Northern Ireland Assembly

Committee for Enterprise, Trade and Investment

OFFICIAL REPORT (Hansard)

Electricity Market Reform: Common Arrangements for Gas and Smart Grid Pilot Project

15 March 2012

NORTHERN IRELAND ASSEMBLY

Committee for Enterprise, Trade and Investment

Electricity Market Reform: Common Arrangements for Gas and Smart Grid Pilot Project

15 March 2012

Members present for all or part of the proceedings:
Mr Alban Maginness (Chairperson)
Mr Daithí McKay (Deputy Chairperson)
Mr Gordon Dunne
Mr Phil Flanagan
Mr Paul Frew
Ms Jennifer McCann
Mr Stephen Moutray
Mrs Sandra Overend

Witnesses:

Mr Shane Lynch	Northern Ireland Authority for Utility Regulation
Ms Tanya Wishart	Northern Ireland Authority for Utility Regulation

The Chairperson: The Utility Regulator will give evidence on electricity market reform (EMR), common arrangements for gas and the smart grid pilot project.

Members have a copy of a presentation from the Utility Regulator. Background documents relating to each of the three areas that we are concentrating on today are also tabled. The first is electricity market reform, the second is the common arrangements for gas, and the third is smart grid technology. A response from the Utility Regulator to the issues raised by Mr John Simpson, who addressed the Committee, is tabled. It relates to the electricity market reform element of the briefing. A letter to the Committee Clerk from Mutual Energy Ltd regarding infraction proceedings on gas regulation is also tabled. It relates to the common arrangements for gas.

I am very pleased to welcome to the Committee the Utility Regulator, Mr Shane Lynch, and the electricity director in the Utility Regulator's office, Tanya Wishart. You are both very welcome. Thank you very much for the documentation that you supplied to the Committee. Without further ado, I will ask Mr Lynch to make an opening statement, and we will then move on. I am not rushing you at all; sorry if I am giving you that impression.

Mr Shane Lynch (Northern Ireland Authority for Utility Regulation): We will need about 10 minutes for the presentation, and then we will be happy to take questions.

The Chairperson: Yes. These are complex subjects. As I said, if I gave the impression that I was rushing you, I did not mean to.

Mr Flanagan: Before you start, Mr Lynch, may I check that you will be going through the PowerPoint presentation that we were given?

Mr Shane Lynch: We were planning to speak to the PowerPoint presentation, but I am happy to pick up on our written response to the questions that Mr John Simpson raised. I am also happy to take any other questions on energy regulation.

As you described, Chairman, the three topics in our presentation are energy market reform, smart grids and common arrangements for gas. I will speak to energy market reform, my colleague Tanya Wishart will speak to smart grids, and then I will come back and speak on commons arrangements for gas.

Energy market reform is an initiative that was started by the Department of Energy and Climate Change (DECC) in GB. It commenced with an energy White Paper last year. The Department of Enterprise, Trade and Investment (DETI) in Northern Ireland is looking at the issues that DECC raised. In all but one of the issues, we in Northern Ireland can do our own thing. One of the issues relates to what we call the carbon price support, which is effectively a carbon tax. My understanding is that we do not have devolved powers in that regard. However, it is our choice whether we adopt the other three or any variation of them. DETI is consulting on the issues. They are policy issues really, but they are closely aligned with regulatory issues. Therefore, we are clearly a central stakeholder in all of this. We work closely with DETI and advise it on regulation issues.

I will quickly take you through the four issues on the coloured slide that shows the graphs. The first one is a policy that is driven towards obtaining improved sustainability in energy production and consumption. So, it is really an additional tax on carbon producing generators. Renewable generators would avoid the tax because they do not produce carbon. We already have a carbon tax due to a European directive called the EU emissions trading system (EU ETS). That is already included in the price of electricity in Northern Ireland and right across Europe. The little blue bits at the top of the graph, starting in 2013, represent the additional tax. That is a forecast of what the additional tax is likely to achieve.

The policy thinking in the UK is that the European tax does not go far enough. From our perspective, the fundamental policy issues are sound in that they create a disincentive for fossil fuel generation in the long run. However, in the short to medium term, they could have a disproportionate effect on a small place like Northern Ireland, where we are still very dependent on fossil fuel generation. All power stations in Northern Ireland are run on fossil fuels; two of them run on gas and one on coal. In a very small market place like that, there are other key policy considerations such as security of supply and price. With any policy initiative such as this, we have to be very careful that it does not have a disproportionate effect and does not, for example, drive the fossil fuel generating plants out of the market too soon. That is important, because we are not going to be able to run the system on 100% renewables. We are supporting DETI in its work with DECC to try to take those considerations on board in their discussions as part of that work.

The second issue relates to a carbon support mechanism rather than a carbon tax. Effectively, from a policy perspective, there are two ways to encourage renewables. One way is to tax non-renewable plants and the other is to provide support mechanisms for renewables. In Northern Ireland and GB, we have the renewables obligation certificate (ROC) regime. Renewable generators get that added support. The thinking in GB is to change that mechanism to a different mechanism called a renewable energy feed-in tariff (REFIT), or feed-in tariff (FIT), mechanism, which is designed to stabilise the price of renewable energy over the longer term. At the minute, renewable generators will get ROCs, but they also get the wholesale market price for the electricity that they produce. That wholesale market price varies every 30 minutes, which is what you see in the graph. People who invest often prefer stability, and this regime is designed to reduce the investment risk. For us, in Northern Ireland, adopting that mechanism or something similar to it is optional.

