



Select Committee on the European Union

Energy and Environment Sub-Committee

Corrected oral evidence: Brexit: energy security

Wednesday 25 October 2017

10.30 am

Watch the meeting

Members present: Lord Teverson (The Chairman); Lord Curry of Kirkharle; Viscount Hanworth; Lord Krebs; The Duke of Montrose; Lord Selkirk of Douglas; Baroness Sheehan; The Earl of Stair; Viscount Ullswater; Baroness Wilcox.

Evidence Session No. 4

Heard in Public

Questions 54 - 64

Witnesses

[I](#): Richard Harrington MP, Minister for Energy and Industry, Department for Business, Energy and Industrial Strategy; Dan Monzani, Head of Energy Security, BEIS; Katrina McLeay, Head of Safeguards and Delivery, Euratom Exit Team, BEIS.

Examination of witnesses

Richard Harrington MP, Dan Monzani and Katrina McLeay.

Q54 **The Chairman:** Minister and colleagues, welcome to this inquiry on Brexit and energy security. This is the last of our evidence sessions on this particular subject. We look forward very much to the session with you, particularly to fill ourselves in on government policy and where government feels we are on these issues. Perhaps I could remind Committee members that, if they have any interests, they should declare them when they ask a question. This meeting is on public record. A transcript will be prepared and you will get a copy of it. If there are any errors in it, please let us know and those can be amended.

For those watching or members of the public in the room, perhaps we can start off with the witnesses introducing themselves. Minister, perhaps you would start, followed by Katrina and Dan.

Richard Harrington: I am Richard Harrington. Apart from being MP for Watford, I am the Minister for Energy and Industry at BEIS, so I cover the whole of the energy portfolio. I am very pleased to be here, Lord Teverson. Thank you for the invitation.

The Chairman: We are delighted to have you.

Katrina McLeay: I am Katrina McLeay, Head of Safeguards and Delivery in the Euratom Exit Team in BEIS.

Dan Monzani: I am Dan Monzani, Head of Energy Security at BEIS.

The Chairman: Perhaps we could start with a general question. What are the UK's priorities for its post-Brexit energy relationship with the European Union?

Richard Harrington: It will not come as any surprise that energy is an area where there is a strong alignment of interest between the UK and the EU. Prior to single markets and everything else there always have been arrangements—for example, interconnectors and so on. There is mutuality of interests because the connections offer major benefits to both parties. Clearly, it remains in the UK's and the EU's interests to facilitate cross-border trading to be as efficient as possible. Ireland is a classic example, but it is the same with all the other countries.

To summarise, our priority is to seek a trading relationship with the EU that is as close as possible. We also want to be in a position to influence our policy, because a lot of the arrangements at the moment come at the behest of the UK Government on political policy, but we have always been very much ahead of the game in our thinking—for example, the national grid and so on. So, our top priority is to be as near as possible to the current arrangements. I do not know whether Dan or Katrina would like to add anything.

Dan Monzani: That is right. The interconnectors have delivered benefits from efficient trading. There are a number of other interconnector

projects under development as well. So, our goal is to make sure we can have as efficient as possible a relationship on electricity and gas.

The Chairman: Minister, you make an interesting and important point. In many ways, we have been the leaders in liberalisation policies and all sorts of other areas in energy. Do you think that might lead to greater divergence of policies post Brexit, in that the European Union could be less competitive and open without our influence, and that might cause issues or opportunities for the future?

Richard Harrington: I do not believe so, and I hope not. I think that partly as a result of our involvement and the EU relationships it has been beneficial to consumers in every country. I have seen no evidence of de-liberalisation, but it is very difficult for us all in a post-Brexit world to make predictions because we all know that the majority of the negotiations that will bring them all about have not happened yet, and this is a very small subset of it. There is such a mutuality of interest here that I do not see this divergence at all. I hope I am right in what I say, but none of us can know exactly. I do not see a move towards it.

