Northern Ireland Assembly

Committee for Enterprise, Trade and Investment

OFFICIAL REPORT (Hansard)

Electricity Policy Review: Northern Ireland Authority for Utility Regulation

5 November 2013

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
Mr Paul Frew
Mr Fearghal McKinney
Mrs Sandra Overend

Witnesses:

Ms Jo Aston	Northern Ireland Authority for Utility Regulation
Ms Jenny Pyper	Northern Ireland Authority for Utility Regulation
Mr Kevin Shiels	Northern Ireland Authority for Utility Regulation

The Chairperson: We have with us here today Jenny Pyper, the new chief executive officer in the office of the Utility Regulator, who took up her position just within the past few days. Jenny, it is good to see you. You are very welcome indeed. Congratulations on your appointment.

Ms Jenny Pyper (Northern Ireland Authority for Utility Regulation): Thank you, Chair.

The Chairperson: Also with us today are Kevin Shiels, the retail and customer protection director; and Jo Aston, the water director. You are very welcome indeed.

Jenny, I have already congratulated you on taking up your new position. I am sure that your colleagues have informed you that the process is that we invite witnesses to make a presentation of up to 10 minutes, and then there is a question and answer session. If you are happy enough, please proceed.

Ms Pyper: I am, Chair. Thank you for the opportunity. It is a few years since I appeared before this Committee, but since leaving the Department of Enterprise, Trade and Investment (DETI), I have been in front of the Committee for Regional Development and the Committee for Social Development. I have been working in those two areas for the past few years. I hope that all that experience will help me as I lead the Utility Regulator team forward and we try to balance the many competing demands — economic, environmental and social — that face energy and water regulation.

I know that you, Chairman, appreciate that this is day two for me in my new job, so I will rely very heavily on my directors, Jo and Kevin, when it comes to answering your questions. However, I think it

entirely appropriate that I am with them this morning to hear at first hand the views of the Committee, particularly given your ongoing inquiry into the security of supply and electricity prices.

The Utility Regulator has started work to improve transparency and understanding of the complexity around electricity prices, and the paper published in March gave its initial findings. It is fair to say that the initial paper has been widely welcomed by all stakeholders. It provoked some very positive debate, including across government, and with the Committee, industry and consumer groups. The issues could not be higher on the Northern Ireland agenda, but they are also right at the top of the GB agenda. The further analysis that we have done since March should contribute further to the debate, and, hopefully, it will help to inform your review. It also points to additional work that needs to be done by the Utility Regulator, alone and in conjunction with many of the other stakeholders, including DETI. As I said previously, I would love to be able to say that I have the silver bullet that will resolve the issues. Sadly, you will know only too well, because you have heard evidence from so many different groups over recent months, that the issues are complex and interwoven. The impact of any actions taken to try to address electricity prices really needs to be fully understood. That is where the unique position of the regulator is hugely important, as we can bring impartial, independent and transparent analysis to the complexity.

I do not want to say anything more to set the scene. We propose to start by looking briefly at security of supply issues. Jo will lead on that, and Kevin will pick up on related pricing issues and talk you through the key elements and findings in our paper. We will then be happy to take your questions.

Ms Jo Aston (Northern Ireland Authority for Utility Regulation): Thank you, Chair and Committee members. I will talk about the risk and how it was identified. As part of the regulatory process, the System Operator for Northern Ireland (SONI) identified a risk to security of supply from 2016 and a deficit in supply from 2021. It is worth noting that there is still a surplus of supply from January 2016, but it is a question of whether there might be a sustained outage of a large generating unit. That is the risk that we are trying to manage.

From 2021, we are in deficit, which is a real issue. It is worth reflecting on why that is the case. The failure to deliver the North/South interconnector within the time frame projected in DETI's strategic energy framework is very significant. The framework projected its being delivered by 2013-14. We all know that that is not the case. In fact, we will probably not get it until 2018, and even that is from a positive perspective on the delivery time frame.

The 2016 date has come about by virtue of the need to comply with the EU large combustion plant directive. That will impact on some of the large generating units at Ballylumford, which will have to be taken out of service. That is compounded by the fact that the Moyle interconnector has failed and is operating at about half its full capacity.

So, having set the scene, what are we doing to manage the risk? That is the real question that I hope to address today. In June, we published a joint paper with DETI that set out the context and issues around security of supply. We explored with the Minister of the Environment the possibility of getting a further derogation. That would be a great solution to the problem of having to upgrade the plants at Ballylumford and taking them out of service. However, we have been informed that they are already in a derogation position and that there is no scope for a further derogation, so that is not a solution.

We are liaising with Mutual Energy, which has put two interim solutions on the table. It is progressing those, and they look very positive for delivery in 2014. However, the two interim solutions are novel, and both rely on the cables already in the ground, which are failing. They do not negate the risk, and, therefore, we think that there is still a need to explore further the scale of that risk. I am in discussion with the System Operator to determine the quantum: if we still have a surplus of 200 MW, what is the additional wattage that we need to make us comfortable that we will not have an outage in that situation?

I also asked the System Operator to look further into whether the demand side and renewables would help out in that situation. Again, that would be another good solution. However, they have already included those calculations in their projections, and it is not really viable, within the time frame, to get anything more out of those two avenues.

I continue to work with the System Operator to identify how we can procure additional generation capacity and what the scale of that capacity should be. Discussions are ongoing on that and have not bottomed out as yet.

We hope to publish a further update paper, in conjunction with DETI, this November. Fundamentally, looking to the long term, we need that permanent solution to the Moyle interconnector, but it will not deliver until 2017. We really need the delivery of the North/South interconnector, not just for security of supply reasons but to help the cost of energy, because it will help the market and drive down prices.

