Northern Ireland Assembly

Committee for Enterprise, Trade and Investment

OFFICIAL REPORT (Hansard)

Electricity Policy Review: Northern Ireland Renewables Industry Group

1 May 2014

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:
Mr Patsy McGlone (Chairperson)
Mr Phil Flanagan (Deputy Chairperson)
Mr Steven Agnew
Mr Sydney Anderson
Mr Sammy Douglas
Mr Gordon Dunne
Ms Megan Fearon
Mr Paul Frew
Mr Fearghal McKinney
Mr Mitchel McLaughlin

Witnesses:

Mr Mervyn Adams	Northern Ireland Renewables Industry Group
Ms Meabh Cormacain	Northern Ireland Renewables Industry Group
Mr Seamus Hegarty	Northern Ireland Renewables Industry Group
Mr Patrick McClughan	Northern Ireland Renewables Industry Group

The Chairperson: Briefing the Committee today are Mr Patrick McClughan, the chair of NIRIG; Mr Seamus Hegarty, the vice-chair; Mr Mervyn Adams, the group chair; and Meabh Cormacain, the policy and communications coordinator. You are all very welcome indeed. Thank you for being with us here today. I will just explain the nature of the briefing, although you should be well enough versed in these matters anyway. We have received your papers, for which we thank you, and members have already perused them. You have up to 10 minutes to make your presentation, and then we will have the Q&A session. I know that there are four of you here today, but we do not require four answers to each question. I am sure that you have different specialisms in your fields, so could the person who specialises in the area that the question is about answer that question? That will make for a more efficient meeting and will allow us to explore, within the time constraints, the issue in more detail with you, which I am sure that you want, too.

Are you starting, Mr McClughan? If so, it is over to you. Please continue.

Mr Patrick McClughan (Northern Ireland Renewables Industry Group): First of all, thank you very much, Chair and Committee members, for taking the time to take our presentation today. We certainly welcome the Committee's interest in grid connection policy.

I will start by explaining a little bit about the Northern Ireland Renewables Industry Group (NIRIG). We represent developers in the renewables sector in Northern Ireland. We promote the responsible

development of renewable energy, which allows Northern Ireland to benefit from a reduction in our reliance on imported fossil fuels, which are required for conventional electricity generation.

Today, I will stress the importance of the grid to the development of renewables. Renewable electricity needs to be connected and distributed to where it is needed. To do that, we need the appropriate network, infrastructure and policy. The grid is now over 40 years old, and it obviously needs to be repeatedly repaired and updated. That work is not solely to allow the connection of more renewable energy, which is often a common misconception. NIRIG believes that it is in everyone's interest that Northern Ireland is seen to be very attractive to investment. That will require a stable regulatory regime and a timely and efficient delivery of key infrastructure, which includes interconnectors. That, in turn, requires a coordinated and supportive response from all the stakeholders involved.

So, again, we are very glad to be here to answer any questions that you might have. At this stage, I will hand over to Meabh, who is our policy coordinator in Northern Ireland.

Ms Meabh Cormacain (Northern Ireland Renewables Industry Group): Thanks, Patrick, and thanks again to the Committee for allowing us to present today. I will very briefly take a step backwards and give a bit of an overview of renewables and why they are important, given that that is the sector that we represent. It is widely recognised that, globally, action needs to be taken on climate change and carbon emissions. I do not think that there is any real disagreement about the need to reduce our reliance on single sources of energy and to increase our diversity and security of supply. Policy across Europe, in the UK and specifically in Northern Ireland is very much about building a more diverse and sustainable electricity supply, which will effectively mean more electricity coming from renewables.

Northern Ireland has some of the best wind resources in Europe, and that is certainly something that we are keen to continue to develop. About 18% of our electricity comes from renewables, of which 14% is large-scale, onshore wind. We are absolutely confident that, with the right policy framework and the right kind of commitment, we can hit our strategic energy framework (SEF) target of 40% renewables by 2020. We know that we do not yet have formal targets in place for 2030 and beyond, but we believe that progress can be made after the 40% target is reached. We are very much reliant on imported fossil fuels, and we believe that renewables can act as a hedge against our volatile fossil fuel prices.

As I said, we think that we can make our targets if we have the right kind of approach. There are a lot of uncertainties out there. Although this review is looking at grid connection, I will briefly talk about some other uncertainties, and then I will hand over to Seamus.

The Committee will be aware that there is a lot of uncertainty for renewables in the planning and local government side. Planning policy is being pulled together under a single strategic planning policy statement. We have local government reform. So, as of 2015, we as a sector are not entirely sure who will be making decisions on large-scale wind applications going forward. An inquiry is being carried out by the Environment Committee, which recently closed its call for evidence into wind energy. So, there is a lot of movement and change happening in the planning and local government side of things.

I will hand over to Seamus, who will give a very short indication of markets, before Mervyn takes us into grid connection. Thank you.

Mr Seamus Hegarty (Northern Ireland Renewables Industry Group): Good morning. Once again, many thanks for this opportunity to make our presentation. As well as being vice-chair, I look after the markets committee in NIRIG. I am aware that the Committee has already considered some of the market aspects of electricity and the review of electricity prices. However, two key changes are coming. First, there is the change from the renewable obligations support mechanism to a feed-in tariff (FIT) with contract for difference (CFD), which is being introduced in 2016. The renewable obligation will disappear from 31 March 2017. That is a big concern, primarily for investors who are looking at projects. One of the aspects that they look at is the revenue returns on projects. They look at the difference between what is an existing renewable obligations certificate (ROC) regime and what would be an electricity market reform (EMR) FIT with CFD regime.

The key issue is that there is a certain amount of money allocated in the levy control framework, so there will be a budget allocation for Northern Ireland developers. The issue is how that whole contract

allocation pans out. As well as that, because we are going into an auction-type scenario for contracts, there is also contract-price uncertainty.

The second key point is the introduction of the integrated single electricity market (I-SEM) in December 2016. We have an existing single electricity market (SEM). That is a mandatory pool market, which, in our opinion, has been very effective in reducing the cost of electricity and improving transparency in the cost of electricity to all parties on the island of Ireland. The I-SEM will be introduced in December 2016, and it is changing the SEM to align with the EU target model. There is also the uncertainty about what option will be the outcome of that and how it will align itself with the introduction of the EMR FIT with CFD in 2017. Thank you.

The Chairperson: Thank you very much for that.

Ms Cormacain: We have a full section on grid connection now from Mervyn, if that is all right.

The Chairperson: Sorry, I thought that you were finished.

Mr Mervyn Adams (Northern Ireland Renewables Industry Group): I will make this quite brief and hit bullet points, because I know that there is a lot of weighty stuff in grid connection. This is a wish list from the industry. First, we would like to see cross-party support for the decarbonisation of the industry in Northern Ireland and for the use of renewables in the long term to support that. I think that that was underscored by the recent Intergovernmental Panel on Climate Change (IPCC) findings.