The third one is known as the capacity mechanism in energy market reform. The graph shows the amount of generation surplus. By that, we mean the amount of surplus supply that we have over peak

demand. That is forecast to reduce quite significantly in GB, and the graph shows that by 2019 the margin is likely to be as low as 10%. That is very tight. In a market the size of GB, you would typically prefer to have margins of between 15% and 20%, just to give that security of supply that we think we need. That mechanism is designed to ensure that the capacity margin does not fall off too low. It is really a fixed payment that all generators in the marketplace get for simply being there, and it is seen as a contribution towards their fixed costs, which are their investment costs and their operating costs in the long run.

Finally, the bottom left-hand corner of that slide shows another tax, if you like, or standard. It is an emissions performance standard against generators that produce carbon. It sets a limit, taking a belt-and-braces approach that you cannot produce more than 450g of carbon per unit of electricity. Yet again, it is another regulatory standard that is designed to encourage renewables and discourage fossil fuels in the market.

At the end, I will take questions from members. I will not say any more on EMR, other than that DETI is consulting on it, and that, at some point, it is likely to lead to the need for legislation in Northern Ireland. I turn to Tanya to pick up on smart grids.

Mr Flanagan: Mr Lynch, is DETI carrying out an active consultation?

Ms Tanya Wishart (Northern Ireland Authority for Utility Regulation): It has closed.

Mr Shane Lynch: It closed at the end of January.

Ms Wishart: Good morning, ladies and gentlemen. I will talk about smart grids, covering three main points: the role of the regulator on smart grids, the current position of smart grids in Northern Ireland and the vision for the future of smart grids in Northern Ireland as I see it.

To clarify, as a regulator, our role is to implement government policy, so, obviously, the Department is responsible for setting the policy, and we interact with it on that. However, we implement the policy rather than set it. Our role is to approve the investment requirements of regulated companies to ensure that that policy is implemented. I have an engineering background, so I have a personal fascination with smart grids and the technology. However, my role as a regulator is to look at the needs for the investment and the value that consumers will get for that investment, because it is consumers who will pay for any smart grid technology that is implemented in Northern Ireland.

I have concerns about the costs of any investment, but my duties include the requirement to protect consumers, and, as part of that protection, I need to consider security of supply and the sustainability of networks going forward. It is important to state that I personally believe that smart grids have a very important role in delivering the value that we seek for consumers in Northern Ireland.

Where are we at the minute in relation to smart grids? The network in Northern Ireland has elements that are already very smart. The electricity supplies that we all enjoy are controlled 24 hours a day, seven days a week, and many automated processes currently exist. However, the smartest part of the network control systems is the man in the middle, and I can say "man", because, as far as know, no control engineers in Northern Ireland are female. That person's role is to manage the flow of electricity through the wires.

When it comes to smart grids, a lot of this technology already exists. We are really talking about applying it in new ways to get greater value for consumers. We want the various pieces of equipment that we have in the network to talk to each other, remove the man in the middle and have more automation. It usually includes smart metering and an element of conditioned monitoring of existing equipment. I also want to highlight to the Committee that large energy users in Northern Ireland have metering that I consider smart already, and one third of domestic costumers in Northern Ireland have prepayment meters and, therefore, have quite detailed knowledge of their own electricity consumption — how much they are using and when they are using it — if they want to access it from the metering that they have in their housing.

There has been, as I am sure you are aware, substantial money spent worldwide on smart grids. In Northern Ireland, we have approved a trial, and NIE is carrying that out in Coleraine. That started in January and is intended to last for two years. In that trial, there is smart metering and conditioned monitoring of equipment, and NIE is developing technologies that allow the various bits of equipment to speak to each other and to speak to its existing IT systems. The idea behind the trial is to reduce the need to build new lines in the future and to extend the life of the existing equipment with a view to saving money for consumers. It is back to the value added for consumers, who pay for any investment.

A smart-metering trial is also being developed to look at the impact of smart metering on vulnerable customers. We want to ensure that we maximise the value for vulnerable customers, as that is a consideration in Northern Ireland, and ensure value for money going forward. The Utility Regulator fully supports both of those trials. However, it is worth highlighting that both trials have hit technical snags.

So, where do we see smart grids going to next? We want to monitor closely the trials that are taking place in Northern Ireland. We have regular reporting from those trials so that we know the issues that are being raised. We are aware, as I am sure you are, of the substantial investment that is being carried out in GB as part of the low carbon network fund. We and NIE are watching very closely the progress on the investment that is taking place there and elsewhere in the world. We see Northern Ireland as a fast learner. I emphasise "learner", because a lot of the trials are having significant technical problems, which is why there are trials. However, we see benefits in low-hanging fruit that can come out of the trials and can be implemented quickly to add value. However, we are keen not to fund a white elephant.

So, in summary, we will approve investments that we see as adding value for consumers in Northern Ireland. We have smart technology in Northern Ireland, but we see a need to improve the level of smart technology going forward to add value for consumers.