Mr Kevin Shiels (Northern Ireland Authority for Utility Regulation): Thank you for the opportunity to talk to you about prices, which is what I will concentrate on today. It is an opportune time to have this discussion because it has been six months since we put out the March paper, which kicked off the whole prices debate. The Committee has had a lot of interaction with stakeholders in the intervening time. We have now produced a follow-up paper, which was published yesterday, and you have a copy of that in front of you.

There is a lot of detail in the follow-up paper. We will probably get into a lot of detail on prices when members ask questions. I will begin by showing you a couple of high-level strategic slides, because there is currently quite a lot of debate on energy pricing issues, even at the GB level. Much of the debate in GB on wholesale and retail pricing has relevance to issues that we have also been tackling in Northern Ireland.

It is worth taking a step back to think about some of the strategic issues and using those as a context and framework for a more detailed conversation about the issues that affect Northern Ireland electricity prices. On slide 6, we have tried to demonstrate that there is a key set of competing priorities in energy, of which the Committee will probably be well aware. They have been the subject of much of your debate with and briefings from the various stakeholders since we issued the March paper.

There are competing priorities in the cost of energy infrastructure and the cost of bills for domestic and industrial customers. There are concerns about security of supply, sustainability and decarbonisation. In energy, we often find that those are competing tensions and concerns, which pull in different directions. All economies, Governments and societies have to decide where to land in that mix. Policy regulators and stakeholders have to decide on the balance between those competing priorities. The issues that we tackle in Northern Ireland in this "trilemma", as it is called, are no different from the issues being considered across Europe and in all advanced energy economies. We will come back to the issue of trade-offs several times this morning, so it is important to bear that in mind.

Slide 7 details the other context issue that is really important in the whole pricing debate, which is that of shared responsibilities. This is a key lesson that we are learning from the current GB debate on energy. In GB, there has been much debate about who does what and what people's roles are in understanding what is going on in the energy scene. From our point of view, there are four key stakeholder groups here, each of which has a responsibility to understand what is going on in energy and make informed policy decisions at the back end of an evidence-based debate.

The role of government is to set strategy, policy, targets and legislation. As the regulator, we have a role to provide an independent viewpoint and regulate to protect customers. We have expertise and data sets that we can bring to the table to help you and government make good evidence-based policy decisions on energy. The industry itself has a role to play. That has been one of the main focuses of the GB energy debate and includes the role of the industry in being transparent. It has to ensure that other stakeholders are clear on what the prices and profits are, where they are earning, what they are earning and so on. Consumers also have a role to play. They need to be informed and active, and, in the modern energy markets in which competition is in play, they need to shop around. We also need consumers to be involved, educated and active in order to make the markets work effectively .

That was the second strategic context slide, and it is very important because some of the issues that we will come back to relate to who has a role, and what that role is, in the energy conundrum of keeping prices as low as possible, while keeping the lights on and serving sustainability concerns.

The next slide shows where we have got to. We produced the March 2013 paper. At the start of the debate, we tried to shine a light on the electricity pricing issues and generate a good, healthy debate on what was going on there. We think that we have achieved that. We had a lot of responses to that paper, which we have now published on our website. Our follow-up paper, which was published yesterday, is a stocktake and culmination of all that we have heard, thought about and developed since we issued the March paper.

The Committee has announced its review of prices and the security of supply. That has been very helpful. Listening to, and being made aware of, the various stakeholder briefings that you have had as part of that has helped us to develop our thinking.

I am conscious of time, so, for those who have not had a chance to go through the paper yet, I will end by talking through some of the key findings and issues in our paper. I will talk for a couple of minutes on several key headings.

As ever in this debate, we divided our analysis into wholesale, network and retail because that is a useful way to frame the debate. I will talk briefly about each of those, and then I will talk about some of the renewable issues that have come up during the past six months.

The paper's key finding on wholesale costs is that they make up about 70% of the final bill. The percentage differs depending on the customer, but it is roughly 70%. Another key finding is that the single electricity market (SEM) has been beneficial to Northern Ireland. Through it we have avoided some of the problems seen recently in GB — for example, problems with transparency and efficient investment signals. We are in a better position in respect of wholesale and generation issues than we would have been in the absence of SEM. We have a very transparent market in which prices and quantities are available every half hour. The SEM arrangements also promote the efficient scheduling of generators. The paper also notes that the SEM Committee is willing to engage with anyone on any aspect of the wholesale market in which material improvements can be made or further discussions are required. I will talk a bit more about that in due course.

Wholesale prices in the SEM are higher than those generated in the British Electricity Trading and Transmission Arrangements (BETTA) market in GB. That can be attributed to several factors, including raw fuel input prices; higher fuel, transport and shrinkage costs; generation mix factors between the two jurisdictions; economy of scale differences; and, potentially, to the view of some commentators that wholesale prices in GB are "too low" to incentivise the required investment in new generation.

Going forward, the regulatory authorities recognise that further work is needed to review the SEM arrangements and, where appropriate, to consider options for improving the SEM market model. That will be done in the short term by a review of its effectiveness by the SEM Committee and, in the medium term, through the delivery of the EU-wide regional integration project.

Network costs make up 20% to 30% of the final electricity price, and the key findings of the paper are that, in Northern Ireland overall, our total network cost comparisons are being benchmarked with other jurisdictions. No material issues were raised in that area in response to our March paper — I am talking about network costs at an overall market level. However, the allocation of network costs between customer groups does materially impact on price differentials. Other jurisdictions in Europe, for example, have taken explicit policy decisions to favour non-domestic customers — industrial customers — at the expense of domestic customers. The Northern Ireland Authority for Northern Ireland (NIAUR) considers that further work is needed to identify and model the impact of jurisdictional network cost differences and their impact across different customer groups. We hope to commence that in the next few weeks, and we will work alongside DETI on that project to bring it to fruition in the coming months.

