Northern Ireland Assembly

Committee for Enterprise, Trade and Investment

OFFICIAL REPORT (Hansard)

Electricity Policy Review: Action Renewables

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 Gordon Dunne

Witnesses:

Mr Jonathan Buick	Action Renewables
Mr Michael Doran	Action Renewables

The Chairperson: I welcome Mr Michael Doran, executive director of Action Renewables, and Mr Jonathan Buick, head of projects. Thank you for being with us today to discuss what is proving to be a very interesting topic. You were here for most of the previous session, so you will know that you have up to 10 minutes to make your presentation after which we will have a question and answer session with members.

Mr Michael Doran (Action Renewables): Thank you very much. We will probably take less than 10 minutes to do the presentation; I am sure you will be glad to hear that.

We are going to highlight three issues, two of which are directly related to your brief. One of them is slightly peripheral, and Jonathan will deal with that at the end. The first issue that we want to talk about is the length of time that it takes to make a grid connection, and the second one is to do with cost. Jonathan will talk about the specific issue to do with small-scale renewables. It is not specifically part of the brief that you had originally drafted but it is related, and we will explain that when we get to that point.

You have already received our submission, so I will summarise that very quickly. There are two issues to do with grid connection, one of which you discussed with the Northern Ireland Renewables Industry Group (NIRIG) earlier, which is the 90 days that it always takes Northern Ireland Electricity (NIE) to come out and give you a quote. The second one, which is more of an issue, is the amount of time it takes, once you have received the quotation, before NIE makes the connection. That, now, is typically of the order of two years in Northern Ireland. That is becoming a major issue.

There is also a separate issue that in GB when you get your grid offer, they also give you a date for grid connection. That does not happen in Northern Ireland. So, when they give you the grid offer, and you pay the deposit, you have no indication when the grid connection will be made.

The second issue is to do with cost. I should have started by saying that we are, typically, working in the 50 to 500 kilowatt range, so we do not tend to be in the larger-scale market that NIRIG works in. Also, we tend not to do a lot of work at small, domestic scale. What I am talking about are issues that are particularly within the 50 kilowatt to 500 kilowatt scale.

Typically, in Northern Ireland, the cost of grid connection is now somewhere between 20% and 50% of the total capital cost of the project. In England, it is 5%, so it costs considerably more in Northern Ireland to get a grid connection.

We did a survey of the last 15 projects in which we were involved in Northern Ireland and found that the average cost was £174,000, and that was typically for a 250 kilowatt wind turbine. Those were pushing, on average, around 40% of the total capital expenditure. In one of those 15 cases, the grid quote was £309,000. The turbine was costing £150,000, so it was costing twice as much as the turbine. I will ask Jonathan to highlight the third issue.

Mr Jonathan Buick (Action Renewables): The third issue is with another sector that we work with, which is the small-scale photovoltaics (PV), micro-scale photovoltaic or solar panels that you will have seen popping up on roofs across Northern Ireland. We have become aware, in the past six months or so, that the electricity that those panels generate and export to the grid is not assigned to electricity suppliers: in other words, it is just absorbed into the NIE system. That effectively reduces the losses attributed to the NIE grid in the transmission of electricity.

At the moment, although we are not entirely sure of the mechanisms, there is one electricity supplier that is willing to purchase that electricity even though the electricity is not assigned to it, and that is Power NI. We feel that competition is lacking in the area of export of domestic renewable electricity on to the grid. It is something that happens in GB, where the export is deemed and any electricity supplier can purchase that electricity, and the electricity is assigned to them. Another alternative would be to install half-hourly metering. At the moment, we understand that NIE is not allowing installers to install their own half-hourly meters, and the cost of NIE installing half-hourly meters is prohibitive for that scale of development. So, that is another issue that we have come across.

The Chairperson: OK. You raised a number of very interesting issues there. Mr Doran, you said that NIE always takes 90 days to come out and do the initial thing. That is in all cases. It leads me to believe, from what we were teasing out earlier, that it is taking 90 days, or up to 90 days, simply because it can. Would you suggest that that initial period should be reduced: in other words, do you think that, as part of the licence or criteria, that should be reduced to say 50 or 60 days or 40 days?

Mr Doran: Yes, I think that it should be reduced. Approximately a year ago, I chaired a meeting in Antrim. There were about 150 farmers present who had made grid applications. There was a straw poll, and, of the 150 in the room, every single one had been given a grid quote of between 88 days and 90 days. It is not abnormal; it is the norm.