In the past, a central coordination committee, the sustainable energy interdepartmental working group (SEIDWG), looked at the policy side and the strategy. That has not been active, and we feel strongly that you need that coordination group looking at the strategy going forward if we are going to be successful in achieving our targets. Again, in supporting the achievement of those targets and to create a unified vision, we need the DETI Energy Bill and the Grid 25 documents from the System Operator for Northern Ireland (SONI) and Northern Ireland Electricity (NIE) so that there is a coordinated plan that everyone can sign up to. There have been interim plans and medium-term plans in place that have been going forward, but the policymaking processes that are wrapped around those have been slow in the extreme. There was a recent hiatus of about two or three years while support mechanisms were put in place for what are called cluster connections, which are single-point connections that are meant to avoid the proliferation of overhead lines. It would be fair to say that we are sitting with 500-odd megawatts connected at the moment, but if that hiatus had not occurred, we would probably be sitting with closer to 800 megawatts connected at the moment.

So, there is a legacy of issues for large-scale developments. The proliferation of small-scale developments is a focal point at the moment in the form of single turbines on farms and rooftop photovoltaic (PV). Commercial rooftop PV is now being looked at. All this has come into being post-NIE's RP5 application to the regulator for funding. There are no mechanisms for funding or support for strengthening for those small-scale developments. I think that that is something that is missing at the moment and that needs to be brought forward.

There are some issues that would help that. Contestability is one, as is the developers' ability to carry out some of the construction works themselves. That is in place in the South of Ireland and in mainland UK, and it is on the regulator's forward work plan. However, it needs to be one of the focused items that it is looking at.

The use of innovation is another issue. There is smart grid stuff and stuff that gets so technical that, sometimes, my eyes just glaze over when I hear the guys talking about it. There are solutions there that can bring forward cost-effective connections, but again, it needs to have the support behind it to allow NIE, SONI and all the various players to go ahead and do it.

That is a quick run-through of the headline points. Patrick will maybe close the presentation, after which we will take questions.

Mr McClughan: Thanks, Mervyn. I am sure that you can gather our position on many things. Certainly, we are very willing to engage the Committee across all aspects of this issue. We represent small, medium and large wind developers in Northern Ireland, and, whether it is an issue on the 11kV network or about transmission, as I said at the start, we would require everybody to take a very interested role in assisting us with the delivery of a suitable grid connection policy.

We really need to utilise the fantastic wind regime that we have in Northern Ireland and to make the most out of it. We need to make it as attractive as possible to investment, which is currently leaving a legacy of benefit. We look forward to answering your questions.

The Chairperson: Thank you very much for that. There were a couple or three wee things that I wanted to raise during your presentation, but you have raised them for me. So, thank you for that. What is missing now that SEIDWG is no longer there? Why should it be reintroduced?

Ms Cormacain: My understanding is that SEIDWG was formed a number of years ago and subsequently had a grid subgroup to look at strategic grid issues. However, that group has not met for possibly a couple of years. In the past year and a half, NIRIG has asked for better coordination on grid infrastructure and grid development. The regulator, NIE, SONI and, indeed, DETI, have agreed that better coordination is required. So, there is now a renewables grid liaison group, which was formed towards the end of 2012 and which meets every couple of months to discuss operational policy. We feel that that has made a difference, in that we can now sit at a meeting with all the key stakeholders on grid connection policy and talk about issues and policies as they are coming down the line rather than, say, going individually to SONI to talk about something that we may subsequently need to talk to the regulator about.

The grid liaison group looks specifically at operational issues. It does not have a strategic output. One specific issue, for example, is NIE's Network 25 strategy, which we know is under development and which we hope should be coming forward this year. We are not exactly sure when. We have a question about, for example, who is buying in to that policy and what level of support Departments will provide to the strategy when it is published. We think that SEIDWG would be an appropriate forum for that. We also think that SEIDWG as a grouping is vital now, because we have a strategic energy framework review coming up in 2015. We are aware that there are at least five Departments involved in energy, plus all the network operators, builders and regulators. The original strategic energy framework outlined the need for strategic grid investment. The regulator at the time said in its response to the draft SEF that it would welcome guidance from DETI on strategic grid infrastructure. We are not entirely sure how that comes about, and we think that, given that a review of the SEF is coming up in 2015, now is the time to reform a group to allow that coordination. "Coordination" is a key word, because there are policy decisions that NIE makes that have an impact on DOE policy. We think that those players need to be in the same room at a certain level to discuss that.

The Chairperson: Thank you for that. You mentioned contestability. Will you expand a wee bit on what the outworkings of that means?

Mr Adams: Contestability can cover a wide range of things. In the larger connections, which are the large wind farms, it could be the building of a 33,000 volt line from point A to NIE's connection point B. At the moment, that can be built solely by NIE, which is the system operator. In other jurisdictions, the developer can build it. He can use resources that he may already have on site to do electrical works around the site. He can do it in a timely manner to fit in with the site development, and then he can present it to NIE and say, "I am ready for connection". So, it can speed the whole process up. It can be demonstrated that it is more cost-effective. It is not always more cost-effective, especially as you go up the voltage levels, because it gets more technically complex, and the likes of NIE and SONI have the concentration of those technical people who can deliver that.

At the other end of the scale, it could involve the small developers creating their own substation and then just saying to NIE, "Please connect my substation. I have a single turbine attached to the other end of it". So, again, it is more the packaged approach that the developer has control of.

The Chairperson: What is preventing that happening now?

Mr Adams: There need to be changes in the licence structure for NIE and SONI. There is a limited amount of contestability that can take place in SONI in the transmission arena, but there is practically none in the NIE arena, so they need their licence changes. Before that can be done, a detailed process has to be put in place. We have suggested that there is no point in reinventing the wheel. The South of Ireland has a process, the UK —

The Chairperson: Will you explain what you mean by the term "process"? A process with whom?

Mr Adams: The processes are mostly involved once the developer constructs the asset, whether it is a substation or a line or whatever. Once that is connected to the NIE system, it becomes so integral to that system that NIE adopts and maintains it along with the rest of its things. That means that it has to be constructed to a certain standard and quality, and tested and all that. So, the processes involve the specification that is given to the person to build it, as well as NIE testing and taking it over post-construction so that it can comfortably own the asset for the next 30 years or whatever its lifetime is. So, it is those specifications and processes that need to be put in place to enable this to start.

The Chairperson: Is that a legal matter, or is it just an agreement for an individual undertaking or site? What is it?

Mr Adams: It is a legal status, and the first step is to get the capability included in the licence agreement. So, you need the licence sorted out, and then, when an individual case comes forward, the legal agreement is made between the party who wants to build and NIE.

Mr McClughan: It is exactly the same situation when you have a house-building developer who builds the road and DOE then adopts it. It is already available.

Mr Adams: It is very similar.

The Chairperson: I can hear the efficiency issue, because we have heard that from other people before. I have a question about costings and projected costing. We will park the efficiency bit and getting things done quicker, because we hear that complaint regularly. What about the costings?

Mr Adams: I will be upfront about the costings. Some of them can be marginal, and my personal estimation is that, the higher up you get in the low voltage levels, the more marginal the costs get. When you are down in the voltage level, you find that there are a large number of operators out there who are capable of building that sort of thing. A lot of them are looking for work at the moment with the downturn in the construction industry and everything else. So, it is a highly competitive area. There are distinct cost advantages that could be had.