The final 5% to 10% of the cost stack in electricity prices is at the retail end of the market. The Northern Ireland retail market is in a pretty good place. The current regulatory regime enables transparency, and we have control over the margins earned and the electricity prices for the dominant suppliers in the domestic and small industrial sectors. We have monitored what has gone on in the GB energy retail market in recent years and taken many steps to ensure that those problems do not emerge here. In fact, if anything, the GB energy market is starting to point to some elements of the Northern Ireland regulatory model as things that might be used to improve the GB energy scene. Some recent policy announcements in GB relate to measures already in place in Northern Ireland or within the SEM. NIAUR is commencing a number of projects to influence the operation of the supply companies and the regulatory framework behind them. We will introduce a new retail market monitoring regime and review the effectiveness of competition in the electricity supply markets. Those are projects for 2014.

I will move on to renewables. I separate that area only because, usually, when we talk about prices, we stick to wholesale, network and retail. I have separated out renewables because it has been the subject of so much debate in the past six months, both in responses to our paper and in the briefings made to the Committee. I know that it has raised a lot of issues and questions. Our paper notes

some key points. Renewables bring both costs and benefits to any electricity market — that is true anywhere. Weighing up the impact of those, in both the short and long term, can be difficult. However, we will help to facilitate that debate. We think it important to split renewable issues into three main elements: the role of renewables in the wholesale market itself; the renewables incentivisation framework; and other impacts that renewables bring to electricity systems, for example, on grid reinforcement requirements. We think that splitting the renewables issues in three allows a better framework, allowing us to get our heads around all the various renewable issues that can complicate matters.

An important and substantive proportion of revenue for renewables comes from the incentivisation framework for renewable generation, as opposed to the SEM market itself. We note that DETI has committed to a review of the costs and benefits of renewables in the Northern Ireland context and in the context of the 40% renewable generation target. We welcome that review, and we will provide whatever assistance we can to DETI.

In our final slide, we set out the actions that we, as the Utility Regulator, will take in the coming period on the wholesale, network and retail aspects of electricity in order to build on our work over the past six months.

Thank you, Chairman.

The Chairperson: Thank you very much indeed for that. Let me pick up on your point about renewables. I see that you have broken renewables issues down into three areas. Do you take the view that incentivisation is too generous and delivers too high a margin of profit?

Mr Shiels: We have no view on that specific question, Chairman. That is why the DETI review is very welcome. It will look at the whole area of renewable incentivisation: the costs and benefits that renewables will bring; and the costs of meeting the renewable targets. That will feed into the DETI review of its strategic energy framework. From my point of view, looking at everything that has been said about renewables in the past six months, the costs and benefits that they bring must be thoroughly weighed up. I presume that this is what the DETI review will bring to the table, which is, I think, very welcome. I do not have a view on whether renewables are over- or under-compensated because of the incentivisation framework. I think that a government policy has been put forward to deliver higher levels of renewable generation, and an incentivisation regime is in place to deliver that.

Ms Pyper: The SEM Committee has been looking at some interesting work, and Jo will talk about that.

Ms Aston: I will put a few facts on the table about wind and peat. The SEM Committee has just published a generator cost: performance report, which identifies the profit margins of the different generators. We can say that 34% — one third — of the revenue turnover from wind and peat is attributable to renewables incentives. We apply four renewables obligation certificates (ROCs) for small generation units, whereas there is just less than one ROC for larger generation units. So the incentive mechanisms were probably there for a very good reason at the time that they were being developed. However, now is probably the right time to revisit them to see whether they are delivering what we want, having reached a good level of renewables to date, in getting to the next 40% in a way that is sustainable and most cost-beneficial for customers in Northern Ireland.

The Chairperson: There is one other point on which I would like clarity. When the NIE people were here, we tried to explore the issue of the North/South interconnector and security of supply, but we did not seem to get anywhere. People were of the view that, even with a good wind, there would be an interregnum period in which there would, potentially, be a difficulty with security of supply before the North/South interconnector could be delivered. We were exploring the options, and this was the point at which we did not appear to get much information. Things went a wee bit grey at that point from the NIE people. We were exploring the two options, and Enniskillen and Letterkenny were mentioned, where a feed already comes through from the rest of the island. We were trying to tease out whether, in the intervening period, works could be done to enhance either of those current live connections to take some advantage of the existing supply in the rest of the island. We were hit with, "We cannot really get into this. This is very technical." So we have asked NIE for the technical detail to explore that further, and, indeed, we will probably ask for your opinion on it. I think that NIE suggested that you had been informed on this. Have you any opinion on that, or is there is any information that you could provide us with, either today or subsequent to this meeting, to leave us in a much more informed position than we currently are?

Ms Aston: We are very happy to supply additional information, and it probably will be necessary to do so, but let me give you a bit of a feel for the situation. I have been exploring with the System Operator the scale of the problem of security of supply and what the potential solutions are. Have we tested everything? What safety factor is already there, given that we still have a surplus of 200 MW? I am not an electrical engineer, but I understand that more can be taken from the two existing North/South interconnectors, as NIE has done on previous occasions. However, there is an upper limit at which there is instability in the network. Therefore, they cannot be taken very much further. The flex is not sufficient to address the shortfall that we are talking about here. I say "the shortfall", but I am still trying to bottom out what the quantum of that shortfall is. Do we need another 200 MW or what? Therefore, I am still working with the System Operator on the scenarios for what we need to give us the comfort factor.

The Chairperson: That brings me on nicely to my next question. The surplus margin is projected to reduce from 600 MW to 200 MW from 2016. What is the minimum surplus margin at which you will still have security of supply and below which it is determined that there will not be security of supply?