The Chairperson: Thank you, Ms Wishart. Do you want to go on to the gas now?

Mr Shane Lynch: Yes, I will speak for two or three minutes on gas. This is about a project that we referred to as common arrangements for gas (CAG) for Northern Ireland and Ireland. CAG is not exactly the same as the single electricity market (SEM) on the island. SEM is a wholesale market where wholesale electricity from power plants is bought and sold. CAG is not a wholesale market for gas. We import all our gas and are, effectively, what I describe as price-takers. The price of gas is set elsewhere in the UK and Europe, and this island is an importer of gas. We have one interconnector from Scotland into Northern Ireland, and we have two other interconnectors coming in north of Dublin. There is also a North/South gas pipeline now on this island, and we have a similar gas network in GB. So, effectively, we have a ring of gas pipelines on the GB island and on this island with cross-sea interconnectors.

Currently, we have two different sets of arrangements for operating the gas network in Northern Ireland and in Ireland. By and large, we operate independently and shift and trade gas from A to B independently. The whole concept behind CAG is to take those two operating regimes and combine them in one system. The thinking behind that is that those who want to bring gas onto this island and sell it in the North and South prefer a bigger and single system. Such a system is simpler and there is a single code of operation, etc.

The creation of a bigger trading place for strategic reasons will also lead to the opening up of other and bigger opportunities. For example, a couple of developers are seriously looking at creating a gas storage facility in Islandmagee. You will have seen the recent announcement from BP, which is a partner in one of those projects. The whole rationale behind storing gas is that the price of gas can shift significantly from summer to winter, so, in economic terms, there is an arbitrage to be played if you can store gas. It is also good as a security of supply facility, and it works well with wind-powered generation; gas that can be released quickly for power generation works well in combination with wind power.

Many developers regard creating a storage facility here, where the only customers are on this island, to be for too small a market place. They want a system that combines the trading and operational

arrangements on both islands across the interconnectors. That is essentially what we are trying to do with CAG.

We started the CAG project in 2008 after we had made the SEM operational in 2007. We are still working on the project and do not yet have it over the line. Recently, our regulatory colleagues in Dublin, the Commission for Energy Regulation (CER), decided that it wanted to review the cost-benefit analysis of the project, and the two regulators released a statement to that effect. That review is now being carried out by CER, and we hope to have the results of it in a couple of months.

The purpose of the CAG arrangements was, effectively, to kill two birds with one stone, as they would also allow us to comply with the European internal market in electricity (IME) II directive. You may have seen some media coverage on that. The objective of those types of energy directives is to increasingly move towards a bigger marketplace and a common arrangement across Europe. We had always intended to comply with IME II through the CAG project. However, as the CAG project was delayed, we have had to fast-track plan B and accelerate some of the requirements of the directive. We are doing so as a separate path and hope to have those completed by July or August . We have always worked with the European Commission on the basis that we would deliver compliance with that directive through the CAG programme. It recently took the view that the CAG programme was taking longer to deliver than was first anticipated. Hence, there has been a threat of infraction proceedings against the UK and Ireland. We are working closely with DETI, CER and the Department in Dublin, and we do not think that it will be an issue. We are quite confident that it will be resolved and that the arrangements will be in place this summer.

The Chairperson: OK. Is your presentation complete? Thank you very much, Mr Lynch and Ms Wishart.

I want to deal with CAG initially. You are really saying that there has been a bit of delay in its implementation, but work will continue on it. The delay seems to be with CER in the South. Although the danger of infraction proceedings is receding, I suppose that it is still present. Are you saying that work is ongoing on that and should be completed in a number of months?

Mr Shane Lynch: Yes. We are confident that the work will be competed and we will be compliant.

The Chairperson: OK. Colleagues, I am a wee bit conscious of time. I do not think that there is much more that we can explore with regard to CAG unless colleagues have any further points to make.

I am very interested in what you told us about smart metering, Ms Wishart, and, in particular, prepayment meters. Is that a form of smart metering?

Ms Wishart: It is, yes.

The Chairperson: It may be a lower form, but it is a form of smart metering. What was your point about it? Did you illustrate simply that we are making inroads into smart metering already?

Ms Wishart: One thing that smart metering is seen to do is make people aware of their energy consumption. Therefore, they can make informed decisions that will save them money. They can decide when and when not to use electricity. What I am really flagging up is that quite a large population in Northern Ireland have that information at their fingertips. They may not choose to use it. However, hopefully, as people become more educated, the fact that the technology is already in their homes means that we do not need to spend money to provide that information to them. We can make them aware of that information. They can choose to use it now.

The Chairperson: Therefore, in a sense, you are conditioning some elements of the population to the whole concept of smart metering through prepayment.

Ms Wishart: Well, I am not sure if I would want to say "conditioning" —

The Chairperson: I am not using that word in any sinister sense. *[Laughter.]* People are becoming accustomed to it.

Ms Wishart: I think that people are becoming aware of their energy usage and the impact of it. People have different desires to manage their impact on the environment. It means that if they want to make informed decisions, we can facilitate that now. The information is available to them.

The Chairperson: NIE has put forward proposals on smart metering, has it not?