Where an overall cost for the development is concerned, if you can reach completion at an earlier date, your overall development costs are also beneficial. That is really the speed issue, but cost benefits are associated with speed.

Mr Dunne: Thank you very much for coming in this morning. Can you clarify who you represent? Is it mainly the large-scale providers, or is it everyone across the board?

Ms Cormacain: We represent the wind, wave and tidal sector —

Mr Dunne: Do they tend to be the larger providers?

Ms Cormacain: Historically, development in Northern Ireland would have been large-scale onshore wind development. When NIRIG was formed about four years ago, the bulk of our membership was large-scale onshore developers, but we now represent a number of the small-scale developers, as well as offshore wind and the tidal developers who have leases.

Mr Dunne: The lead-in time for projects can be quite extensive, and it is something that we hear a lot about. Planning permission comes up regularly, along with NIE's reluctance to get involved until planning permission is in place. What is your opinion on that? Certainly, we feel that the planners and NIE should be working in parallel.

Mr Adams: That was subject to some discussion with the industry before NIE brought it in. By and large, the industry agrees with it. It prevents what is called the reservation of capacity. The South of Ireland hit that problem with the Gate 1 and Gate 2 projects, whereby projects that did not have planning were assigned grid capacity and maybe subsequently did not get their planning permission. There is an active market down South in grid capacity. They are selling something that has been promised to them that they never actually had. The small size of our system makes it worse for Northern Ireland. If you reserve capacity for projects that are fictitious in some way, in that they do not have their planning, that has a greater impact, because the overall system is smaller. If we look at the history of pre- and post-planning applications, we see that there are substantial reductions post-planning. The number of turbines has been reduced, as has the size of turbines. There are various

things like that. If you had a system where you just went in with the planning application — maximum export capacity (MEC) — you could very well be thinking that the grid capacity is full, but in reality it is not. So, we support the requirement for planning.

Mr Dunne: Fully?

Mr Adams: Yes. We would like to see the process working quicker. We think that there are too many delays in turnaround times and that it is too slow in getting quotations back out. However, we support the principle.

Ms Cormacain: I just want to add to that. Mervyn mentioned speed. This is definitely being felt more in the small-scale sector due to the sheer number of applications that are coming through. Developers would like to get a much earlier indication of what the budget might look like. I know that this has changed significantly in the past 18 months, and I am sure that Committee members have heard this before, but the sheer volume of applications coming forward and the impact that that is having on grid connection costs have meant that a number of sites that would have been chosen for their wind speeds are now seen as not viable because of the grid connection costs. Developers would like to know earlier whether it is worth their while getting planning permission. I think that there is also a move towards looking at where grid connection is better rather than necessarily where the best wind speeds are. Planning has worked for the industry in advance, but it would be better if it were that bit easier to get early information on costs.

Mr Dunne: Just out of interest, does NIE give technical advice prior to planning approval? Will it give that advice initially?

Mr Adams: It will give what it calls a desktop estimate, which is non-binding on NIE's behalf. So, whatever the outcome — say it says, "Those plans are fine" or whatever — if those plans change by the time that you get your planning approval, there is nothing binding about that. We have been party to discussions with NIE and the small developers' arena in a focus group. We are trying to reach an agreement with it to provide two-week turnaround budget estimates at an early stage. That would give smaller developers an idea of whether to chase this development or that one.

Mr Dunne: Is that given free?

Mr Adams: There may be a charge. We do not know yet. However, what we are saying is that, if there is a charge, it has to be substantially less than what it is being charged at the moment for a feasibility study.

Mr McClughan: It has to be fair and equitable. It also gives the developer that parameter to input into their model to see whether the site is worth developing. It is a simple fix in some regards.

Mr Dunne: Is that what you meant when you said that more resources should be put into NIE to help the smaller developer?

Mr Hegarty: Very much so. All the information is there. It has 11 kV circuits, and it knows exactly what load is on those 11 kV circuits. It knows the construction of the 11 kV circuits and what megawatts can be put on to them. As Mervyn suggested, a two-week turnaround is, to me, very practical. However, I agree with you: I do not think that it would have the resources for the volume of applications that are being made to it. That is why it is not happening in two weeks; it happens in two months.

Mr Adams: We are chasing another issue. It is not a solution but something that will help probably only larger scale small-scale developers, so that means the people who are looking at groups of these, but it would benefit large-scale developers as well. We are asking for access to the NIE geographical information system. We all have our own geographical information systems. However, if we had the overlay of where the lines and the substations are, the more technically minded small-scale developers could do their own studies and reach their own conclusions. That would allow them not only to make their own decisions but to challenge NIE decisions if they decide to go ahead if they do not totally agree with what NIE has come forward with.

Ms Cormacain: I know that this may be quite a long answer to that question, but I will take it back to coordination again. NIE will make decisions that are based on the resources that it has available.

That is a regulatory decision. The amount of resources that NIE requires will depend on the type and amount of renewables coming forward. That is one element of it. We have a significant number of small-scale generators coming forward for connection, which, in turn, have been supported by a policy that was put in place by DETI. So, you have different players. I know that in the past couple of years straightforward answers on investment have not been that easy to give because we have been waiting for a fifth price control, RP5, for NIE. That was concluded only recently — I think it was concluded two weeks ago.

Mr McClughan: Even for large-scale ones, the implementation of DS3 and such programmes as this will certainly enhance and allow more renewable generation to come onto the grid. We are waiting for the decision on that aspect in particular, but there are things that could be done to assist and move on the small, medium and large.

Mr Dunne: Yes. Thank you very much.

The Chairperson: I am not sure about this, but NIE requires developers to have planning permission in place before it will even go the route of giving a quotation. It depends on who you are talking to, but a lot of the developers are telling me that they cannot understand the rationale behind why there cannot be a parallel or a twin-track approach. You have taken us in a sort of direction. What is your take on that? I am hearing from people that that is a big issue and that it is contributing further to delays in going from point of application to point of conclusion. What is your take on that? It will need just one answer, please.

Mr McClughan: If it was fair and equitable to all our members, we would be happy to see that parallel approach.

The Chairperson: What does "if it was fair and equitable" mean?

Mr McClughan: If it does not hoard the export capacity; if you are not hoarding megawatts. If somebody did not have their planning permission, but had a grid application for x number of megawatts and they never intended to carry out their planning application, that would be taken out of availability for other generators to utilise.

The Chairperson: Sorry, I do not quite get that. If both applications are made simultaneously, and a simultaneous process is run in parallel, I do not understand how one can affect the other, if the main thing is to get both going concurrently. We have heard from others in the renewable sector that that is exactly what is done in Britain, and it does not seem to be presenting any sort of difficulty.

Mr McClughan: I totally agree. It goes back to the original point: as long as it is fair and equitable. When the developer receives his planning permission, the grid connection and the opportunity to connect must arrive at exactly the same time.