The Chairperson: But it is abnormally the norm, if you know what I mean. I do not know whether you have any experience of other places, but is there comparable time frame in the UK within which the power company —

Mr Doran: In GB, it is normally weeks.

The Chairperson: It is normally weeks with the power companies in Britain?

Mr Doran: Yes. It is normally three to four weeks, in our experience.

The Chairperson: Normally three to four weeks. Right. There you are.

I am coming on to the connection bit here, because you said that, in your experience, the connection was typically taking up to two years. You mentioned something about the UK grid, the offer and the date of connection. Can you give me some sort of an indication as to what the comparable timescale of that is?

Mr Doran: It is normally three to six months.

The Chairperson: It takes three to six months, and it is taking two years here?

Mr Doran: It can take up to two years. There are issues here, particularly associated with easements, where you might imagine that it is fairly straightforward, but it gets into complex legal issues. All I will do is highlight that there is a considerable discrepancy in the amount of time that it takes to make a grid connection here in comparison with what it takes in GB. That being said, a large part of the issue is not with NIE being uncooperative. I am not sure that it has the resources to do it any faster.

I have to tell you a little story. I first became involved in this about 15 years ago. When I first started dealing with NIE, at my first meeting, they were talking about PLGs, and I did not know what a PLG was. I said, "Sorry, guys, what is a PLG?", and he said, "It is a piddly little generator." So, that is where you have a small electricity generator trying to get into the system. That attitude does not exist in NIE anymore. It is receptive, and it is trying to move forward, but I think that it is constrained by resources.

The Chairperson: That brings us back to the original question that we asked earlier about the input from other companies to do some of the work and whether the licence should be changed to allow for that to happen.

Mr Doran: We believe that it should. We think that there should be competition in the market.

The Chairperson: Yes. That makes sense.

You mentioned that the last 15 projects that you had were averaging out at £174,000 for a 250 kilowatt turbine. It is difficult to average out where there are longer distances to connect into the grid. Have you done a comparative study with parts of Britain, or can you give some sort of indication as to what those costs might be?

Mr Buick: We can give some examples. In some of those instances, we went to Airtricity in Scotland and asked what the cost would be for constructing a comparative amount of works to comply with NIE's conditions. The cost has typically been about one third of NIE's.

The Chairperson: Really? I am sure that that study is not commercially sensitive, so could you provide that to us, please? That would be very useful.

Mr Buick: Yes, we can.

The Chairperson: Thanks very much.

Mr Dunne: Thanks for coming along this morning, gentlemen. You have had a long sit. You will be aware of a number of the issues that we have covered. We will quickly cover planning permission. What is your attitude in relation to the planning permission issue? Should it run in parallel with applications?

Mr Doran: For the scale that we are talking about, we think that it should run in parallel. I heard NIRIG talking earlier, and I can understand why, at the larger scale, it might be slightly reluctant to go down that route. However, for the scale that we are working on, we think that it should run in parallel.

Mr Dunne: Is there any evidence that NIE will get involved in giving technical advice without planning permission? Can it do that?

Mr Buick: NIE will, for a cost, undertake what it calls a feasibility study. So, it will give you an indication of how much it may cost to connect to the grid without having planning permission. However, as many of our clients will often say, it is not worth the paper that it is written on, because it does not reserve that capacity in the grid. In fact, if your neighbour or someone else down the road were to come the next day with planning permission in place and submit an application and reserve that capacity by paying a deposit, your quote is meaningless.

Mr Doran: To refer back to the comment that I made earlier about it possibly not having adequate resources, I can understand why it does not want to have to give out any more quotations than are absolutely necessary. So, it is easier for it to only give a quotation where there is already planning approval, because that means that it is likely to have to process fewer quotations.

Mr Dunne: Is there a risk that people will fire in applications in an unmanaged way if you go down that route?

Mr Doran: It is possible, because you could put an application in to block the guy next door. So, if there is limited capability to get onto the grid, and if you think the guy next door is going to put up a wind turbine and you do not want it to go up, you could make an application to put one up so that he cannot get in, because they appear to treat them in the order in which you make the application. That is possible. I do not think it is likely to be a significant issue, but it is possible, yes.

Mr Dunne: What is the average time now for one of your customers to get planning permission?

