working with and serving get the benefits.

Q532 **Mr MacDonald:** Can I take that for granted? I know what you do. The Highland council has proposed £12,000, rather than £6,000. The Shetland Islands council has proposed 5% of gross revenue, which is also about £12,000. I have been pushing that for a year and a half. The Scottish Government doing it at half the price that people outside the energy industry are suggesting is not looking after the communities who are generating this energy. Is that correct?

Scott Somerville: In terms of the detail, that is one that needs to be looked at from a policy perspective. Certainly, as a general point, we definitely see the benefits of helping our customers and them feeling a direct benefit. It is important that we talk about climate, but the biggest difference that we make to people's lives and businesses is managing to cut their bills and therefore them feeling the benefit. In terms of specifics, that is a different point from the projects that we are involved with, but we certainly see that. We serve 5.5 million customers across the UK. Them feeling the benefit is definitely important. Others might have a view.

Guy Jefferson: I do not really; this is not my area. The previous panel might have been better placed to answer that. All I would say is that I recognise the concerns of community-based organisations on their ability to connect to the grid. That will be relieved somewhat once we get through this huge process that we are right in the middle of with regard to queue reform and we see more demand coming on the system.



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That will free up the ability to connect more readily and some of the restrictions that are there at the moment. That means there will be a better opportunity for community-based organisations to get better visibility and hopefully quicker connection to the network. That is all I can comment on in terms of that.

Mr MacDonald: That is fine. Thank you very much.

Chair: Gentlemen, thank you all very much indeed. That has been very interesting and very helpful to us for our deliberations. Thank you for making the time to be with us today.