Ms Wishart: At this point in time, we do not have a policy structure for smart metering. However, you could say that we are aware that there is a direction of travel. It is important that we are positioned to get any benefits that there are from smart metering to Northern Ireland consumers. Our metering population is getting smarter.

Later in 2012, we hope to be in a position to launch a trial that looks specifically at vulnerable customers. We are really saying that we know that there is a particular issue in Northern Ireland with regard to vulnerable customers that, perhaps, is not such an issue in other places. Therefore, we do not want to duplicate other trials because a lot of good and useful information is out there that we can use. However, we want to ensure that anything that we do is tailored and addresses issues that are specific to Northern Ireland.

The Chairperson: The benefits of smart metering or smart grid are self-evident. I suppose that one of the less obvious benefits is the fact that you can use the existing grid in a better, more efficient fashion and, thus, avoid immediate expenditure of additional funds to upgrade the grid. Is that correct?

Ms Wishart: Absolutely.

The Chairperson: Why are we not just getting on with it?

Ms Wishart: I think that it is goes back to word "trial".

The Chairperson: Do we need all of these trials? It has been done in the United States and elsewhere in the world.

Ms Wishart: A lot of money is funding trials. I have yet to see one that is fully effective and does not have technical issues that are yet to be resolved. NIE has already bought equipment. It has its own unique IT systems. Obviously, it is important that it looks at the equipment that is out there. In smart grids and smart metering all those pieces of equipment need to talk to each other to automate that. They also need to fit into the systems that NIE has. The trial in Coleraine is at the first stage of looking at how those technologies can talk to each other, but it has already hit significant technical issues and is not up and going yet. We are keen to get it up and going to reap the benefits, but everybody is spending a lot of money on trials because those technical issues are not insignificant. We do not want to spend money on something that will not work. Hence, we want to fund trials initially.

The Chairperson: OK, you have the grid here. It needs to be uplifted to make it more efficient and effective, particularly for renewable energy. Why are we not progressing all of that faster? You talk about 200 meters in Coleraine. That will take two years or so.

Ms Wishart: The idea is to have the metering in and then monitor how it is working. It will not take two years to put in the equipment; it should go in quite quickly.

The Chairperson: I am saying that that period of experimentation will take upwards of two years.

Ms Wishart: It is not our intention to wait until the end of the two-year period if we feel —

The Chairperson: Just to learn the lessons.

Ms Wishart: No. It goes back to the idea of low-hanging fruit. If lessons are learnt and there are things that we can implement that are picking up quickly and will work, we would certainly do so. That may not be just from the trial in Northern Ireland. It would be any trial. The equipment standards in GB in particular — the type of equipment they use and how their networks are managed — are very similar. We hope to learn good lessons from what they are doing and implement them. We do not need to duplicate what they are doing to learn from it.

The Chairperson: OK. I will now bring colleagues in to ask questions on the smart grid and then move on to the reform of the electricity market.

Mr Frew: I thank you for your presentation. Large companies and, to a certain degree, smaller companies and any newbuild here in Belfast or anywhere else in the Province will have a form of energy management system. They will have smart metering, and they will know exactly what they are using and where and what is costing most.

I have a wee bit of background knowledge of this from my previous career, and my problem is that I do not see, and have never seen, that on the grid. You are talking about pilot schemes, but, to me, it still seems to be more customer-focused rather than about the grid itself. I know that there are plans in place and trials for that, too, but we have a grid that is ageing, and that is the same across Europe, and maybe the infrastructure is not where it should be in, say, the west of the Province.

That then leads us to the problem around renewables. We have to be much more sophisticated in how we connect the renewables, to put it that way, onto an ageing grid. I am talking about technology that will tell us the exact state of every cable, line and supply chain along the grid rather than at just the customer point of contact. Is it fair to say that, in that regard, we have slept in? Can you reassure me that action is being taken now to know where the problems are on our grid in order to fix and enhance it and bring it up to a level that will not only cater for the needs of our population but will also facilitate the growth in renewable energy?

Ms Wishart: I believe that NIE has a very good handle on the condition of its grid and knows its network very well. With regard to the control mechanisms that I mentioned, there is a distribution control centre and a transmission control centre. That is live, 24 hours a day, seven days a week and is monitoring the flows of electricity on our network. At this point in time, every meter in Northern Ireland is not feeding back to a central point, so we do not have that level of information. That is something that we may aspire to if it adds value for consumers. At the higher points of the grid, NIE knows the flows through all its major substations. It already has online monitoring there, and that comes back to the central control centre. That is needed to ensure the security of supply that we enjoy and to manage the network so that lights come on when we turn them on.

The question of whether every line should be monitored, again, comes down to cost. If there is value in monitoring down to a certain level, and if it saves consumers money, we will certainly want to do it. If, however, the impact of monitoring does not make any difference to that decision, we will not do it, because there would be no value in doing so. It is not simply a case of investing. A cost-benefit analysis needs to be carried out first. The engineer in me finds the technology fascinating, and I would love to see more being done. However, I have to consider whether an investment will add value for consumers and then make sure that it does, because, at the end of the day, they are paying for it through their bills.