Mr Buick: It all depends on the quality of the submission. A good submission may also involve planning consultants helping you to draft that submission, and there is a significant cost to that. Coming back to Michael's point, if planning permission has a cost, which may be in the order of about £10,000 or £15,000 — for a wind turbine it is perhaps in the order of a few hundred thousand pounds for development — that is a significant cost. The £6,000 cost or thereabouts for grid connection is also a significant cost. Those are not things that are undertaken lightly. There is a bit of putting the cart before the horse, as one of the other guys said. We think that the two should run in parallel, particularly for this scale of development.

Mr Doran: What about the timescale?

Mr Buick: For a good application, planning approval can be as quick as six months. For an application where other surveys are required, surveys that the client has not done beforehand —

Mr Doran: That timescale has come down. If you had asked me the same question five years ago, I would have said that it was between 12 months and 18 months. The DOE has become much more efficient in processing applications and is doing a very good job.

Mr Dunne: Put that on the record. To be fair, the workload has dropped considerably as well, but it is starting to pick up again, which is good. We all want to see it.

I have been made aware of another issue by installers and businesses. There is a real problem, especially in the west of the Province, with being able to make a connection, basically because the grid is unsuitable to take it. It is very difficult to connect 50 kilowatt systems to the grid. Are you aware of any solutions to that issue?

Mr Doran: There is a specific issue typically to do with 50 kilowatt PV systems. Just to remind you, you get different levels of renewables obligation certificate (ROC) support at different scales of generation. If you have less than 50 kilowatts of photovoltaic panels, you get four ROCs, and if it is more than 50 kilowatts, you only get two ROCs. So, a lot of factory roofs typically tend to go up to 49 kilowatts. When they go to export the electricity back to the grid, they come under conditions called G83. That is the code that allows you to connect, and the way in which NIE interprets G83 in Northern Ireland is different from the way in which it is interpreted in England. In Northern Ireland it interprets the capacity of the system to produce electricity, and, if it is greater than 3·7 kilowatts, they make you go to a higher-level code.

What you can do is put a limiter on, which is called a reverse power relay. That means that, even though you have the capacity to produce 49 kilowatts, you cannot export more than 3·7 kilowatts. That protects the grid, but NIE will not allow that in Northern Ireland. It says, "You have the capacity. Even if you put the limiter in, we won't accept that.". It then asks you to go to a higher-level code. There is now a new code in GB called G83/2, but they seem to be cherry-picking the way in which that is being implemented in Northern Ireland.

So, there is an issue for PV installers, typically installing 49 kilowatt systems. They are being asked to do something that NIE could address. We talked earlier about smart metering. Basically, those reverse power relays are a form of smart metering that will not allow too much electricity to go back onto the grid at one time, but NIE is not accommodating that within its system.

Mr Dunne: Is that a major disadvantage to PV installers?

Mr Doran: Yes, typically at the 50 kilowatt range.

Mr Dunne: What do you think we as a Committee could do about that?

Mr Doran: I understand that NIE will be giving a presentation at some stage. I would ask its representatives about this, because it is something that NIE could address. All it has to do is fall in line with what is happening in the rest of GB. I do not see this as an insurmountable technical issue.

Mr Dunne: Are you satisfied that the equipment involved meets current regulations in relation to standards?

Mr Doran: Yes. We have done research into that, and we are quite satisfied that it is adequate. NIE takes a different point of view. It assesses or interprets regulations as depending upon the potential total capacity of your system, not what you are actually trying to put onto it.

Mr Dunne: And that is a major drawback?

Mr Doran: It is for PV installers in the 50 kilowatt range, yes.

The Chairperson: Just following through on that, what is the oversight body to ensure consistency of standards apply? In other words, if NIE is behaving differently to what is happening in GB or, indeed, to anywhere else — we will take it even further, to the EU — what is the oversight body? Is that the regulator? Does the regulator have an input to that?

Mr Doran: I am not completely sure. I think it is the regulator.

The Chairperson: We can find out anyway, but I know that it is a very technical issue and that you guys are the experts in it. If you could find out and let us know, it is an issue that we can put to NIE. We can also put it to the regulator. The Committee Clerk has just reminded me that the regulator will be in next week. It would be appropriate if you could get that over to us before next week. Thank you.

Mr Dunne: Could you get that information into us?

Mr Doran: Yes.

The Chairperson: It would be very helpful.

Mr Flanagan: Thank you for the presentation. You said that connection costs account for between one fifth and a half of total capital costs. You quoted an average cost in Britain of 5%. Have you a comparable cost for the rest of Ireland?

Mr Buick: The cost in the rest of Ireland is similar; it is about 5%. Those are the costs that we have seen in the research that we have carried out. In the particular example that we looked at, we saw that, in one instance, the cost quoted in GB from another contract to carry out the same amount of work is one third of the cost in Northern Ireland.