Q55 **Viscount Ullswater:** Perhaps I should start with a declaration of interest. I am a trustee of an estate in Cumbria some of whose income comes from wind turbines and other minerals. My question is about security of supply. Do you expect Brexit to affect the UK? In particular, what steps will the Government take to ensure that the UK has access to the EU workers needed to construct and maintain its energy system?

Richard Harrington: I will try to answer the questions separately. Both are important questions but they are separate.

As far as security of supply is concerned, I do not believe it will affect it because we have a very well-functioning, competitive and resilient energy system now. When I first took on this job I visited the headquarters of National Grid in Wokingham. I strongly recommend that members of the Committee take the opportunity to see it. There is a huge screen on the wall with all the different sources of electricity on that particular day.

The Chairman: We saw it last week.

Richard Harrington: You will have seen the diversity of supply. I do not want members of the Committee to think that I believe its job is easy, but with the technology and so many different sources of electricity and so many ways it can be adjusted in the short, medium and long term, I am not worried about security of supply. The capacity market, new nuclear, offshore wind and so on have helped a lot to do that. I believe that government intervention generally—I promise I do not make a political point here—with contracts for difference and the capacity market options, for example, has made sure that we are not too dependent on any particular source of supply. I do not say that out of arrogance but based on my observations. I do not think security of supply is an important issue as far as the EU is concerned.

The second question you asked was about skilled workers. As we all know, leaving the EU quite clearly ends the freedom of movement in its current form. That is why many people who campaigned for it wanted it. Whatever our personal views might be, I think that will happen. I think the Government have always said they want the brightest and the best. That may or may not be a political point, but, to answer your question, from a practical point we have to have a system to identify what skills we need and whether we can generate them here through training. In the long term the apprenticeship schemes and everything will come through, but there is a skills shortage at the moment.

I had some experience at the Home Office, where I was doing a different job from this, with the Migration Advisory Committee. That is an independent committee that assesses in what sectors of the economy we need skills and helps to facilitate it. Admittedly, that is now outside the EU, but it makes sure those people are fast tracked and, if they are below the salary threshold, there is a waiver. For example, that is how we get nurses and such like. We are very aware of this.

The MAC is looking at all these sorts of things, so a lot of analysis is going on, but we cannot risk a skills shortage in the construction area. I am less concerned about that simply because, in a previous life, I saw the huge expansion of apprenticeship schemes in construction and so on. However, looking at the skilled workers needed when we talk about Euratom, for example, there are very few of them in Europe, let alone the world, to do it. We have to make sure that we can bring the necessary people here, and it is a top priority for us.

I cannot give you a direct answer, which I would like to, because a lot of it is to do with the general negotiations and conditions and terms around Brexit, but we are not taking it lying down and just hoping it will be all right. We have this current facility through the MAC and it is a top priority for the Government.

The Chairman: One of the themes of the various Brexit reports we have done, particularly on agriculture, animal welfare and on the food side, is not so much about the brightest and the best that you mention but the people who have skills—for example, harvesting—that are not usually recognised internationally as high skills. One specific issue in this inquiry concerned EDF, particularly around Hinkley C. It was very concerned about its need for specific construction skills. It required about two-thirds of the European total of those people. Perhaps we would see that issue in other infrastructure areas, maybe—I do not know—on the interconnector side. EDF had this particular issue. I do not know whether you are aware of that. I presume you are.

Katrina McLeay: I think it is in steel fixing and concreting, is it not? I believe it gave figures for the total available resources in the UK and how much of that it might need to commandeer for the building of Hinkley Point. This is a matter we have been discussing with it, and those issues and concerns have been flagged with the Home Office as part of its consideration in the work the Minister has mentioned.

Richard Harrington: The Migration Advisory Committee reports to the Home Office. This is very important. As you might imagine, EDF is not shy in coming forward and is very important to our economy. If it makes points like that, it is our job to take them very seriously. I do not think it is exaggerating or anything like that. I do not think it is one of those things where the sky is falling in, and we have to make sure that its fears do not happen.