Ms Aston: I have been asking myself that question. If the Moyle interconnector, with its interim solutions, which are not totally reliable, were up and running to 450 MW, would that do it? The other question is this: what is the likelihood of prolonged outage? I have been advised that that actually happened in January 2012. I then asked questions around that, such as, "What was the status of the Moyle interconnector at that time?", and I believe that it was operating at a lower capacity at that stage as well.

The Chairperson: At a lower capacity?

Ms Aston: Yes, at a lower capacity. There seemed to be a fault at that time, yet we seemed to get through it. Again, I am exploring the boundaries of what the likelihood is and what the consequences would be, but I have not come to the end of that. I want to bottom that out to find out what additional capacity we need to plug the gap in order to leave ourselves comfortable.

The Chairperson: If you are assured of the gap that needs to be plugged, is there enough supply via Enniskillen and Letterkenny to do that, or are there enhanced works that could take place in the intervening period to accommodate and deliver that?

Ms Aston: I am not sure that there are enhanced works to be done, because, from what I understand of the network, even if you do them, there will not be enough network capacity at those more remote locations. If you look at the renewables connections that we are trying to make happen throughout the network, you see that there are restrictions on those, because the network grid is not able to take it. Therefore, I am not sure that that would provide or be a viable solution. It is certainly not one of the options for plugging the gap that I am pursuing at the moment.

I have asked SONI to look at demand-side management and the aggregated units to see whether there is any additional potential there. I think that it has already factored that into the equation in its capacity statement. SONI has informed me that the scale is likely to be another 100 MW or 200 MW. Once you are talking about that scale, those sorts of smaller options are not sufficient to plug the gap that we are talking about here. It is important to set that out so that everybody understands that avenues are being explored.

The Chairperson: That is grand. Thanks very much for that.

Mr Flanagan: Congratulations on your recent appointment, Jenny. I want to ask about the debate on the surplus capacity of 200 MW. I was at the EirGrid conference that you addressed last Thursday. I think that it was the guy from France who spoke about the difference between power and energy, and he said that politicians never understand the difference. My reaction was, "What difference?" I had to find out from EirGrid what he meant, and it was quite an interesting concept. We are told that there is surplus capacity of 200 MW, but do we actually know how much surplus power there is?

Ms Aston: I am the water director, so can I butt out at this stage?

The Chairperson: Give it to us in litres. *[Laughter.]*

Ms Aston: The way in which I would answer that question, perhaps not comprehensively, is, and I am happy to come back to it —

Mr Flanagan: I am happy for you to say that you do not know.

Ms Aston: I do not know.

Mr Flanagan: That is fine.

Ms Aston: I do not know the subtleties that you are talking about.

Mr Flanagan: Is it subtleties that you are going to look at?

Ms Aston: What I will say is that we need, and can use, 200 MW of useable capacity. That is what I am focusing on in finding out what we need to plug the gap. It is not those megawatts. What do we have surplus? It is the 200 MW that —

Mr Flanagan: What I do not understand is that you are talking about plugging a gap, but there is already a surplus of 200 MW there. If nothing goes wrong, that is plenty.

Ms Aston: That is absolutely right. The next stage is to ask what the scenario is. The scenario is that we have sustained a large plant outage, and there is a risk of that. We must ask what the likelihood of that happening is. What would be the consequence, and are we or are we not prepared to live with that consequence? What is the cost of removing that risk? If it is a reasonable cost, I think that most of us would wish to do it. If it is not a reasonable cost, we may decide —

Mr Flanagan: Who pays for that risk? Is it the consumer or is it the companies?

Ms Aston: If we leave the risk there and the lights do go out, we will all suffer.

Mr Flanagan: Sorry, I will redraft my question. At the moment, there is a surplus of 600 MW. Who pays to generate those extra 400 MW? Is it the consumers or is it something that the companies do out of the goodness of their heart?

Ms Aston: It depends. It goes back to the single electricity market, so it is back to how the companies are remunerated for the electricity that they use every half hour that they bid into the market. The consumer pays for what is used. The whole single electricity market structure is a structure whereby companies get rewarded for the immediate short-term costs of uplifts and maintaining the asset, and also for the capital investment over the longer period. It is built in so that they get paid only for the units that are used every half hour.

Ms Pyper: I think that it is fair to say that the System Operator is cautious and tries to be prudent, instead of playing fast and loose with the risk of the lights going out. Therefore, a lot of the further work that Jo was talking about — about needing to understand what the quantum of the risk is — is to get underneath the detail of what the System Operator is saying. We must ask what we need for generation adequacy and determine what we need to be absolutely sure that we can keep the lights on. It is about drilling down underneath that.

Mr Flanagan: But you cannot be sure.

Ms Pyper: As Jo said, it is about assessing the level of risk. We could take a chance and say that all the generators are fine, that they have all been through their servicing schedules, and so on, and that nothing could go wrong, but what if something does go wrong? The last thing that we want is for the lights to go out. Keeping the lights on is such a fundamental issue. That is where the Utility Regulator finds itself in that independent position in the middle, trying to make a balanced decision about the level of risk and about how to be most prudent when it comes to plugging any gap should it materialise. It is not an exact science. It will take dialogue with DETI and with the System Operator really to understand whether we have an acceptable level of risk that we are managing at the minimum cost to consumers.

Mr Flanagan: You could have 1 GW of surplus capacity yet there could still be a situation in which you do not have enough. How do you measure the threshold?

Ms Pyper: That is the expert judgement that we have to —

Mr Flanagan: You are gambling with consumers' money, really.

Ms Aston: With electricity, we like the comfort of being able to switch on our lights every morning. We like to know that that is there. We like not to have to worry about it. That is very important.

Mr Flanagan: "Keeping the lights on" is a very emotive term.