Mr Flanagan: Have you any idea why that is?

Mr Buick: The costs for the equipment that NIE has seem to be high. Other contractors —

Mr Flanagan: Is there a statement of charges?

Mr Buick: The statement of charges seems to be high for the equipment that NIE is quoting.

Mr Flanagan: Are the prices of any of the particular items within the statement of charges high, or is it just a general thing that they appear to be inflated?

Mr Buick: From the discussions that we have had with our clients, it just seems to be an inflation across the board. For example, a span of line has a certain cost, and a transformer of a certain size as a particular cost, and we are told that those items can be sourced more cheaply.

Mr Flanagan: OK. I will speculate a bit. You do not have to get into this game if you do not want to. Could any of that be attributed to claim that the Electricity Supply Board (ESB) overpaid when it bought NIE and this is how it is getting its money back?

Mr Doran: We do not know.

Mr Flanagan: Am I allowed speculation here?

The Chairperson: No. Just facts.

Mr Flanagan: What impact does disproportionately high grid connection cost have on renewable energy development?

Mr Doran: It discourages it. We believe that if there were more competition in the market, more renewable electricity would be going in. You would still have the issue of grid capacity, which is not NIE's fault. It is just trying to deal with the system. The person who presented earlier, Meabh Cormacain, was talking about the need for a strategic approach to improve the grid and the fact that the grid is now coping with issues for which it was not designed. Whatever happens, money has to be spent on the grid. The issue is where that money should come from, and I do not think that that has been clearly identified.

In my opinion, the Competition Commission is also restricting NIE, which is trying to upgrade the grid. For instance, on the last determination, the commission cut back NIE's prices, but a large part of that price increase was associated with grid improvement, which is required. If there is not an improvement in the grid, we will restrict the amount of renewables that will go ahead in Northern Ireland.

Mr Flanagan: Yes. Is there a problem with NIE profiteering?

Mr Doran: I do not believe so.

Mr Flanagan: You do not think that it is making too much profit based on the —

Mr Doran: No. I think it is an issue of resources, and also that somebody should determine, at a strategic level, who is going to pay for the upgrade of the grid.

Mr Flanagan: Do you think that NIE is playing a game to overstate the extent of the problem to try to attract additional investment from the regulator?

Mr Doran: I do not believe so, no. I think that it is trying to address the issue, but the Competition Commission is actually holding it back. The Competition Commission is only acting on how it keeps the bills down for customers. I think that it is a bigger picture than that, and it is something that we are all aware of, which is security of supply. You need to balance that with the environmental considerations and the cost. In my opinion, it is not just a cost issue.

Mr Flanagan: So you disagree with the Competition Commission's findings.

Mr Doran: Yes.

Mr Flanagan: Do you completely support NIE's submission?

Mr Doran: Not completely. It is very complicated, and I did not read the entire 700 pages. However, it is acting, and the regulator has also acted in a similar vein in the past few years. My opinion is that it is an overemphasis on cost control, and not looking at the carbon implications, the environmental implications and the security of supply issues. If we do not have an upgraded grid and, on a slightly separate issue, if we do not have an improvement in the interconnector to the South of Ireland, that will limit the amount of renewables that will be delivered in Northern Ireland, and we will not hit the 40% target.

Mr Flanagan: But renewable connections were to be looked at on a case-by-case basis.

Mr Doran: Yes.

Mr Flanagan: So what you say there does not really make sense.

Mr Doran: It does, because if it is on a case-by-case basis, and you do not have a strategic overview to improve the grid to the west, then every time an individual application goes in — for the scale that we are taking about — it will go to £200,000, to £300,000, to £500,000, to £1 million just to connect one turbine, which is not cost-effective, so it will stop that turbine. It needs an overall view of how you address the overall grid issue and where the money comes from to address that. I do not see that being a major political debate at the moment. It does not seem to be in the domain about who is going to pay for it. I do not think that a decision has been made that we actually need a grid improvement, which I think that we do need.

Mr Flanagan: I do not think that there is any dispute that the grid needs improved, but some of us are of the opinion that it is a contrived argument from NIE and others to attract additional investment in to improve the profit that it makes as an organisation. That is my concern.

Mr Doran: That is valid, but that is not my opinion.

Mr Flanagan: In the absence of a strategic plan — I forget the word used — or a strategic approach, do you support the proposal for clustering?

Mr Doran: Yes, I think that that makes sense.