Ms Cormacain: I know that you asked for only one answer, but I think that part of the problem is that there is a three-month period in which NIE is obliged to provide a connection offer. For planning permission, historically, the worst-case scenario has been seven years for a large-scale project, so, while applications might be made at the same time, determinations may be years apart. It can only be a parallel process so far.

The Chairperson: How could they be years apart?

Ms Cormacain: You might get a grid connection offer, at which point you are locked into that particular number of megawatts, but you are still awaiting planning permission. That might end up going to planning appeals, which might be one year, two years or four years.

The Chairperson: Is that not a business call at that point rather than a reason for not doing it that way?

Mr McClughan: It is something that the terms of reference that you are suggesting could deal with in the eventuality that you did not get it. Your allocated capacity could go back to you or go back into the system for open bidding, so to speak. Meabh's point has resonance in that if something from a

planning perspective is delayed for a period, it also affects the megawattage that has been allocated to that applicant.

The other thing to take into context is our planning system, although I do not want to delve into that area too deeply. From some point, we have the unique projects bidding aspect in Northern Ireland. Sometimes applicants are challenged and told that they decided to split a project or that they did not consider grid in their application, for instance. So, a few things need to be sorted out. As I said, as long as it is fair and equitable, we would have no issue with running parallel processes.

The Chairperson: You referred to a few things that needed to be sorted out. What are they?

Mr McClughan: Project splitting is one aspect of it from a planning perspective. You could be seen to have carried out a planning application without considering the grid application route. Then, if NIE gives you a different route to the one that you had imagined you were going to get, it is open for further scrutiny and challenge. So, everybody just needs to arrive at the same point. However, all the decisions that involve the statutory stakeholders and authorities need to be robust and not affected by challenge.

The Chairperson: You can never prevent something being affected by challenge. There are always courts and all sorts of things around the place to protect interests.

Mr Flanagan: Thanks for the presentation. I want to establish whether the current system is fit for purpose. Is it working?

Mr Adams: The grid?

Mr Flanagan: Not the actual grid but the process of grid connection.

Mr Adams: My answer is a reserved yes. The applications that NIE is getting at the moment are predominately in the small wind arena. NIE is trying to treat those in an equitable way that it has established against a background of large-scale applications. NIE is getting in the region of 60 applications a month. It is trying to deal with those in the same way and create a grid connection queue that means that people get on in the sequence that they make their approaches. That is just not working. NIE is taking at least the full 90 days to come back with an offer to people. Those people have committed a lot of money to it and are finding out at a very late date that they have this astronomical connection charge. In that arena, we want to see budget costs up front and provision of grid information to the developers so that they can do their own calculations and avoid the late shocks.

Mr Flanagan: What is the current situation with grid connection? Is it done on a purely first-come-first-served basis, or is it done as a process based on who is easiest to connect to the grid or who is bringing the most megawatts at any given time?

Mr Adams: It is done based on application date. The reason for that is that, as soon as the agreement is firmed up between NIE and the other party, be it large or small scale, that is a contract. It is a case of, "We are going to connect you, and here is your offer". NIE plugs the capacity into all subsequent calculations. On the small scale, if there is one circuit that can accept a maximum of four small turbines, number one will take up slot one and so on down to slot four. Now, those four might not have planning permission. A fifth one might come in with planning permission and be told, "Oh, we are full", but those four might never get planning permission. However, to do the calculations, NIE has to go on that date order.

Mr Flanagan: I understand what you are saying about the parallel process, and that makes some sense. Is NIE providing developers with a rough figure something that you endorse?

Mr Adams: Yes. It is something that we are actively chasing.

Mr Flanagan: What assurance can be given to developers that NIE will not triple or quadruple that figure just because it takes the notion to do it?

Mr McClughan: It would have to be done in layers, so to speak. You would capture certain areas within which you could hit. I imagine that the caveat would be that a disclaimer would be attached to it.

Mr Flanagan: One of the big problems that I see with NIE's policy of grid connection is the complete lack of transparency about its process, methodology and decision-making. NIE can make any decision that it wants to without having to provide a rationale to the developer or the person making the grid connection. Is that something that needs to be sorted out as part of this process?

Mr McClughan: There is the statement of charges that is publicly available and allows you to see how much NIE charges for various items. I do not know whether Mervyn or Meabh can elaborate.

Mr Adams: The statement of charges does help. We are led to believe that NIE is imminently going to issue for consultation its planning procedures documents. It is rewriting those, and that will help. We have found that NIE has been very open to discussion on issues associated with connections. So, if we felt a particular offer had something in it that we did not agree with, we have always been able to go back and talk to them. We fully appreciate that the volume that I referred to and the small-scale development that is there at the moment maybe prohibits that at that level. There is an issue at that level.

Mr Flanagan: Is the statement of charges a good enough system or do you have any feeling that NIE is profiteering at the moment regarding grid connections?

Mr Adams: I do not think it is profiteering, but it is playing on the safe side. Its design criteria that it plans to is maximum generation and minimum load. That is not always going to be the truth; sometimes, the generation will be consumed at the point of generation and not even make it onto the circuit. To move away from that basic principle, however, NIE needs to employ the smart-grid solutions that I referred to earlier.

Ms Cormacain: There is quite a lot of frustration out there, and a number of factors account for that. There is the issue of the high number of small-scale connections, and the impact on the capacity of the grid is one of the major ones.

We are in a time of really significant change in the energy sector generally and in the electricity sector particularly. The system is trying to cope with demands that were never envisaged when it was built out 40, 50 or 60 years ago. The policies that are in place, whether written down or not, need work. They need to be upgraded and developed, and they need to take into account the diverse range of energy sources that are going to come onto the system as well as the fact that we are a very limited market in Northern Ireland and we need to make sure that we are interconnecting and exporting, when possible. We need to maximise the use of the grid.

There is this period of time — I think that we are in the middle of it — where massive change is taking place. Grid policy is changing and initiatives are happening on the island. There is the DS3 project and there are initiatives taking place in the North and in the South. Even at a European level, network codes are changing. Against that background, we have NIE, the regulator and SONI all trying to make the system work. We have certainly found all those stakeholders to be approachable whenever we have had issues, both as an industry group and individually as developers. My colleagues would say that, whenever there is an issue, we have found it possible to sit down and talk to the stakeholders.

It is a difficult time, and we would really like to see better coordination on things such as policy. Who is making the policy and writing it down? How do we all make sure that we are as happy as possible with a fair and equitable policy? Work needs to be done, but it is against that backdrop, as I said, of change happening on all fronts.

Mr McClughan: Again, SEIDWG would provide that strategic coordination to deal with it in future.

Mr Flanagan: The providers are supposed —

Mr McClughan: If it was reformed, they could provide that.

Mr Flanagan: Regarding NIE's role, is the monopoly situation that we have at the moment working effectively or would developers prefer to see the introduction of either competition into the connection market or stronger regulation to provide greater transparency and accountability for NIE's decisions?

Mr Hegarty: I suggest that the contestability aspect of it would be competition. As Mervyn said, sometimes it is not just the marginal cost of the grid connection; it is the time-frame delivery of that which is more important to a developer.