The Chairman: Is the Home Office listening?

Katrina McLeay: Yes.

Richard Harrington: It is.

Viscount Ullswater: Do you expect the UK to continue to participate in the EU's gas solidarity arrangements? Could you also comment on whether you see more energy coming through interconnectors in the future and how you assess that in Brexit terms?

Richard Harrington: On the first point to do with the gas solidarity arrangements, I would point out, not to Viscount Ullswater who I know has been studying this, and put on the record that the purpose of these extreme arrangements is to deal with the most unlikely circumstances. When all other market-based measures have failed, these come into being.

I reiterate the point I made before. Our neighbours benefit from this just as much as we do. While it is dependent on the EU final exit agreement—I have to add that caveat to most things I have said today—I am sure that everyone will think that it is the prudent thing to do; I am absolutely certain about that. I cannot say definitively because so much depends on the general exit arrangements. But on the scale of controversial things that have to be dealt with for these arrangements this is probably right at the lower end. Could I ask Dan to comment on the interconnectors?

Dan Monzani: Let me put this in the context of broader gas security as well. Our system benefits from a broad diversity of gas sources, some of which are through interconnectors with Belgium and the Netherlands in the EU, but also globally. We benefit from our geographical position and the investment and infrastructure over the past 10 or more years in allowing LNG—liquefied natural gas—to be an important part of our energy security. We have, at least for the time being, some domestic sources and access to Norwegian gas fields. In general, that market-based approach to open trading is what gives us gas security. As the Minister said, we would expect the market to enable gas to flow where it is needed according to normal price mechanisms well before any gas solidarity principle needs to be invoked. It is very much a last measure once a number of alternative sources have been exhausted.

Recently we published our strategic review of gas security, which tested the system's robustness, even after the UK continental shelf has declined, to a number of very severe shocks, including severe disruption either to

our own infrastructure or exports from the Middle East or Russia. We found that, in the vast majority of cases, the market would continue to deliver that security of gas supply. I want to put that context around the points about gas solidarity.

On electricity, electricity connection is something that we think can deliver benefits in terms of both cost but also security in being part of the larger market. There are, as the Minister explained, other ways in which National Grid is able to ensure we have that security, but we think interconnection is a good way of doing that. Currently, we have 4 gigawatts of electrical interconnection, and another 9.5 gigawatts have either received or are seeking regulatory approval, so it is an area that we hope will expand.

There are two 4.4-gigawatt interconnectors currently well advanced in construction, one with Belgium and one with Norway, and we are encouraged that since the referendum construction has begun on two further ones, both with France. It suggests that that is a growing area, and obviously trade as part of a broader bloc is a good and efficient way of getting the power we need and supplying the capacity. We will always make sure we have sufficient energy security, whether through domestic or imported means, in the capacity market as well.

The Chairman: You make the important point that investment in interconnectors has not dried up, but the Committee believes it is a fairly important strategic move to increase interconnection that had not happened for some time. Presumably, the Department has in mind the top three things that might get in the way of that free flow afterwards, whether it is codes or little things about trade. I do not know. Apart from the investment side, are there things we need to negotiate for our future relationship that we might not otherwise be aware of?

Dan Monzani: The fundamentals of joining two markets will remain the case. There is a benefit to those markets from trade, and generally that benefit is to both sides. One of the advantages we have seen from closer integration through interconnectors over the past few years has been the increased efficiency over shorter and shorter time periods. One of the important factors about the electricity system is that it needs to be balanced pretty much in real time. In a less well-coupled system you might be able to trade a day ahead or something similar; in a closely integrated system you can get those coupled trades over much shorter timeframes. That is on a sliding scale of the degree of efficiency with which you can enjoy your trade, and those are some of the benefits we see from increased participation in co-ordinated trading arrangements.