Mr Flanagan: If there were to be a smaller number of clusters as opposed to wind turbines, would that have a significant impact on the need for upgrading the grid and grid strengthening?

Mr Doran: The clustering is of more benefit to the larger wind farm applications. Most of the sector that we deal with is what we would call medium. It is not the small scale; it is not the large scale. It would not really assist us, because the clusters are not likely to be where the individuals are trying to put up the wind turbines.

Mr Flanagan: Do you think that there is an adequate level of transparency within NIE's decision-making process on its actual decisions?

Mr Doran: No, I do not believe that there is.

Mr Flanagan: What improvements would you like to see to increase transparency there?

Mr Doran: The first one is a technical issue. Jonathan?

Mr Buick: A full breakdown of costs would help to understand how those quotes have been arrived at.

The Chairperson: For the record, when a person gets a quote, it does not give a specific breakdown — x, y, z. Right, OK.

Mr Buick: No. In many instances, we are finding that, after the 90 days, the client may be contacted by NIE and simply told that the cost is likely to exceed £200,000. At that point, the client is given the choice of whether he wishes to go ahead with the full quotation, which would involve more work and extra time, or whether he wants to go to the fallback position of having simply a feasibility study, which we spoke about earlier, which is simply giving them a price on paper but not holding the grid for them. Obviously, at that point, the client has already got his planning permission and he is already in the process, so to do that would be to effectively kill the project. Therefore, at that stage, the majority say that they will go ahead with the full study, and later it comes back with a £300,000 cost. Does that answer your question?

Mr Flanagan: It is your question. *[Laughter.]*

The Chairperson: It was on the back of this.

Mr Flanagan: Finally, what is the highest quotation you have seen for connecting a single wind turbine to the grid?

Mr Buick: It is in excess of £800,000.

The Chairperson: OK. Thank you. Just coming back to —

Mr Flanagan: Sorry, Patsy. When you say "in excess of £800,000", do you mean £820,000 or £2 million? *[Laughter.]*

Mr Buick: It is eight hundred and something. I do not remember the exact figure. It is eight hundred and something. I think that there may be even higher quotations than that.

The Chairperson: Coming back to the point that we were talking about, who do you think is, or should be, responsible for the strategic overview?

Mr Doran: I think that DETI should be. I think that the strategic energy framework was a great move in the right direction, because it set clear targets and objectives for Northern Ireland. However, there has not been much movement since on identifying what will happen with the grid and who is responsible for it.

The Chairperson: That is my next question. Who do you feel should be responsible for investment in the grid?

Mr Doran: That is a difficult question to answer, because we are not part of the decision-making process. I think that that is a decision that the politicians in Northern Ireland have to make. We are not political.

I am not being cagey here. I think that it is a decision that the politicians in Northern Ireland have to make. It is a decision that has to be made, and avoiding that will not solve the problem.

The Chairperson: OK. Thank you.

Mr Anderson: Thank you, gentlemen. I think that most of the questions that I wanted to ask have been touched on. There is a question on costing. If a developer comes in and connects to the grid, they could be charged a very high cost. If other ones then come in and connect, do they get a lesser cost? Is the first connector compensated for that? I know that if upgrades of electricity transformers take place in a housing development, if someone goes in at the cost within a time span, the first developer can be compensated for the outlay at the start. Would that happen here?

Mr Buick: No. Typically the first connection would be the least costly. The second connection would cost more, because it requires more work further along the line to upgrade the cables back to the substation.

Mr Anderson: Is that always the case?

Mr Buick: Yes. Take the example of a 200 kW wind turbine. When the first turbine connects to the line, there may be a capacity of about 400 kW available. So that first wind turbine could connect in, and all that is required to connect it is maybe three spans of overhead lines and a transformer. The next turbine might connect a little bit further down the line. However, because capacity has been taken up and there maybe is not spare capacity in the line, the developer has to pay for the upgrade of that line back to a position where it can take that electricity. So, he is paying for maybe 3 kilometres of upgrades.

Mr Anderson: So, whichever way it is done, it is done in fairness to each of them.

Mr Buick: At the point when they make their application.

Mr Anderson: It is fairly done. There is no discrepancy.

Mr Doran: No. We believe that that is fairly done.

Mr Anderson: That is my point. Getting back to investments — I asked NIRIG this earlier on — what planned investments do you think would need to be made to resolve the current issues with the grid? We have the North/South and Moyle interconnectors. How do you see that issue, going forward?