Ms Aston: If you have excess capacity in the market, you drive down prices, because there is better competition. We have been living with a surplus of perhaps 600 MW, which has left us very comfortable. It has left us in a position in which the market is better because there is more capacity than we need, so, with demand and supply, that is a very good position to be in. Once you have less surplus, you are at the mercy of the marketplace and its cost implications, which is not a good place to be.

In all industries, such as the water industry and the electricity industry, there are standards of security. There are limits of lost load. The surplus that we currently have — 200 MW, I understand — does cover that standard for Northern Ireland. The issue is that we are dependent on a small number of large generating units, and any one of them going out will cause us a problem because of the scale of the units. Therefore, it is prudent and important for us, working with the System Operator, to work down through what the scale of the risk is. What is the likelihood of it happening? If we can then remove it at reasonable cost to the consumer, I think that that is a reasonable thing to do. If the risk has a very low likelihood, and to plug the gap would incur a very big cost, I think that a different decision might be called for.

Mr Flanagan: But you are plugging a gap before a gap exists. That is my problem. I have no difficulty driving a car with the diesel light on, although perhaps other people do have a problem with that. However, it is not a problem that concerns me. Can I ask —

Ms Aston: Think about an aeroplane. It has two engines. Why does it have two engines? It needs only one, so why does it have two? It has two because the risk of failure is too great. That is what we are really talking about.

Mr Flanagan: It is not quite as dramatic as a plane falling out of the sky.

Ms Aston: No, it is not as dramatic as that. What I am asking today is this: do we have a real risk here or not? I am not sure that it is a very significant risk, but I think that there is a risk there, and I want to assure the Committee that we are working with the right players to get to the bottom of it.

Mr Flanagan: From a regulatory point of view, what is your office doing to change consumer behaviour to use more electricity at night when there is low demand in the system and probably surplus capacity in the market? Most washing machines and tumble dryers come with a delayed start, not that I use them much, so you can set them to come on in three, nine or 12 hours. From a pricing and regulatory point of view, what consideration has the regulator's office given to changing all that again?

Ms Aston: We have had a pilot scheme on smart metering, which hands the power over to consumers to decide when they use their electricity. We have got the outworkings of that scheme and are now in engagement with DETI on how we roll that out.

Mr Flanagan: As part of that pilot, were consumers told, "This is your smart meter, and this tells you how much electricity you are using", or were users educated that they are better using electricity at night because you will make it cheaper for them? Was that been part of the pilot, or was your pilot the exact same as the one in Limerick?

Ms Aston: No, the pilot has been to put a metering box into people's homes to allow them to see how they use and distribute electricity. Part of the pilot involved analysing how you can encourage people

to redistribute their use factor and determining what the benefit is so that consumers can see that benefit and change their behaviour.

Mr Flanagan: If there is a single unitary price of electricity regardless of the day, it does not matter, from a pricing point of view, when consumers use electricity. Therefore, if it were cheaper in the middle of the night, when there is less demand on the system because fewer people are using electricity, would it not be sensible, in line with your smart meters, to encourage people to use such equipment at night because it is cheaper to do so?

Ms Aston: Absolutely, and that is part of the smart metering programme.

Mr Flanagan: Was it part of the pilot, though?

Ms Aston: The pilot did not impact on the bills. It was a pilot on how consumers use their electricity.

Ms Pyper: It was aimed more at getting people used to the idea of seeing how much they were using. We are all very used to switching the lights on, leaving our phone charging, leaving our TV on and not really worrying about whether we take a two-minute or 10-minute shower. Therefore, part of the pilot was about education and letting people see that they could switch all their lights and machines off yet there might still be electricity being used.

Improving people's awareness is a key part of changing their behaviour. We are all very slow to change our behaviour. Look how long it took for people to get used to putting their seat belt on automatically. That was a change in behaviour that took years. Changing people's behaviour around usage of electricity requires a similar amount of time. They have to have an awareness of what they are using and when they are using it, and that is largely what the pilot achieved. The next stage in smart metering will be seeing the link with cost.

The Chairperson: I am anxious to move on. There are a few other members looking to come in.

Mr Flanagan: Patsy, this is my final point.

The Chairperson: Can you make it a smart point?

Mr Flanagan: It is not a question. People were encouraged to wear their seat belts because if they did not do so, they would be financially penalised.

The Chairperson: You are not talking about putting the price of electricity up.

Mr Flanagan: No, I am on about putting it down at night to try to encourage more people to use electricity then.

Mr Dunne: Thanks very much for coming along this afternoon. How significant is the North/South interconnector to security of supply? How will the future market in the Republic and Northern Ireland, and how we manage it, be impacted on by the interconnector that we are hearing so much debate about?

Ms Aston: We have been discussing the risk from 2016. However, if we do not do something, there will be a deficit come 2021, if the Ballylumford plant is removed. Fundamentally, therefore, it is crucial that we get the North/South interconnector in place and energised well before 2021.

Additionally, we are operating with a single electricity market at the moment. All the interconnectors — the Moyle interconnector and the North/South interconnector when it comes — add flexibility. They allow us to use and procure electricity at the cheapest cost, which drives down prices, because we can sell into the GB market and procure out of it when things are not cheap.

Mr Dunne: That is where the big gains are going to be.

Ms Aston: We want as much flexibility and capacity in the electricity system as possible. The North/South interconnector will play a fundamental part in security of supply and an important part in driving down prices.

Mr Dunne: The savings will be passed on to the consumer, then.

Ms Aston: Absolutely.

Mr Dunne: They will be? Domestic and industrial?

Ms Aston: Yes.

Ms Pyper: If I remember correctly, when we did the cost-benefit analysis of the single electricity market to try to establish whether it had the potential to bring benefits for consumers, there were around £7 million of savings that could be made attributable to the North/South interconnector. We have not been able to get those savings in the single electricity market because we have not had that second interconnector. The cost-benefit analysis assumed the second interconnector. There are savings to be made there.