Mr Frew: Do you think that the technologies that are and will be in place around the smart grid are compatible with everything that we need to do to bring on board renewable energy and all the instruments —

Ms Wishart: The technology is there. It is about getting the pieces of it to talk to each other and automating it more. If you have to make assumptions, you have to put safety factors in place. You, therefore, end up possibly spending more than you would have had you known the live figures and information. It is an evolving field. I think that the amount of money being spent worldwide is an indication of the fact that a lot of people realise that there is a need to develop it further. We obviously

want to ensure that any developments that add value for customers in Northern Ireland are implemented in Northern Ireland.

Mr Frew: You touched on this question when you talked about knowing exactly where we have to spend the money at the right time. I suppose a blunt way of putting it is this: are you sure that the technology will be able to measure and assess the lifespan of a cable on a pole, taking into account the weather and all the other elements that cause cables to deteriorate, including even the electricity flowing through them? Are you saying that, by using the technology that we will have in place, we will be able to say, "We do not have to invest in this line for a further 10 years, but we will have to invest in these two lines within three years"?

Ms Wishart: The electricity grid has existed for a substantial time. The first undersea cable from Ballylumford to Larne was put in in 1934. There is a lot of historical information on how the equipment has performed, how long it has lasted and how it has been managed historically. You, therefore, do not need online monitoring to know the lifespan of some equipment. You can tell what is necessary from the historical information and the replacements that have already carried out. That is how NIE makes investment decisions currently. So, there is a lot of really good information that should ensure that investments are not nugatory in any way, which is, I suspect, where you were going with that question.

Online monitoring is a way of ensuring that people continue to have security and quality of supply and, at the same time, preventing the need to increase the amount of network. You mentioned the ageing asset base. What I would say is that the network is a perpetual asset. There has been and will continue to be continuous replacement. The network has existed for a substantial time, but that does not necessarily mean that, overall, it is an old asset.

Mr Flanagan: Thanks for the presentation on all three aspects. I think that the three topics you covered are that large and detailed that we could probably have set aside a specific agenda item on each one and have regular weekly slots where somebody from the Utility Regulator discusses them.

In respect of smart meters, you already alluded to the fact that extensive trials have taken place around the world and that quite a substantial trial took place in the South. When you said that the trial in Coleraine was not operational yet, what did that mean?

Ms Wishart: The trial in Coleraine is a smart-grid trial. It has 200 or maybe 300 meters. It has some condition monitoring, and what it is doing is getting different types of technology to talk to each other and trying to manage the grid on a live basis. When people talk about smart-metering trials, most of them relate just to installing meters and looking at the communications between the meters and the management systems, in relation to how much electricity is being used and when. So, it is a different type of trial. One of the benefits of monitoring what is happening elsewhere, including in the ROI, is ensuring that all those different aspects — looking at both smart metering and smart grids — can be brought together to get the best solution.

Mr Flanagan: Surely, given the fact that we are all part of a single electricity market, would one large pilot scheme or a trial across the island in a couple of different places, not deliver more reliable results and enable this to move forward in a better way? I am concerned that, with separate trials taking place in the likes of Limerick and Coleraine, what we are seeing is unnecessary duplication and unnecessary delay.

Ms Wishart: There is no duplication. The Coleraine trial is something very different. It is about managing the grid. The ROI smart-metering trial is about communication between meters and trying to change customer behaviours by looking at tariff structures. We are very aware of the ROI trial, and our colleagues in the Commission for Energy Regulation (CER) have provided us with all the information in relation to it. We have been involved in some of the earlier development stages. I see no need to duplicate that trial in Northern Ireland; I will get all the information from it that I need and that will add value for consumers in Northern Ireland.

The smart-metering trial that we are doing in Northern Ireland, which is probably closer to that than the Coleraine trial, is aimed at the vulnerable-customer issue. That is something that we have specific

concerns about which was not approached by the ROI trial. That trial was covering an entire customer base, and it paid no specific attention to vulnerable customers. So there was a gap there, on which I felt I needed specific knowledge. I intend to plug that gap.

Mr Flanagan: As to NIE's latest price control proposal, has any funding been suggested or set aside to pilot and develop smart meters? While answering that, maybe you could provide an update on where you are with the deliberation on it.

Ms Wishart: Because there is no formal policy yet from the Department, the NIE submission talks about smart meters and it has given us information about them, but NIE has not asked for any money for a roll-out of smart metering, and it will not do so until there is a formal policy. However, we are fully aware that that policy is being developed. We expect it to impact within the price-control period, and we expect to allow moneys as appropriate, and the current deliberations will not delay it. It is not a case of us having to look at that right now. We will look at it when it becomes a live issue.

Mr Flanagan: Sorry, Tanya. When you say that there is no policy, do you mean that there is no policy from DETI?

Ms Wishart: DETI is considering that and we expect it to come forward.

Mr Flanagan: Is smart metering not one of the recommendations in the strategic energy framework?

Mr Shane Lynch: There is no policy decision, yet. Clearly, there is going to be policy on smart meters. It can vary. DETI has not fully concluded yet, but it will do so shortly. That is our understanding.

Ms J McCann: Can I ask a very quick supplementary question?

The Chairperson: A very, very quick one.

Ms J McCann: Who ultimately pays for all these trials?