Mr Doran: Moyle is one issue. I think that it is running at about 45% capacity. That needs to be upgraded. I think that it is unfortunate that the interconnector to the South of Ireland is being pushed off to a planning inquiry. My opinion is that a political decision should have been made to go ahead with that. I have no control over that. Because of the nature of wind and its intermittency, the more wind that you have on the system, the more interconnectors you need to keep the system robust. So I think that it is critical that that interconnector goes ahead. Then, we need a strategic assessment of what needs to be done to the grid in the short term and who is going to pay for that.

There was a discussion during the previous submission about the opportunities for smart metering — I am sure that you do not want to go over it again. NIE is already involved in one project in Coleraine, and another project is coming online in Lecale near Downpatrick that will look at specific pilot projects. At the moment, smart metering will not solve the problem, and the grid needs to be upgraded as soon as possible. If that does not happen within the next year or two it will restrict our ability to put further renewables on. It needs a strategic overview.

Mr Anderson: You are telling us that it will have a massive effect on our reaching the targets by 2020.

Mr Doran: Yes. If there is not significant investment it will become increasingly more difficult as time goes on.

Mr Anderson: OK. This is my last question. The cost and how it inhibits renewable energy development was touched on earlier. How greatly do you think the high cost is inhibiting development? At what level does it inhibit it? Is it great? Is it massive? "Huge" was a word that was used earlier on, so I will use it again.

Mr Buick: When the cost of grid connection exceeds 50% of the total capital costs, it is a show-stopper. Those projects do not go ahead. We know that from some of our clients who have just stopped and given up because of the quotations for grid connection. NIE also recognises that when it contacts clients to say that it is likely to be excessive and ask whether they want to go ahead. However, of course, at that point the clients have committed themselves.

Mr Doran: It is a difficult question to answer. Typically we are talking about 250 kW wind turbines. If you compare that against a 2·5 MW single turbine in a wind farm — and it could be 10 of those, so you could have a 25 MW wind farm — you would need 100 250kW turbines. At the scale we are talking about, the cost of connecting to the grid is probably stopping 30%, 40% or 50% —

Mr Anderson: That is very high.

Mr Doran: Yes, but that is a relatively small part of the overall electricity generation. The wind farms are generating more. At the scale that we are talking about, it is a significant deterrent.

One of the things that I would point out is that the smaller turbines that are typically 250 kW are owned by people in the locality or the community. They are not owned by companies that may or may not be resident in Northern Ireland, and all that money resides in Northern Ireland. So, while they may be relatively insignificant in the actual number of kilowatts, they make a more significant contribution to the local economy.

Mr Buick: Yes, we did a quick calculation to work out the value of the small-scale wind sector, as it is known. Some 700 turbines have planning permission but have not been constructed. If they were to be constructed and connected, the annual income to Northern Ireland would be in the order of £100 million.

Mr Doran: For 20 years. I would also imagine that most of that money will continue to circulate. If it is a farmer, he will put in more potatoes, buy another tractor or build another outhouse, and the money will stay in the economy.

Mr Anderson: It is good to get that information about those types of wind turbines in the community.

The Chairperson: There was one point that I think you referred to, Mr Buick. I did not pursue it at the time as it passed the agenda. You referred to the solar PV — that stuff that is coming from solar photovoltaic — not being recorded by NIE. If it is not recorded, how did NIE determine what percentage is coming from that renewable sector and those PV panels, and how can the percentages be accurate? Maybe I am missing something there.

Mr Buick: It is not being recorded, and, as such, it is simply an estimate. There is no precise figure for how much electricity has been exported from small-scale PV in Northern Ireland. We simply do not know, as we do not have the metering in place to be able to do that.

The Chairperson: OK. That is grand.

Mr Flanagan: If we do not know how much has been exported, how do we know how much incentivisation has been paid?

Mr Buick: The incentivisation is based on what is being generated, not on what is being exported. We work with a lot of those small-scale customers — the domestic PV sector, who typically have maybe three, four or five kilowatts of PV panels on their roof. We have to phone the homeowner annually and ask how much they have generated in the past year. That is the only way to get that information.

The Chairperson: I have seen that some use their tablets and stuff like that to record it.

Mr Buick: You can use tablets. There are some online programs that come with some of the panels, but we phone the customer to ask. If we do not get that information, we estimate it.

The Chairperson: How does the customer record it, other than those who are computer savvy and stuff?