The statement of charges has been mentioned. If you look at that, you can see that there are fairly broad items of equipment costs per kilometre of overhead line and the cost of a substation. From that, a developer can take a view on how far the wind farm or the renewable generation source is from the network and can take a particular route in kilometres so that they can have some sort of projection of the costs. If you are talking about a change going forward and about being fit for purpose, it is about contestability and about where developers are afforded the opportunity to build their own infrastructure. I think that that, in itself, should drive down the connection costs that are associated with the offer that you get in the first place.

Mr Flanagan: If that was the case, would developers be happy to sign up to an agreed level of standards that everybody would comply with?

Mr Hegarty: That is the bottom line. At the end of the day, we are aware that NIE has to adopt and manage whatever we build. That is a key thing in the process. It needs to get its act together and get the specs out for the type of gear as if it were going to a third-party tender itself or a third-party overhead line contractor or substation build. It needs to put out a spec, and that is a spec that we would take. We would not then need third-party contractors to build for us.

Mr Flanagan: Are NIE's modelling and planning standards up to date? The way that some people see it, it is financially rewarded for doing capital works, which leads to what many see as an ultra-conservative approach and a more costly way of doing things. Have you seen that in your experience?

Mr Adams: I think —

Ms Cormacain: Mervyn, maybe you can come in after me. Some of the issues you raised were also raised during the process that led to RP5, and the Competition Commission addressed some of those in its final determination on RP5.

You asked earlier whether there is a need for greater regulation, and I know that that is a question that the regulator had when the Competition Commission was making its determination. I have not read all 750 pages of the report — mea culpa — but certainly —

Mr Mitchel McLaughlin: Why not? *[Laughter.]*

Ms Cormacain: I have had other things to do.

The Chairperson: We will give you 15 minutes if you like. *[Laughter.]*

Ms Cormacain: OK. I will get to work.

Certainly from the executive summary, it seems that the Competition Commission is recommending a different type of arrangement for regulation. I have not really got into the details of that yet and, as I said, maybe a bit of time needs to be set aside to look at that, but there is that movement. There was certainly a line or two in the Competition Commission's determination that suggested that greater transparency would be welcomed or should be an outcome. It is not so much about more regulation but better regulation or better regulatory policies for how NIE and the regulator interact in the coming years. Some of those issues are perhaps slightly outside our remit as an industry group.

Mr Adams: You asked whether NIE is conservative in its approach. I think that the answer is yes and no. It is conservative in its approach when it gives you a quotation and makes assumptions about maximum generation and minimum demand, but it is not conservative in its overall approach.

Northern Ireland and the island of Ireland is facing levels of renewable penetration that are unprecedented anywhere in Europe. On Christmas morning, we had 51% instantaneous penetration of renewable energy into the system. At a system level, NIE is dealing with that very well. We believe that it is conservative at an individual quotation level because it does not have the smart systems in place nor the support mechanisms to enable it to install those smart systems. If it had those in place, it would give it more latitude at the quotation level.

Mr Flanagan: One of the conditions of RP5 was that NIE could apply to the regulator to invest or allow investment in renewable projects. Is that happening?

Mr Adams: It is. With the volume of applications that came in from small-scale producers, NIE discovered that it had a problem it was not aware of before. The local transformers were designed to bring power to houses, but when you switch that and try to push power back through them, they do not work. So, it had to change elements of those transformers such as tap changes, protection relays and everything like that. I am not exactly sure of the figures, but it identified 20 substations where it had to change protection so that it could do that reverse power flow, and it was awarded an investment of, I think, £2·1 million —

Mr Mitchel McLaughlin: It was £2·3 million.

Mr Adams: — to address those 20.

Mr Mitchel McLaughlin: According to our information, it was 40.

Mr Adams: What has happened is that more applications and more substations have come into this we-need-work arena. Initially, they went back to the regulator and asked whether they could swap one substation for another substation. The answer was no, and understandably no. The regulator was saying that, "People were promised that, as soon as the first substation was done, their conditionality would be removed, so you cannot replace it with one just because it has six turbines connected instead of the two that were on that one". They are going through the process of trying to get more money to address more substations. There is a process there, but it is slow.

Mr Flanagan: Why is it slow?

The Chairperson: OK. Can you just answer briefly please?

Mr Adams: It is slow because of the approval process that is in place between the regulator and NIE.

Mr Anderson: Thank you for coming along to the meeting today. I have a few questions about how the grid investment is proceeding or not. Is there a strategy in place for investment in the electricity grid?

Mr Adams: NIE has put forward a short-term, a medium-term and a long-term plan. The long-term plan is called RIDP — renewables integration development programme — and involves the development of a 275 high voltage line to support predominately the west of the Province. It has proceeded very well. The short-term plan is complete. It is probably 75% of the way through its interim plan, and the last projects are identified and programmed to be done. That takes you up to a ceiling of —

Mr Anderson: What is the timescale for those short-term, medium-term and long-term plans?

Mr Adams: The medium-term plans should be complete by about 2017, and that will take you to an absolute ceiling of roughly 800 megawatts connected renewable energy. To go above that 800, you need elements of the long-term plan — the RIDP — to be established to get the extra high voltage at 275 across to the west of the Province. It has identified its preferred option for stage 1 of that, which is along the southern boundary from the bottom of Lough Neagh out towards Omagh. However, it is a 275 overhead line, and we all know the problems involved for those in getting planning permission, getting public consent and getting constructed. So, we are sitting in 2014, and it will not happen within the window that we need it to happen unless it has the full backing of government and Departments. Everybody has to get behind it if it is to happen, or we are going to be setting up against this —

Mr Anderson: That was one of my questions. I was going to ask you for your view on the current strategic approach. However, you are telling us that things are not going to happen as quickly as possible.

Mr Adams: There is the lack of a road map that everybody is signed up to. There does not seem to be a joined-up view of the long-term future. Part and parcel of that is that even a regulatory process does not support that. It is a five-year regulatory process. We are looking at projects that have a 10- or 15-year lead-in. So, it is very hard for the regulator to approve those outside his five-year window. We need the background of a long-term plan that everybody is signed up to, and we are doing part A of it or part B of it, but everybody is still working towards the same long-term plan.

Mr Anderson: Do you see big issues there?

Mr Adams: There are huge issues around public acceptability. Where are we going with it? Are we going to hit the 40% target? Will 40% even be enough?

Ms Cormacain: That is why we are here today. The Committee has been looking at these issues. We are here specifically on a grid connection/renewables perspective. We know that there was a security of supply review as the first part around electricity pricing. One of the recommendations that came out of the last part of the review was for better coordination and a suggestion that the North/South Ministerial Council should also take energy under its remit.

With regard to security of supply, energy is of such fundamental importance to society that we really think that it needs to be coordinated and that all players should be taking part. So, there is a role for each of the stakeholders we mentioned today: us; NIE; SONI; the regulator; DETI; and other Departments. Security of supply is such a massive issue that I think that we have to coordinate it.

Mr Anderson: So, we are looking for that coordinated response that we talk about from the Department and other stakeholders.