Ms Wishart: Consumers pay for all of them, which is why we are watching other trials and learning from them rather than duplicating them. It is important that we do not spend money unnecessarily.

Ms J McCann: It is always the consumer who picks up the bill.

Ms Wishart: Unfortunately, yes.

Mr Dunne: Most of the members' points have been covered, but I have a quick question. Tanya, you mentioned something earlier about how domestic users have access at present to information about consumption and that they can make savings. Can you clarify that?

Ms Wishart: The current prepayment meter which NIE is buying is set up so that it can be interrogated, and you can get information in relation to your usage. It is also very easy to pick up energy monitors in B&Q, for example, so that, even if you do not have a prepayment meter, you can buy one of these devices, plug it in and it will give you information on your energy consumption and usage.

Mr Dunne: Is it not an issue that most people are paying by direct debit every month? They are paying away quietly and indefinitely, yet they do not have access to the information. I think it is an issue.

Ms Wishart: I pay by direct debit myself, so I am aware of that.

Mr Dunne: We are told that we get a discount, but we are not sure about that. *[Laughter.]*

Ms Wishart: That is regulated, so yes.

The Chairperson: I think that you just do not incur extra charges.

Ms Wishart: If you are on a credit meter, as I am myself, you do not have that same visibility, but if we were to roll-out smart metering that visibility would become apparent to you. If you wanted that visibility, you could choose to buy yourself a monitor or request a prepayment meter, if you wanted to go down that route.

Mr Dunne: In the round, the trial is very small and low risk. We are only playing at it really. Is that not the case?

Ms Wishart: It is about the technologies speaking to each other and NIE testing them against its IT systems and equipment. I would like to see it working first, before we look at investing more money, because, once the communications work for a small system, it is easier to roll it out for something larger.

Mr Dunne: Have you approved the trial?

Ms Wishart: The current trial was approved and was launched in January.

Mr Dunne: Were there plans to have a bigger trial or did you limit it?

Mr Shane Lynch: Ultimately, the results of that trial, like any trial, feed policy decisions. The policy decision to roll out smart metering for 750,000 customers in Northern Ireland would cost a substantial sum of money.

Mr Dunne: That is why 200 meters seems a small amount of units.

Ms Wishart: I should confirm that that is the trial NIE that asked us to approve, and we approved it. We did not limit it; that it what NIE asked for to test the communications and ensure that its equipment could be used for a smart grid.

The Chairperson: I do not want to repeat the point, but there seems to be a certain element of impatience around the table in relation to smart metering and, I suppose, the smart grid itself, because it seems to colleagues that we can do quite a lot with smart metering and developing the grid along smart lines. The real point that colleagues are making is that, with all the delay — we know that you have to do tests and all the rest — are we not falling behind other parts of Europe, other parts of these islands, the United States and so forth?

Ms Wishart: I do not believe so. I am very enthusiastic about it. I can see all of the benefits, and I find the technology fascinating, but, realistically, I do not want consumers paying for something if it is not going to work.

The Chairperson: Learn to walk before you start running. OK, we will leave it there and move on to the other part. The reform of the electricity market that DECC has signalled in its White Paper obviously has an impact on us here, and we have to respond to that. I think that it complicates things a bit. We were working on the ROC system up until now. We will now have a feed-in tariff system of some sort. We are presently benefiting from socialisation in terms of the ROC system, because that is a UK-wide system. Will we continue to do that in terms of the feed-in tariff? What is the position there? I am not absolutely certain.

Mr Shane Lynch: You are right, Chairperson. The current ROC regime is a UK-wide market. If you are a producer of renewable energy in Northern Ireland, you can sell your product anywhere in the UK. All that is happening here is that we are changing the shape of that market from a variable ROC price to a fixed FIT price; that is the purpose of the graph that you have in front of you. My understanding is that the opportunity will remain to sell across the UK market; it is just going to be a different mechanism. The market will stay, but the mechanism within the market will be more of a fixed-price arrangement as opposed to a variable price arrangement.

The Chairperson: Right, so the fixed-price arrangement would be the feed-in tariff?

Mr Shane Lynch: Yes, the feed-in tariff.

The Chairperson: The ROC is more variable.

Mr Shane Lynch: It has more of a tendency to vary, so it is probably more risky. A fixed-price arrangement is less risky for investors.

The Chairperson: None of the generators will be disadvantaged by this change?

Mr Shane Lynch: No, they should not be. DETI is working closely with DECC with that objective in mind.

The Chairperson: OK. The next big issue, which was raised in particular by John Simpson, is the carbon tax. Thank you very much for your note and illustration of that in your paper. The adverse impact is such that you could, in fact, have generators closing. Is that the net effect?

Mr Shane Lynch: A policy decision like that has, in my view, one plus in the long term and two minuses in the short to medium term, which can have a disproportionate effect on a very small marketplace such as ours. The plus, in the long run, is that it is designed to attract renewables and is a disincentive to fossil fuels. The two minuses are, first, that it is going to put up the price of electricity for consumers because it is a tax, and the fossil fuel generators will seek to recover that price from consumers. They will not disappear overnight; it will take a while before competition prevails and they are no longer competitive. The other minus is that, if they were to disappear too quickly, there would be a security of supply risk. For example, Kilroot coal-fired power station is increasingly going to come up against environmental legislation and policies.