Mr Buick: He reads his meter. There are two meters involved in nearly all renewable generation installations. One meter is a generation meter, which records the generation. The other is at the point of connection to the grid; it is NIE's meter. It is only NIE that can install that meter. That is an import/export meter. It records the flow of electricity in both directions, one into the property, and one out.

The Chairperson: Are you saying that they do not read it?

Mr Buick: They do not read the export; they will read the import, but not the export. You will know from the meters in your homes that the meter reader comes out to read it. If you are not in, you are asked to fill it in yourself, or it is estimated.

Mr Doran: There are also different kinds of meters, because the meter that is required to record the electricity being exported has to be a half-hour meter for it to be identified. That is not the normal meter. The normal meter that is in your house is not a half-hour meter. The additional cost of getting a half-hour meter in Northern Ireland is typically about £450. Elsewhere, it is typically about £150. Only one company can install that meter.

The Chairperson: It is not NIE, by any chance?

Mr Doran: Funny enough, yes.

The Chairperson: So NIE is charging £450 for the meter and installation, and, elsewhere, meter installation and all is £150.

Mr Doran: Yes.

Mr Agnew: Thank you for the presentation; it is good to see you, as always. I am trying to get to grips with the issue of the small-scale PV and the export issue. The issue of competition in this case, and contestability earlier, seems to have come up across the whole energy sector. On the particular issue of exporting of PV and the purchasing of the ROCs, what is the barrier to entry from someone else purchasing the ROCs from small-scale PV?

Mr Doran: The issue is not the purchasing of the ROCs. If you have a PV system on your roof, for example, and you generate electricity, you work out at the end of the year how much of that was generated from your PV system. You can then claim for ROCs on it, and you will be paid for that. But, even though you may know the number of kilowatts that have been exported from your house back on to the grid over the year, you will not be paid for the electricity that you sell back on to the grid.

Mr Agnew: Sorry, it is the exported electricity rather than the ROCs.

Mr Doran: Power NI will pay you for that electricity, but no other supplier can do so, because there is not the mechanism for it. That is the issue.

Mr Agnew: The issue is the mechanism.

Mr Buick: The issue is part of the single electricity market. We are being told by NIE that in order for electricity to be dealt with in the single electricity market, it has to be recorded on half-hourly meters. Homeowners do not have half-hourly meters. When the installer installs the system, the house does not have a half-hourly meter, and NIE —

Mr Agnew: When Power NI purchased it, though, obviously the half-hourly meter still does not exist for them, so how —

Mr Doran: That is correct.

Mr Buick: That is right.

Mr Agnew: So how is Power NI able to purchase?

Mr Doran: We do not know, and we have addressed that issue with the regulator. To date, we have been unable to get an answer.

Mr Agnew: As you know, I have been asking questions about this issue, and I met Power NI subsequently. It would say that it is very much a requirement that it purchases it. From what I picked up, there is not a licensing issue. You are telling me that it is almost a knowledge issue or a technological issue.

Mr Doran: No, it is not. If your house has a PV panel on the roof and you are not contracting with Power NI — you contract with one of the other suppliers — those suppliers cannot pay you for the electricity because there is no mechanism for them to do that. So, you are encouraged to go to Power NI.

Mr Agnew: Who needs to set up the mechanism? When you say mechanism, is that a licensing mechanism?

Mr Doran: Yes.

Mr Agnew: Ok, so it is a licensing issue for the Utility Regulator.

Mr Doran: We do not see that Power NI are licensed to do it either. We do not understand why Power NI is paying you for that electricity, because Power NI cannot claim it back either.

Mr Agnew: Yes, and Power NI would certainly say that it is required to do it. It sees it more as a burden than a benefit.

Mr Buick: I can understand that, yes. One possible solution might be to have a virtual half-hourly meter recording all the domestic export in Northern Ireland and assigning that into the grid so that it can be dealt with in that way —

Mr Agnew: Proportionately, by the number of exporters?

Mr Buick: Absolutely. In other words, it could be dealt with in a similar way to GB, where half of the generation of a small-scale PV system is simply deemed to have been exported and, therefore, can be assigned to electricity suppliers. Whether or not that happens is irrelevant, but that is what they use across the board.

Mr Agnew: The cost of grid connection came up in both presentations. I think you said that in Scotland the same work can be done for a third of the cost. You also said that you do not think that NIE is profiteering. Why then, in some cases, is it costing three times more in Northern Ireland?

Mr Doran: Because there is no competition.