Ms Cormacain: We could sit here with a wish list of what we would really like to see happening. We appreciate that Departments have significant responsibilities and are pulled in different directions. However, the fact that there was a coordination body previously maybe implies that there is a need for one again.

Mr Anderson: In your submission, you state:

> *"Smart network management represents a very positive opportunity ... but must be accompanied by infrastructure build-out."*

Is enough being done to put the appropriate infrastructure in place to make the most of smart-grid technology?

Mr McClughan: Back to Mervyn.

Mr Anderson: Mervyn seems to be the focus.

Mr Adams: Smart grid and grid development go together. To some extent, smart grid development offsets grid development. If you can get an appropriate smart grid, especially at the lower voltages of 11,000 and 33,000, you could maybe avoid capital investment. If you are dealing with a fixed fund of available moneys, as you always are, and if you can avoid spending in that area, it will maybe allow you to increase or accelerate development somewhere else. So, the two work hand in hand; they are complementary. Does that answer your question?

Mr Anderson: When you say that they go hand in hand, will the smart-grid option alleviate some of the problems that you see developing in the other one?

Mr Adams: If you get the proper smart grids, it will give you immediate alleviation. A smart grid can be a mixture of intelligent sampling of the current conditions on a line. So, instead of this maximum generation/minimum load thing, you would have a dynamic model that looks at what is happening at the moment, and you would work with that. However, to back that up, you would possibly need to

install automated equipment at substations and automated switches on the line to change line configurations to maximise what you can do. So, one will always point towards an investment requirement for hard equipment to back up the capability of the smart grid.

Mr Anderson: It is a fine balance required.

Mr Adams: It is a balancing act.

Mr Mitchel McLaughlin: That is not an argument against doing it. That is the direction of travel anyway.

Mr Adams: Yes. To be honest, with the increased levels of penetration of renewables throughout the system, unless those smart solutions are enhanced —

Mr Mitchel McLaughlin: And built in from the start.

Mr Adams: And built in from the start, the only other way to do it would be to build a Rolls Royce grid that will take anything you throw at it. We cannot afford —

Mr Mitchel McLaughlin: It would take forever as well.

Mr Adams: Yes, and we cannot afford to do that. It has to be that concept.

Mr Anderson: I have another of couple of quick questions. Putting the targets aside, is it appropriate to build high levels of renewable electricity generation before the grid is in place to support it?

Mr McClughan: Do you mean permitted developments being erected and the grid not being available to take them?

Mr Anderson: Yes.

Ms Cormacain: It is a cart-and-horse situation. If you wait until you have the grid before you build your renewables, it would be very hard to justify the grid in case you have stranded assets or in case a wind farm does not get built out. If you wait until you have your wind farm before you have a plan for a grid, that wind farm or another renewable generation source could sit there —

Mr Anderson: It is another fine balance, is it not?

Ms Cormacain: — for 10 years while the grid gets built.

I do not think that we can afford for one to be built and then wait to start the other. That is what we mean by strategic. If you intend to hit a 40% target and to increase renewables, you also have to intend to have the grid to match that and work with them in parallel. That is maybe not the answer that you wanted to hear, but it must absolutely be in parallel.

Mr Anderson: Finally, I have to talk about the North/South interconnector and the Moyle interconnector. What other specific grid additions/reinforcements are needed?

Ms Cormacain: Mervyn will answer that, and we can send through a lot more information after the session as well.

The Chairperson: I was just going to say that there is much that we will not be able to cover today because of time constraints. So, if it is OK with you, we will submit the remainder of the questions to you in writing, and you can respond to them.

Ms Cormacain: No problem.

Mr Hegarty: Before Mervyn answers, I want to respond to the previous question. If the grid is not there, the investment is unlikely to go ahead. The wind project will simply not be built.

Mr Adams: You asked what other grid investment was needed. The second North/South interconnector is critical, not just for renewables but for system stability and the decarbonisation targets associated with Ballylumford and so on. The Moyle interconnector is running at suboptimal levels and will be until repairs are done. Even then, the concentration of energy flow on the Scottish side will limit its capacity. We really need more interconnection, potentially through the South of Ireland on to mainland continental Europe and France, where there is a surfeit of nuclear energy, and that would create a balance between conventional and green. We have a wind resource on the whole island that is the envy of countries across Europe. If we can get that to market, we will all benefit from it.

Mr McClughan: I will be very quick, Chair. The key is that you must not lose sight of the vision. If we can interconnect into the market, we will be able to get rid of our product, so to speak. That means more jobs on the ground, more opportunities for the local supply chain and a healthier economy coming from renewable energy.

The Chairperson: Thank you for that. We move now to Mitchel McLaughlin. I know that you have been dipping in and out. *[Laughter.]*

Mr Mitchel McLaughlin: This has probably been fairly well teased out. I am interested in the confusion. Everybody I ask is in favour of smart technology, so where is the blockage? What is the problem?

Mr Adams: The problem is the level of acceptance in NIE, which is used to running a safe system. You cannot tell NIE to run the system unsafely, because that is contrary to its licence. NIE has to be comfortable with whatever smart solution is in front of it. It has to achieve its normal output while keeping the system safe. The people selling smart grid solutions will promise you that their system does everything. They are like double-glazing salesmen: they say that their product is the best thing on God's earth, and then you discover that it does not do a and b. So there is extensive testing. I assume that, as it comes in, NIE will adopt a trial approach. It will put one in and become comfortable that it delivers everything that it said it would deliver. These smart gird solutions exist, but only in small arenas. The islands off Scotland, for instance, have some of them attached, but they deal with a very small grid, so they can control it much more easily. We are in the middle. We have flows coming across from the Moyle and loads coming up from and going down South. A small island off Scotland does not have that level of variability.

Mr Mitchel McLaughlin: It is hardly large in the global or international context, is it?

Mr Adams: It is not, but it has unprecedented penetration levels of wind. Nowhere else in Europe approaches 50%.

Mr Mitchel McLaughlin: That is the core of my line of questioning because I see that as a significant impediment to the development of renewables. We do not know how to fit them in; we do not know how to connect; we do not know how to measure the capacity; we do not know how to project their potential accurately; and we would not know what to do with that potential even if we were to achieve it.

Ms Cormacain: I agree with some, but not all, of that assessment. At a recent conference that I attended, someone from the European Commission said that Ireland was giving hope to parts of Europe by showing what can be done with high levels of wind. The countries in Europe that have higher levels of renewables as part of their electricity mix are also extremely well interconnected. There might be 1,000 megawatts of interconnection between, say, Belgium or the Netherlands and Germany, France etc.

Ireland as an island — I have to talk about Ireland as an island because of the single electricity market — is leading the way in being able to absorb high levels of renewables, particularly wind, which is one of our greatest resources as a variable source of energy. We have the ability to absorb into our system 50% of instantaneous penetration, which is wind. There is an all-island programme in place called DS3, which will aim to increase our variable wind penetration at any one time to 75%, a phenomenal figure by anyone's standards. As an island, having that kind of technology is fairly world-leading. We have an awful lot of the technological capability to use the wind and other renewable resources that we have.