The Chairperson: Could this be the final straw?

Mr Shane Lynch: Well, that is for Kilroot to judge. They know their economics better than I do, but it certainly does not help. In the long run, it all comes down to European, UK and Irish policies, all of which are focused on renewable energy. Ultimately, coal-fired power plants are going to close unless they fit clean-up technology, such as carbon capture and storage. However, all that is quite cost prohibitive at present. Nowhere in the world has it really been perfected or operationalised yet. It is one of those issues in which well-intentioned policy in the UK can have a disproportionate short- to medium-term effect in Northern Ireland. We need to watch it carefully.

The Chairperson: Why would it not have such an adverse impact in Britain as it would here?

Mr Shane Lynch: It is because, from a security-of-supply perspective, if we lose one power station, we are likely to see the lights go out.

The Chairperson: That is very reassuring.

Mr Lynch: It is a much smaller marketplace. We have very lumpy contributors to supply, and we have big power plants, relatively speaking, which can have a very sensitive disproportionate effect.

The Chairperson: Is there any way in which we can be exempted from the tax?

Mr Shane Lynch: My understanding is that DETI is exploring that option.

The Chairperson: Is that the Department's position at the moment?

Mr Shane Lynch: Yes.

Mr Frew: I know the realities of the risks and dangers with power stations and the security of supply. What is more important to Northern Ireland consumers in the medium to long term: power generation or interconnection?

Mr Shane Lynch: Good question. What consumers want in the long run are affordable prices. They want their lights to stay on, and, increasingly, they want to know that more and more of their generation comes from renewables. I do not really think that it matters where the power comes from. This is quite a small place. When you are a small island like this, interconnection is a good thing, both across the island and between the islands.

Mr Frew: And with Europe.

Mr Shane Lynch: And ultimately to Europe. It is not necessary for Northern Ireland to try to become self-sufficient in power generation. It is probably not the most economical answer. There should be a combination of indigenous generation and interconnection.

Mr Flanagan: I have concerns about the fact that the proposed electricity market reform is being taken forward by DECC and the implications that that would have for differing levels of incentivisation across the single electricity market. I would like reassurances that that will not have a negative impact on consumers on this island.

You stated that renewable generators will avoid the carbon tax. However, due to the fact that all generators here are paid the same for generating electricity, will consumers end up paying that tax in some way, regardless of whether the electricity is generated from a renewable source or fossil fuels?

Mr Shane Lynch: That is right. There are a couple of points on that. If you have a single electricity market on the island but there is a tax that applies only to Northern Ireland, that will have a distortional effect on the single electricity market. Generators in Northern Ireland will be paying that tax, but the generators in Ireland will not be paying it. We have other distortions in the market through taxation and policy. Interestingly, in Ireland, there is a carbon windfall tax that is distorting the market. Certainly, based on a recent appeal judge decision, it will distort the market.

You are right that our market design is based on what we technically call the system marginal price. The marginal generator sets the price of electricity for everybody. If that marginal generator is paying the carbon tax, that is included in the price of electricity for everybody.

The Chairperson: So, everybody throughout Ireland is affected.

Mr Shane Lynch: Everybody throughout Ireland is affected. The policy thinking is that you will eventually drive the fossil fuel generators out of the market, and the marginal generator will be a renewable generator that is not paying the tax. However, that takes time.

Mr Flanagan: We are a long way away from driving fossil fuel generators out of the market. Fossil fuel generators need to be retained as a backup in the medium term.

Mr Shane Lynch: I agree.

Mr Flanagan: Has there been any assessment of looking again at the facility where every generator is paid the same price to see whether an alternative solution can be found, or would that be completely against everything that is the single electricity market?

Mr Shane Lynch: One of the fundamental pillars of the design of the single electricity market is the system marginal pricing arrangement, under which everyone gets paid the market price of electricity rather than their production cost. That is totally consistent with economic theory on commodity markets.

In the bigger picture, we need to be aware that the single electricity market now has to evolve into a regional electricity market in western Europe by 2016 because of the European directive. The single

electricity market will have to significantly change in design to be compliant with the new regional electricity market. Therefore, some of the design features that we have at the minute may change anyway. In the long run, it is normal, no matter what product you get, that you get it at the market price. If you happen to be cheaper than the other guy, you still get the market price.

Mr Flanagan: That leaves us with an anomaly where renewable energy companies are making massive profits. That is up to them and they take the profit. However, it is not assisting consumers. Consumers want to support renewable forms of electricity because they are sustainable and will not really damage the environment. However, they are not prepared to pay over the odds for it. The whole principle behind renewable sources of electricity is that the electricity should be cheaper, but we are not seeing that benefit.

Unless something seriously changes, the support that people have for renewable electricity will have to be looked at. That opens a whole debate around the community benefits of wind farms and things like that. For example, should an amount similar to the carbon tax, which fossil fuel generators have to pay, be paid by renewable energy companies into community benefits? That is a whole can of worms. There is a massive discussion to be had there.

In terms of the capacity mechanism graph that you showed us, you made a comment that payments are made to companies to cover their fixed assets to give them some sort of security. If that mechanism is not needed, is there any way that the payments can be clawed back?