Mr Agnew: This is where I am confused. There is a lack of competition. Basically, you are saying that there is a monopoly, which there is. It is a regulated monopoly, but it is a monopoly all the same. Why are monopolies bad? It is either because they allow you to profiteer or because you become inefficient. Is it the inefficiency, then?

Mr Doran: I think it is inefficiencies.

Mr Agnew: OK.

Mr Doran: I do not think NIE is profiteering, but that is just an opinion. I do not have insight into what its costs are. I do not know what its cost base is. All we are highlighting is that it is costing considerably more money here to get a grid connection than somewhere else in GB.

Mr Agnew: In this case, then, is the barrier to competition a legislative barrier?

Mr Doran: Yes. At the moment, nobody else is allowed to make a grid connection in Northern Ireland.

Mr Agnew: OK. I just wanted that confirmed; I thought it was the case.

There seems to be an issue with NIE — you may or may not share this view — around innovation. We have talked about smart grids and, from the evidence of the previous presentation — again, you can tell me whether this has been your experience — NIE seems to be needing to be dragged towards it rather than willingly embracing this new technology. You mentioned the issue — I always forget the terminology — about needing a constraint on PV to stop exporting it to the grid so that you do not incur the extra charges from NIE. NIE has resisted that technology, even though it is being used in GB. Is that how you see it — that there is a fear of innovation? I think "risk averse" was the term that was used.

Mr Doran: NIE is risk averse. It comes from a background of engineering, and its prime objective is to protect the grid. The last thing it wants is a blackout where the grid goes down. When you have lots of little generators creating voltage variations, it has the potential to create issues. But I do not think NIE is averse to innovation, because it is part of the smart metering project that is going on in Coleraine. We have nothing to do with that, but I understand that NIE is playing a very active part in that project and wants it to be successful. I think that it has been quite cooperative with the project that is going ahead down in Lecale as well. So NIE is not trying to block it, but it is concerned about protecting the robustness of the grid. I can understand that, but I do not understand what the issue is around the G83/1 and the G83/2, and I think that it could address that.

Mr Agnew: What is the term for the technology?

Mr Doran: A reverse power relay. It is basically a little box that stops too much electricity going back at the one time.

Mr Agnew: I get the principle. I can just never remember what you call it.

Mr Buick: We also have conflicting stories about the use of such technology at a somewhat larger scale. I think that the example was touched on before of a significant user of electricity wanting to install a wind turbine to offset his own load but being refused because, if the factory load were not there, there would not be sufficient capacity in the grid to be able to take electricity from that turbine if it was blowing a gale, for example. We have had conflicting stories about whether NIE may be changing its position on that and whether that is allowed or not allowed or what the story is. That may be something to clarify.

The Chairperson: I am glad that you raised that issue. What is to prevent an individual developer, whether that is a farmer or factory owner or whatever it might be, from generating their own electricity for their own use without connection to the grid and simultaneously having, in case they run out or of power or run low on power, a connection to the grid purely for usage rather than export?

Mr Buick: That is what we are referring to.

The Chairperson: So there is nothing at all to stop them doing that.

Mr Doran: No, and there are people doing that.

The Chairperson: Is that what they are doing at Thompson — the mill place? That is what they are doing, is it?

Mr Buick: Yes. We have been told that where there is an issue is if the farmer wants to install higher capacity than he has a sufficient connection for. If, at any one time, he can only bring 50 in kW of power, and that is all the capacity that is in that grid, but he wants to install a 250 kW turbine — understanding that the output from the turbine goes up and down with the wind and that it may average about 50 kW, matching his own use — we are told that that is being blocked by NIE. However, we are aware of instances where it has happened.

The Chairperson: So, it is piecemeal.

Mr Buick: There seems to be a bit of a piecemeal approach to that kind of scenario.

The Chairperson: I suppose that I would have to ask NIE, but why would it block some and allow others?

Mr Buick: We are not entirely sure.

The Chairperson: OK, that will be a question for us to put to NIE at some stage. Gentlemen, thank you very much indeed. That has proven very useful and informative to us today. Thank you for your input.

Mr Flanagan: Can I seek clarity on one thing?

The Chairperson: Yes.

Mr Flanagan: You stated to Steven that there is a legislative problem that means NIE are the only people allowed to do grid connections. Where is that stated in legislation, do you know?

Mr Doran: It is in its licence. It is the only company that is allowed in Northern Ireland by the regulator to make grid connections.

Mr Flanagan: And it clearly states that in its licence?

Mr Doran: Yes.

The Chairperson: We have a few other questions. If it is OK with you, we will submit those to you in written form. Thank you very much for your time.