It may not be that easy a process, but then it would not be. It is taking a lot of time and the combined efforts of regulators, system operators and network builders, North and South, as well as a lot of input from industry, saying, "Look, this is what we are capable of. We can respond to your requirements as quickly as possible." As an island, we are fairly cutting edge. I recognise the challenges that you put forward. However, I also think that what we have achieved to date is not recognised.

Mr McClughan: DS3 is your solution. It is designed to develop solutions to those very challenges but has been delayed by a year. As Meabh said, if it is implemented, it will allow up to 75% of penetration.

Mr Mitchel McLaughlin: That was my first question. What is the cause of the delay? Is there inertia at a policy level? Is this being driven?

Mr Adams: It is being driven. One of the main factors in raising the 50% threshold is the system's capability to react to a change of frequencies. The DS3 programme has identified what needs to be done to achieve that: changing protection settings, relays and so on. However, it has to be done across the whole generation suite by both conventional and renewable generators. The conventional generators are huge, lumbersome machines. Given their reaction times and so on, their owners are uncertain about how they will react to such changes and so need to carry out studies. They say that they cannot jeopardise the conventional generation plant to achieve this; they have to be sure that they can achieve it without causing any damage. The time granted to them is to carry out test programmes on the conventional generation so that they can come back and say that all generation can achieve these new limits.

Mr Mitchel McLaughlin: This is a big question. It has almost taken us into a theological discussion. The whole idea of renewables is to respond to the pressure on fossil fuel-based generation. We are, in effect, at least hypothesising about replacing fossil fuel generation with renewables anyway, so I do not feel that we should be defending everything. We should, in fact, be encouraging a transition. Is that not the underlying logic of renewables?

Ms Cormacain: It is a transition. We, as an industry, would certainly not say today that we could run the entire electricity system on renewables. There might be a time in the future when that happens, but it is not now. We need a diverse fuel mix. We are at 18% electricity from renewables, which is a really significant jump from where we were five years ago. There needs to be a balance. The European Commission hopes to publish a report in June asking Europe what it can do to reduce its reliance on external energy sources. That is driven directly by the events in Crimea, Ukraine and Russia.
So people are very aware of our reliance on fossil fuels. The prices of fossil fuels are volatile. Historically, the trend is upwards. However, as you mentioned, there are also higher, global notions of climate change and the need to reduce carbon emissions. We have legal obligations to reduce carbon emissions and greenhouse gases. They all come together. As I said, we would not suggest that renewables are the only answer today, but they are definitely part of the answer.

Mr Mitchel McLaughlin: We might need to come back to this. Regardless of whether the Chair has the time to complete the discussion, I do not. It seems to me that the protraction might be a contributory factor to how long it takes to get decisions to effect and deliver change. We may need to drill down into that.

The recent developments at Bombardier, which has an in-house generation plant that it calls "the Energy", raise a question about the requirement to connect to the grid in circumstances in which generators are primarily interested in satisfying their own energy needs and are, allegedly or otherwise, doing it in an environmentally friendly way. Does the group have a formal view on the requirement for individual generators, microgenerators and many of the people whom you are talking about to connect to the grid at all?

Mr Adams: We increasingly advocate to our members that the problems associated with grid connections do not rule out their using renewable generation. Off-grid systems can be used, especially in the farming community. We meet the Farmers' Union and talk to it about farmers using off-grid systems. Let us not forget that a large part of controlling our total energy needs is control of the demand side. If you can suppress the demand side by using off-grid generation, that is all part of moving towards the big target.

Mr Mitchel McLaughlin: I do not claim to be an expert on this at all. I will briefly return to the smart grid technology. There are peak-time loads and times when it would be more appropriate to revert the system to collecting surplus generation or supply and bringing that surplus into the system for redistribution. All of that seems to come back to whether there is a strategic plan that allows people to operate off-grid when that is the appropriate response or connect to the grid should they need additional support or want to dispose of surplus generation.

Ms Cormacain: As Mervyn said, there is demand side management. There is also storage, which Patrick, wearing his other hat, might want to talk about briefly. There is the ability to store electricity, which is notoriously difficult. There are certainly groups in Northern Ireland looking at how to store electricity more effectively.

We are definitely moving away from, "Here is your power plant and here is your demand — just match them up." We are getting into a much more circular system in which demand can be reduced when necessary and storage increased when necessary. Ultimately, looking at smart meters further down the line, every individual household will have to say, "This morning, it will cost x amount to run the washing machine. I will do it later tonight, when it will be cheaper." It is a much more circular system. We are not there yet, but initiatives are ongoing to make that a reality.

Mr Mitchel McLaughlin: Finally —

The Chairperson: Very briefly, Mitchel.

Mr Mitchel McLaughlin: We referred to the upgrading or retrofitting of the substations. Is there anything to indicate that that will have a beneficial impact on the time for connection and the cost involved? I suppose what I am asking is this: is it sufficient?

Mr Adams: The early indications from the completed substations are that there is such a backlog that they are back in the red within two weeks of completion. Six or 10 small single turbines are connected that were not connected two weeks before, but the backlog —

Mr Mitchel McLaughlin: The system is clogged.

Mr Adams: The system is up to its neck.

The Chairperson: On the back of the time it takes for connection, we received a submission from Simple Power today — it may be one of your members. I will read an extract:

> *"In our view the 90 days allowed for NIE to provide a quotation in the first place is overly long. For example, a normal customer connection is required to be provided with an offer in 30 days. We do not see the reason for a 90 day period for small generators. Indeed, our experience is that NIE does not come to the site to look at the job until some 70-80 days have elapsed."*

Is that inefficiency on its part? It seems that, if you give NIE 90 days, it will take 90 days. That is what I read from that. Is that common in your experience? I am looking to you, Mr Adams, because you seem to be the guy. I would not be a bit surprised to learn that you worked for NIE at some stage.

Mr Adams: I did. *[Laughter.]* Many a long day ago.

The Chairperson: There you are: poacher turned gamekeeper. Will you tell me about some of your experiences, for the record?

Mr Adams: I do not totally disagree with your summarisation of the situation.

The Chairperson: Yes, but do you agree with it?

Mr Adams: Yes. *[Laughter.]*

The Chairperson: OK. We got there.

Mr Adams: However, I think that the concern about the volume of small generation is unique, and NIE has so many applications. Unlike straightforward domestic connections, some of these require detailed studies, but I believe that NIE, having been given 90 days, looks on that as an end date by which it must have provided a quotation rather than as a maximum date that it could go to if it had to.

The Chairperson: The point that you are making is that, for small generators, a complex study is not needed.

Mr Adams: You need more of a study than for a domestic connection.

The Chairperson: I know that.

Mr McClughan: Earlier, we talked about the two-week period, whereby there was a suggested offer and access to NIE's geographical information systems that allow us and other developers to see NIE's network and, perhaps collaboratively, do some joined-up thinking about a solution for a connection in that area. All of that would expedite the process and reduce the timelines.

The Chairperson: Thank you.

Mr Mitchel McLaughlin: Does that not mean that NIE is operating on a default arrangement? It has 90 days, but, in practice, it takes them two to three weeks to turn it round when it eventually arrive.?