Mr Shane Lynch: Picking up on the point about renewables, there is no way that generators should make excessive profits at the expense of consumers.

Mr Flanagan: We might disagree on what "excessive" means.

Mr Shane Lynch: They deserve reasonable profits. A reasonable profit is one that is commensurate with the level of risk that they are taking. It is our job, as regulators, to make sure that we design markets that produce that result. When it comes to renewables, the companies get their revenue from two places — the market and subsidies through the ROCs regime. That is something that we are continually looking at.

I totally agree with your point. The strategic energy framework has targets of 40% for renewables, but it also has targets for fuel poverty. We have to consider all of those things in the round and try to tick all the boxes. I am totally with you on that point.

We already have a capacity payment mechanism in the single electricity market. In this case, we are ahead of GB. It does provide a bit more stability for investors, but, because it provides more stability, they should be taking a lesser return, because they are taking less risk. If you were introducing a capacity payment mechanism, one would expect the return to be lower than if you did not have one. In the end, it should come out with the same impact for consumers. Your point is well taken.

The Chairperson: If, for example, Northern Ireland were to be exempt from the carbon tax, would that mean that Ballylumford and Kilroot would be exempt?

Mr Shane Lynch: Yes.

The Chairperson: So, they could generate electricity more cheaply than similar generators in England?

Mr Shane Lynch: Yes.

The Chairperson: That would give them a market advantage?

Mr Shane Lynch: Yes.

Mr Flanagan: He is not saying a pile here, Chair.

Mr Shane Lynch: I am just letting the discussion develop.

Mr Flanagan: I would call it leading the witness. *[Laughter.]*

The Chairperson: We are all used to that.

How do you resolve that?

Mr Shane Lynch: For Kilroot or Ballylumford to sell their power to consumers in Scotland or England or Wales and to compete with generators in those countries, they need to use the Moyle interconnector, which is the only way of getting there. Nonetheless, there are 450 MW of capacity there that can be used. So, there would be a distortion. You are right; there would be a distortion, in practice, between fossil-fuel generators in Northern Ireland and the rest of the UK, if we were to get the derogation.

Mr Frew: Does it not cost the generators more to get the electricity to Scotland?

Mr Shane Lynch: It does, because they have got to pay for the use of the Moyle interconnector.

Mr Frew: Could that, in itself, be a lever or tool to try to get some sort of dispensation or derogation?

Mr Shane Lynch: I think that the arguments about the disproportionate effect on Northern Ireland have been well made.

The Chairperson: Just one point on the smart grid that was mentioned in connection to fuel poverty; smart metering should assist in combating fuel poverty by providing a mechanism whereby people can judge how much electricity they are consuming, when they are consuming it and at what time of the day and so forth, and, in that sense, they can lower their costs. It would be another instrument that we would have to combat fuel poverty, would it not?

Ms Wishart: That is one of the reasons why we are doing a trial on smart metering that is targeting vulnerable customers in fuel poverty. The principle should work, I agree, but a lot of these people are already on prepayment meters and have visible information. So, it is about how smart the meters need to be to add value. We make assumptions when we are looking at the costs and the benefits, and what we are trying to do with this trial is see how many of those assumptions have value and what benefit we can really derive from this. The hope is that we will be able to stretch the benefits for less money.

The Chairperson: Thank you very much, and thank you, Mr Lynch.

Mr Flanagan: Chair, would you mind if I asked a quick question on the common arrangements for gas? I did not realise that you were bypassing it at the start.

The Chairperson: I am sorry; go ahead.

Mr Flanagan: In reading through the papers, I am concerned that CAG may no longer go ahead and that, instead, both utility regulators will simply settle for a second gas regulation. I would like some assurance that it is not going to happen. In the strategic energy framework, even though it is only a policy from DETI, is there a feeling that the Utility Regulator is undermining that framework by not fulfilling its targets under the strategic energy framework and implementing CAG and by not making decisions in a timely and effective manner?

Mr Shane Lynch: Very briefly, the Utility Regulator is 100% behind CAG.

Mr Flanagan: Both utility regulators, or can you only speak for yourself?

Mr Shane Lynch: There is only one Utility Regulator; in Dublin, it is called the Commission for Energy Regulation. We are 100% behind CAG and always have been. We largely see the benefits as strategic

in regard to attracting big investment, such as storage, in Northern Ireland. CER, and we have to respect this, has felt it necessary to review the economics in the interests of its gas consumers. The project is a partnership one, and, like all partnerships, it can only happen if both partners want it to happen. We have to respect CER's wish to review the cost-benefit analysis. We hope that it will be satisfied with the results of the cost-benefit analysis and that we can get the project moving again to completion, but I have to respect its wishes to re-do the cost-benefit analysis.

Mr Flanagan: Thanks.

The Chairperson: In relation to the SEM committee, is the tie-breaker issue now a draft policy position?

Mr Shane Lynch: The SEM committee made a decision on the tie-break issue, and, subsequent to having made that decision, it received an enormous amount of representation, both verbal and written. The SEM committee continues to consider that representation, and we hope to issue a public statement on that shortly.

The Chairperson: OK, that is fine. Thanks very much. I am sure we will see you soon.

Mr Shane Lynch: Once a week. *[Laughter.]*