The Chairman: I understand all that. To pursue it, we all know that it suits both sides, but we are going through quite a difficult relationship and what we have to look at here are things that might go wrong. What is best for everybody on the economic side may not always be the outcome we all hope it will be. Will technical barriers potentially be a big issue post Brexit? Are there any on interconnectors that we should be aware of?

Dan Monzani: I can speak only for the technical side because everything is subject to the negotiation afterwards. We have done quite a lot of the technical harmonisation already. Quite a lot in Europe is done through technical groups, in electricity through ENTSO-E, the electricity system operators' group. National Grid has been very strong in that. There are always technical issues, and harmonious relationships are important to ensure they are dealt with.

The Chairman: You do not feel they will get any worse because we are in a post-Brexit situation.

Dan Monzani: We have to work through them all.

Richard Harrington: I think that Dan, being a very good civil servant and official, is talking about the technical side, but the issue I have picked up here, which is endemic to the discussions today, is to do with the political rather than technical settlement. The fears that you are asking us to outline come from that side of things rather than whether the systems speak to each other and that kind of stuff. Important though that is, that is not going to be an issue here.

Q56 **Baroness Wilcox:** I will admit that I am President of the National Consumer Federation, so that might show you where I am going. The question is: what assessments have you made of the impact of Brexit on consumers' energy costs?

Richard Harrington: It is quite difficult to answer that question because we do not know what the relationship will be between the very things we have been talking about today. It is our policy to maintain an affordable energy supply for the UK, and for the EU it is the same. I cannot attach cost to it because we do not know what the outcome of the negotiations will be. As I am sure the Committee is aware, there is an independent review, whose findings are to be published imminently, under Dieter Helm. I do not know whether you have had any experience of him or had him before the Committee.

The Chairman: Not yet.

Richard Harrington: Whatever can be said about Dieter, no one can say he is not an independent voice in this. He has been asked by the Secretary of State to do this review of the whole cost of electricity supply. It is looking at delivering electricity at a cost that is as low as possible. I am sorry to dodge your question, Baroness Wilcox, but I cannot answer it. We cannot assess the energy costs until we know what the new arrangements are, other than to say that I expect a solution that is as near to business as usual as we can possibly get it, and I see no reason why that would affect energy costs.

Baroness Wilcox: Thank you for that answer. You will know that people are very nervous about their electricity bills.

Richard Harrington: Yes, they are.

Baroness Wilcox: For a start, they cannot read half of them. They do not understand what they are looking at, so it is difficult. We should have something, at least along political lines, to try to reassure people that you are looking at this already and are concerned about it now, rather than waiting to see what happens and then you will think of something and let them know. It does not have the same ring about it that you are in the game already.

The Chairman: You have legislation coming through, do you not?

Richard Harrington: You are right. Yesterday was the Second Reading of the Smart Meters Bill. In the limited time I had for the winding-up speech I explained to the House—maybe Lord Prior has had a similar experience that he would share in your House—that for me to read my meter at home I had to get on my hands and knees with a torch and a cloth, and I ended up covered in cobwebs. You really would not believe it in 2017. Part of the Smart Meters Bill, for which we have had cross-party support—I am very pleased to say that I do not think there was a vote against it—is to provide consumers with the very sort of information you are talking about so that they can control their own supply and cost of it.

I am a recent convert to this, because when I got this job it suddenly became something I had to deal with. Most people I know have estimated bills. There are winding and grinding wheels for people to read their supplies. This in a time when people get itemised telephone bills and for almost everything else they buy. They get their bank statements online. Energy has to catch up with it. I was not belittling your question but saying that, in terms of the narrower but still important point about the effect of the EU and Brexit, I do not expect this to be a major part of it. I hope there is no project fear and people thinking it will make a big difference, because, for reasons I explained earlier in this session, I do not think there is a question of limited supply or a significant price change.

Baroness Wilcox: Certainly not limited supply. We too have had a visit and we are very confident about all of that, but for most people what is going to happen here will be a worry. This is money and it is important.

Richard Harrington: Point accepted.