Mr Shiels: We talk all the time about how difficult it is to get lower costs. A lot of the conversations about prices are about how difficult it is to achieve lower electricity costs. The North/South interconnector is a project that will deliver lower costs.

Mr Dunne: Good. Thank you.

I have a couple of other points. We have heard rumours about potential new business. Is there any evidence that we are losing out to new business because of the lack of security of supply and the inability to give assurance to potential new businesses that there will not be an issue further downstream? Are you aware of any evidence of that?

Ms Aston: I am not aware of any evidence at all. It has never been mentioned to us as being an issue.

Mr Shiels: When Invest Northern Ireland was at the Committee, its view was that, although electricity prices are an issue — I am thinking about prices rather than security of supply — the benefits of Northern Ireland as an investment attraction for other reasons outweighed the electricity price factor.

Mr Dunne: I think that that is perhaps the way that businesses compensate for it.

Mr Shiels: There is a skilled workforce and other beneficial aspects.

The Chairperson: If I can just pick up on that point, Gordon, there were two issues: one was the price and the other was the availability of a supply that was of sufficient magnitude to work for expansion of the business, which is a slightly different thing.

Mr Shiels: I was talking about prices. You are right.

The Chairperson: Do you have anything further to add on that, because the matter has certainly been raised with me?

Mr Dunne: The high energy users with IT-based systems need security of supply. They need high capacity and high volume, and we have been told that there is a risk out there that people are not coming in because of the potential risk to the long-term security of supply.

Ms Aston: Come 2021, where the capacity statement is stating that we will be in a deficit, I think that that would be an issue. It is therefore a fundamental assurance to put out there before the 2021 deadline.

As to the 2016 time frame, hopefully the discussion around the table provides some assurance about the risk that is there and how it is being managed. I would like to think that, come quarter 1 next year, the further investigations or exploration with the system market around the quantum of the gap, the risk and how it can be plugged will put answers on the table.

Mr Dunne: I have a couple of other points, Chair.

We have been enlightened here to the cost to the industry. The big consumers are paying heavily for their electricity, and many of them are now looking at alternative means of supply. What more can be done to try to accommodate work with the big manufacturing users? We had one manufacturer in who is competing throughout Europe for business and claimed to be paying an electricity bill of £1 million a month. What more can be done to try to address the problem? I know that there are various solutions, and I think that you are looking at them in your paper, which, to be honest, I have not studied yet. I think that you will do further work on that. This is critical to the future of big business in Northern Ireland.

Mr Shiels: Absolutely. Electricity prices are one of the major issues for the Northern Ireland economy, and that is true both for industrial consumers and for domestic consumers. We hear often that we have one of the highest levels of fuel poverty at domestic level in the whole of the UK, so electricity prices are important both for domestic and for industrial consumers. That is why we are trying to shine a light on the key drivers for electricity prices.

Our research particularly shows that, for domestic users and smaller businesses, the pricing relativities are that Northern Ireland sits around mid-Europe and slightly above, depending on the timescale of the data. For the large energy users (LEUs) and business customers, we have some of the highest prices in Europe. Part of the work that we are doing is on understanding exactly why that pattern emerges. As I said earlier, our paper shows that it is partly to do with the network cost allocations relative to other jurisdictions and partly to do with the level of other costs that large energy users in Northern Ireland have relative to other jurisdictions, such as renewable incentivisation costs.

As I said at the beginning, priorities of price, security of supply and sustainability are always going to be in tension. We have already talked today about the price that we are willing to pay for security of supply, and the costs that it will take to buy that. All those tensions will constantly exist for Northern Ireland, but what we try to do is get to the bottom of the key drivers and data and provide the Committee, DETI and other Departments with the information needed to make informed policy decisions about where to land on that policy trilemma.

What we need to do in the short term, on the LEU cost front, is to get to the bottom of the network costs allocations point, which is what the project that we will kick off in the next few weeks will do. We are working on that alongside DETI, and then we will be able to come to you with an informed set of numbers.

Mr Dunne: When is that likely to be?

Mr Shiels: Are you asking when the research will be completed?

Mr Dunne: Yes.

Mr Shiels: It will be completed early in 2014.

Mr Dunne: In about six or seven months' time, then.

Last winter was very severe in certain areas. The heavy snow was quite localised, and in fact some of it was quite close to here, over the Holywood hills. If we have snow like that throughout Northern Ireland, is there a risk that there will be a major failure of the network system, considering its condition, age and various other issues? Is that of concern to the Utility Regulator? What brings that question to mind is that, as was mentioned, during that weather the lights in Belfast went out. Fortunately for us, it was for only 20 or 25 minutes in the greater Belfast area. We were affected by it, but the lights were back on in about 25 minutes. However, had we had that severe snowy weather throughout Northern Ireland, is there a risk of major failures?

Ms Pyper: It is a timely question, and one that I discussed with the senior management team yesterday in a discussion on winter readiness.

Mr Dunne: Good. You are thinking outside the box.

Ms Pyper: I will let Jo take that question, because she has had first-hand experience of a winter crisis, albeit on the water side.

Ms Aston: Yes. I lived through that 2010-11 freeze/thaw investigation. We are dependent on all the companies that we regulate. They are the people with the expertise, and they need to manage the network. Our responsibility is not to make sure that they are adequately financed to discharge their duties. However, we realise that extreme weather events are becoming more frequent, and therefore we look to our companies to ensure that they have comprehensive major incident plans in place and that, when they submit their business plans to us for a price control, they have looked at the resilience issues in the network and identified maintenance issues and what they need to do to address them. We find that NIE has a lot of issues with strong storms. That is its particular issue.