Ms Cormacain: Mervyn may correct me, but I think that the licence conditions are that there is a 90-day period, and that applies across the board, whether it is a small or a large connection.

Mr Mitchel McLaughlin: Yes, but, in practice, when they turn up on site, they can turn it round in two to three weeks.

Mr McClughan: Again, that is internal to NIE. It is like studying for an exam.

Mr Mitchel McLaughlin: If it does not take 90 days, it is about time that somebody looked at the 90-day requirement. That is what I am getting at.

Mr McClughan: There is a length of time allotted to them to come back to us and —

The Chairperson: The problem with this exam is that it could be costing somebody else money.

Mr McClughan: Without doubt, through delayed investment. Developers with global interests will look at the delays that Northern Ireland developers face and decide to allocate capital funding to a development elsewhere in the world because they can do it much more quickly there and the process is much more streamlined. You will have examples of that. Elsewhere could even be the South of Ireland. That is one of the hurdles for us.

The Chairperson: Thank you for that.

Mr Agnew: My apologies for missing your presentation. I read the brief, so I hope that I have not missed too much. If we follow your approach of asking for upfront costs, is there a danger that you, as a developer, might say that you have five possible sites and want a quote for each of them? That would increase the workload on NIE and clog the system. Is that a danger or would its charges deter you from doing something like that?

Mr McClughan: You could have a situation in which a developer has five planning applications arriving at the one time, although it is highly unlikely. Therefore, there is a staging-gate process by default: you apply to NIE on a month-by-month basis. At that stage, it would be quite a simple matter of NIE coming back and asking whether the applications could be spread a little better or whether the submission date could be adjusted. It would be very easy for a developer to bombard an entity with applications purely to clog up its system, but that is really to nobody's benefit.

Mr Agnew: I do not even mean deliberately clogging it up. As you say, you are trying to budget and assess which site is best. You are looking at wind speeds, but you will also look at the cost of

connection. If you are trying to make those decisions, you might say that you have identified five possible sites with a good wind speed.

Mr McClughan: Our market experience tells us that we have to apply on a graduated timeline rather than all at once.

Ms Cormacain: Any application, whether for planning or grid connection, takes time and money. I do not think that too many developers would submit a whole series of spurious applications on the off chance that one might get lucky.

Mr Agnew: OK. I asked the question to try to understand that side of the process.

Mr Hegarty: Steven, the cost associated with small-scale renewables means that it is certainly one of the key items that small-scale renewable generators take into account in their feasibility study. Ideally, they want the best site with the best wind, but when they pick that site, they look around and ask whether they can see any electricity infrastructure. That is a key factor. That is why it is very important that, as part of the feasibility study, and before they commit large amounts of money to getting studies and planning work done, they get an idea of what that cost will be. That is why the two-week turnaround would be excellent.

Mr Agnew: I was quite surprised when I read that your position is that you do not want there to be simultaneous planning and grid connection applications. From an industry point of view, I have heard the exact opposite from several renewables developers. You talk about clear direction from Government, but we need clear direction from the industry. You said that it was a big item of discussion among your members.

Ms Cormacain: It is fair to say that the policy in place was agreed in discussion with the industry. By and large, it has worked. There was a RenewableUK wave and tidal conference in Belfast two months ago. One of the presentations was from the grid owner in Scotland. His problem was that there was a significant number of renewable project applications that had a grid connection offer but were struggling to develop the project — they were more complex tidal projects — or they did not have planning permission. Scotland faced having a significant chunk of megawatts, particularly in the north, that could not be used or reallocated. There were projects that maybe had moved a bit faster with their planning permission but could not get grid connection. If you shifted entirely from grid connection first and then planning, there would also be problems. There is discussion within the group, but, up to now, we feel as though planning permission first has worked. We absolutely support the better provision of information earlier. NIE has made some moves in that direction, and it would be great to see more.

Mr Adams: It is significant that the South of Ireland, for its next gate, is moving to a position in which it will accept an application only when planning permission is in place. It suffered under the previous regime and is looking to what is in place up here as a potential solution.

Mr Agnew: What understanding of smart grids has NIE at present?

Mr Adams: Of the technology?

Mr Agnew: Yes. You said that some pilots were taking place in GB. What level of understanding is there? Is there a capacity issue in NIE? Is that part of the issue?

Mr Adams: No. Our feeling is that there is quite a good level of understanding and interaction. NIRIG has been directly responsible and has, perhaps, poked NIE with a stick a wee bit to move it in the right direction. However, it is engaging with one of the firms that we consider a UK leader and that has a number of schemes up and running. It is interacting with the industry and telling us where it is with the schemes. We would still like it to be quicker, but it is moving, and we have no doubt that there is the technical expertise in NIE to understand and, when it makes the decision, to implement schemes such as those.

Mr Agnew: You mentioned that it is likely to do so through a pilot. Is there a timeline for that?

Mr Adams: No. As an industry, we are pushing NIE to give us a time frame so that we have a fuller understanding of when the results might be visible.

Mr Agnew: Does it even seem minded to go in that direction?

Mr Adams: I think that it is, but it is in a consultation phase with the provider. It has paperwork exercises and schemes worked out. The next step, I assume, is that it takes one of those schemes, implements it and proves that it can work. We are pushing it to say, "Your schemes show that you can put up two turbines close to the substation and every circuit without affecting it, whereas your worst design places the turbine at the end of the line. If the two turbines close to the substation will have no effect, why do not we go ahead and connect them now?" The industry is pushing the boundaries to see whether we can speed up the process.

Mr Agnew: Would it —

The Chairperson: Briefly, Steven, we are tight for time.

Mr Agnew: Would it be helpful if NIE had a dedicated person or team focusing on smart grids? Have you asked for that?

Mr Adams: Undoubtedly, it would. The drawback with that is that you need somebody with a high level of technical expertise and knowledge of the system. You will not meet someone like that walking down the street. He is probably already in NIE now. So, if you pick him out and put him in a dedicated team, he might create a hole in the quotation generation.

Mr Agnew: Chair, I have a few more questions. I will pick the most pertinent.

The Chairperson: We agreed earlier that we would submit further questions in writing. I am really pressed for time, Steven. You can ask one brief question and get a brief response.

Mr Agnew: I just want to get a sense of how much risk NIE is taking in investing in one of the pilots. When you say that this is an alternative to the investment in the grid, what kind of cost are we talking about? Presumably, you say that this is a better alternative because it is more cost-effective.

Mr Adams: With the likes of the substations that got the £2·3 million investment, you were able to enable them with an investment of, I guess, £5,000 or £6,000 for each. Without that, you would have to restring the line back to the turbine at a cost of maybe £20,000, so they are cost-effective.

The Chairperson: That concludes our session for today. Thanks very much for your invaluable insights. This has proven very helpful and useful to us. It has been recorded by Hansard for our perusal when we produce our report later.

Mr McClughan: If the Committee ever wants to visit a wind farm, contact me and we will arrange that. It is very useful to have that experience.

The Chairperson: You mean a non-contentious one. *[Laughter.]* Thank you very much.