Mr Dunne: I see that you touched wood there.

Ms Aston: I am touching wood. When Northern Ireland Water (NIW) experienced the massive freeze/thaw event, a lot came down to the behaviour of individuals. Householders had to be mindful of the possibility of their own supply pipes freezing. It is about having information and about being as ready as we can be.

Ms Pyper: It is down to managing the risk. There may be a need or demand from some of the energy companies to invest in and gold-plate their infrastructure. It is the regulator's job to get a balance and manage the risk between having good, robust and resilient infrastructure in place, without gold-plating it to the extent that it would withstand any unforeseen weather event or natural disaster. We are looking at that and challenging the companies on their investment plans. They all produce winter readiness plans and test them, and that is something that we have sight of.

Mr Dunne: Do you scrutinise them?

Ms Pyper: We look to see that they have done that work thoroughly. That is something that we were talking about with the senior management team yesterday.

Mr McKinney: Thank you, Chair. Congratulations on your appointment, Jenny. I have two specific questions on pricing and one general one. Obviously, you have reported on there being some debate about the energy market's design, the SMP and capacity payments. Could the market be restructured to give renewable energy a percentage of the SMP or to cap the level for renewables based on a reasonable rate of return?

Mr Shiels: I guess that I have a couple of points to make in that area. The SEM was set up with an awful of thought, consultation and effort; it did not happen by accident and took a long time to put in place. The arrangements for the SMP aspect, together with the capacity payment aspect, are there deliberately to try and mimic the payments required to incentivise long-term efficient generation to take place.

A project called regional integration is coming up in the next year. It is about establishing a standard set of principles that will apply to all wholesale markets across Europe. A project has already kicked off to deliver the changes required for the regional integration project in the SEM systems and mechanisms. Many different things are being looked at in that project, including the structure of payments and the structure of the payment and training arrangements in the SEM. So, it is an opportunity to look at things such as that.

Structuring the wholesale markets is a tremendously complicated business. Wholesale investments are awarded over a very long depreciation period. Therefore, what we should not do is try to tinker with, or have knee-jerk reactions to, wholesale systems. These things need to be thought about and done properly. However, the sort of things that you are talking about could be considered with regard to future changes to SEM.

Mr McKinney: How does the capacity pot work? If there is potential drop-off, is there time to review it?

Mr Shiels: I am not going to try to describe the operation of the capacity payment mechanism because I know that it is complicated and I am certainly not an expert on it. The theory behind it is that it is there to top up the payments made from the SMP to generators. The SMP covers their short-run marginal costs, and the theory is that capacity payment mechanisms are there to top that up and reward longer-term investment requirements. So, there is good thinking behind it. I do not know the

precise answer to your question. However, I am happy to take it away and come back to you on it in a written response.

Ms Pyper: The key point is that we are having to look at the design of the market again because of the drive from Europe with the regional integration project. It took many years — and I know, because I was there — to develop the design for the single electricity market. I think that it would be difficult for us to do anything significant with the SEM given that we have the regional integration project. However, I know, and Jo can confirm, that at the meeting in October the SEM committee looked at, and took a paper on, improving competitiveness. It was looking to see whether there was anything that could be done in the short term to try and, I suppose, tweak the SEM model without causing major concerns or balancing shocks in the market.

The direction of travel that Europe has now set us on means that it would be difficult for us to develop, consult and implement changes to the SEM as it stands. That is not to say that there are not opportunities to improve things in the new market with the new regional integration project.

Mr McKinney: I have a general point. I am relatively new to this, so forgive me. It strikes me that this is one of those debates where, if you had the choice, you would not start from here, if you know what I mean. You are dealing with a potential crisis in 2016 or potentially further, if you do not do anything, in 2021. Is there any sense that this could be widened or developed in a way á la the Netherlands, which put together the energy agreement for sustainable growth? It brought all of the partners in. We have had Phil reflecting on customers. We have had the domestic and industrial aspect of this also. Is there a way in which the debate could be reconfigured in order to get everybody in to agree the future vision? From what I hear, we are looking at trying to plug a gap at present. I am not hearing the vision.

Ms Aston: I suppose that what I would say is that we would not start from here. I think the reason why we are here is that we do not have the North/South interconnector, which was part of the strategic energy framework. That was the plan. A vision was set out to have that in 2013-14. That is why we are here.

The SEM has delivered benefits. We do not have the lack of transparency that exists in the GB market and we are in a much better place. Part of the regional integration project is about making the market European-based so that we are competitive. We are looking at models across Europe to get the learning in, but we must remember our context in Northern Ireland and our limitation and remoteness here and not throw the baby out with the bath water. Part of the work that Jenny mentioned was about what we can do now to improve prices in the short term. It is also important to know what is working well in the SEM and hold on to it. It is about learning lessons about what is good and how we can improve it.

Ms Pyper: It is interesting to see what has happened in the GB market. The Labour Party's statements about what must be done show that the direction of travel that Ed Miliband has been signalling is moving towards what we have. We have a very transparent pool system in the SEM and a lot of regulation. It is a very regulated market, and Ed Miliband is calling for more regulation and a move from the bilateral contract mechanism, which there is in the British Electricity Trading and Transmission Arrangements, which seems to have failed to deliver the necessary investment to give the security of supply assurances needed in the GB market.

It is not that we are complacent, but we are in a position where we have a transparent pool market. Yes, we have identified that there is a potential security-of-supply risk, largely because of the failure to deliver the second North/South interconnector, but we are aware of that risk and are alive to it. We are trying to quantify it and we are looking at possible solutions. It is not that we are in a really bad place. Jo is right; we are sitting with a market that is working well. Looking at the input that the Committee has had from other commentators, many of them have acknowledged that the SEM has delivered benefits for Northern Ireland. That is an important point to reinforce.

Mr Shiels: All those points are reflected in our paper, Fearghal.

Mr Agnew: I apologise to the witnesses and the Committee for being late; I had to chair another meeting. I congratulate Jenny on her appointment to her new post.

I do not know much you have followed our oral briefings on this subject, but we have heard a lot about the cost of upgrading the network in order to incorporate renewables. What is often repeated is that

renewables have a downward pressure on price, but no one can tell me the extent of that. I do not know whether you are doing any work on assessing and quantifying it. If there is a debate about the costs and benefits of renewables, it seems to be about the costs but not the benefits.

Ms Pyper: I am not sure whether you heard the end of Kevin's presentation —

Mr Agnew: No, I am sorry, I did not.

Ms Pyper: — but one of the papers in the pack looks at key issues. I will let Kevin speak about that. It looks at renewables in three elements and tries to help the Committee understand the tensions that you mentioned.

Mr Shiels: We followed the debate quite a lot over the past six months. I have talked to the Committee a lot about wholesale and our work on retail issues. We separated renewables out as well because there has been so much comment and debate about them over the past six months. We appreciate that with renewables there is a huge set of issues to get your head around, and that it is not a simple matter of doing a sum to say that X benefits plus Y costs equals Z, which is the benefit of renewables. It is too complicated for that. The DETI review of renewable penetration is welcome, because that should be some sort of structured exercise to start to make a better assessment.

Mr Agnew: Do you know when it is due to report?

Mr Shiels: No. I have not been talking to DETI about the timeline for that. We thought that, to aid debate, it would be useful to split the issues around renewables into three elements. The first is the role of renewables in the SEM; the second is the incentivisation framework around renewables, and the third is the other impacts that renewables bring, whether avoiding carbon or bringing extra grid and connection costs. I am reflecting some of the pros and cons that were made to you many times by several different stakeholders.

It is almost impossible to put a figure on it and say that renewables are a good or bad thing. At the end of the day, there is a government policy and target to improve renewables generation, and we are working with DETI to help to implement that. The purpose of the renewables aspect of our pricing paper was to try to make clearer what the renewables impacts were in the context of prices and bring more evidence to the debate.

Mr Agnew: We heard from the NIE, which has re-estimated the cost of upgrades required to incorporate the 40% of renewables to the grid. Is its figure of £500 million one that you have interrogated? Is it a valuation that you accept? I do not see any benefit in the NIE underselling the investment required because, obviously, it has to go to you to justify any investment. What are your views on the figure? It is significantly down on the figure of £1 billion originally estimated.

Ms Aston: As you said, the NIE has to submit to us, and justify, every bid that it wants to upgrade the network. It is the NIE's responsibility to make sure that the network remains economic. Therefore, it brings cases to us for renewables and investment. We have approved investment of probably between £30 million and £35 million to date. It has taken us a long way in that percentage. I cannot say whether the gap is £500 million or £1 billion. We should be getting closer to the right number. I could not stand over the £500 million and talk about how much gold-plating there is or how much is actually needed. We need very robust detailed plans so that Northern Ireland Electricity is more than talking about a global ballpark figure into a network plan of investment to upgrade to have the vision of what we want, where we want it and how we want to develop it. Looking at that gap, you could say that we have got the low-hanging fruit to get renewables as far as we have. Perhaps it will be a lot more costly to get them to the next stage and meet the next target. It feeds in very appropriately to the review of renewables that DETI will undertake.

Mr Agnew: Apologies if this has already been raised: where are your powers in relation to connection charges? A common complaint that we hear in the Committee is that connection charges are too high, particularly when you get to small-scale renewables, where the costs are still quite high in comparison with the benefits of investment. The NIE has given us its case as to why the charges are the way they are, but are you satisfied with the charging?

Mr Shiels: The NIE has a network connection statement, which we have to regulate and approve. It has been verified. All connections have to be made by the NIE under that policy. To that extent, the connection charges are known and verified.

Mr Agnew: How do those compare with GB or the Republic of Ireland? It is not for you to judge whether those who complain are right, but is there a discrepancy in charges with other regions?

Ms Aston: When it comes to connections and renewables, it is about what is necessary and what the consumer connecting has to pay for. I am not sure that you can benchmark that. Northern Ireland Electricity needs to make sure that a connection is economic in its policy for charging for connections. My understanding is that it is able to connect, but that if what it is connecting to requires an upgrade it has to upgrade up to a 33 kW cable line. Beyond that, it does not, but if that upgrade is needed, it has to pay for that. The cost of connection will vary with the individual circumstance.

There is then the requirement to upgrade the network beyond 33 kW. Recently, we approved investment to about 40 substations — actually, it is 30 substations, I got my numbers wrong there. That will allow quite a few additional connections to be made, because, again, the wider customer base has to carry that. We have looked at the economics and they are justified. Therefore we have approved it.

Mr Agnew: Thank you very much; that is very helpful.

The Chairperson: Thanks very much for that, and thank you for being with us. Earlier, I mentioned Enniskillen and Letterkenny. Have you any information to share with us on that?

Ms Aston: I have taken a note of it.

The Chairperson: I know that other members have made a few queries around that. Could you pass them on to us?

We have a number of other questions; we had quite a number here. The Clerk will forward those to you, and, perhaps, you could respond in writing.

Ms Pyper: That is fine.

The Chairperson: Again, I wish you well, and thank you very much for your time.

Ms Pyper: Thank you, Chairman, and thank you for the opportunity. I know that we will be talking to you on these issues again. If we can do any more, such as go through our paper to help aid the Committee's inquiry, we would be happy to do so, if that would be helpful. We are also happy to talk to researchers about the information that we have.

The Chairperson: That is great. Thank you.