Q57 **Lord Krebs:** I would like to ask you about something on which we have heard a lot of evidence: the Internal Energy Market. Have you investigated the question whether we can stay in the Internal Energy Market post Brexit, and, if you have investigated it, what is your conclusion?

Richard Harrington: You are quite right; it is a very important point, because I think everyone would agree that the IEM works very well. We are considering all aspects of our future relationship with the EU, of which energy trading is a part. I do not think anyone can say that the Internal Market has not brought mutual benefits such as the ones I spoke about before. We had interconnectors before the IEM. One trading market is a

comparatively new thing, but it is possible to have the same relationships as we had before irrespective of our membership of the EU. It is the trade that is sufficient, rather than the label that it comes under. I sincerely hope that that will be the outcome of the talks on the European Union, and that something that works very well and is of mutual interest to every country in it will not be brought into the main political agreements as to what happens post Brexit.

As to all this stuff about a good deal, bad deal and having to watch this, I do not see it here. The label of the EU and UK is one thing, but where there is such mutuality of interest I do not believe it is beyond the wit of those involved to work this out very quickly; but we are waiting for the second phase of the negotiations. Dan, would you like to add anything to that?

Dan Monzani: I would emphasise a point I made earlier about the importance of those interconnectors and their efficiency. Of course, we are talking here about electricity, but in gas we can have a range of relationships. For example, Norway is not a member of the EU but has an important gas trade relationship. It is an observer on ENTSOG rather than a full member, but obviously it has some influence on account of its position.

Lord Krebs: Reading back to you what you have said, you think it is neither here nor there whether we are in the Internal Energy Market; there are no particular benefits or costs associated with that.

Richard Harrington: I should clarify what I said. I am saying that it is the efficiency of trade that matters and we want to continue, rather than what label it is under. I think it is quite possible to have a very good, close trading market when we are outside the EU. I do not think it is dependent on that. I would like it to be the same because it works well. I do not see why it should not be done under an umbrella that is not EU membership. As Dan said, there is precedence in this field for countries taking part in these organisations without full membership of the EU. A lot of the IEM was our policy. I know I keep repeating that, but there are areas where we can say we wrote the textbook, and in this case it is largely true. I do not take it lightly. I am not saying there will be no difference without the IEM, but it is our belief that there will be arrangements very comparable with the IEM, and we have picked up nothing to the contrary.

Lord Krebs: We have heard on several occasions from Ministers that contingency plans are in place for 'no deal' and £250 million is being spent on this. Are you able to say what your contingency plan for 'no deal' is in relation to the energy market?

Dan Monzani: I do not want to go into too much detail, but we have had a pretty comprehensive look through all the areas—for example, in legislation where references need to be changed and in the functions throughout the system where there might need to be an alternative. We are looking carefully at what needs to be done. I do not want to go into

too much detail about things that we are hoping and expecting not to need, because, as the Minister has made clear, we are hoping to negotiate a strong relationship within the IEM, or close participation along those lines, with efficient trade. That is our full expectation, but of course you would expect us to do insurance work as well.

Lord Krebs: Would that ambition involve remaining in ENTSO-E, ENTSG and ACER?

Dan Monzani: That is one of a number of issues to work through. As the Minister just described, there is a range of different ways in which people have influence. Norway is in ENTSO-E and not in ENTSG.

Richard Harrington: But they appear in ENTSG in an observation capacity.

Dan Monzani: That is absolutely right. There is a range of other direct membership of these bodies, whether or not you are a member of the EU, and observer status. Whatever formal arrangements we have, we will continue to try to exert influence, and I am sure National Grid and Ofgem, which are so well respected there, will continue to do so as well.

Lord Krebs: But is your dream ticket to remain members of those groups or observers, or do you not mind?

Dan Monzani: I think we will have to work through all these things in negotiations.

The Chairman: But you must have an ask. I feel slightly frustrated by this conversation. Everything you say is absolutely right. Coming back to Lord Krebs's question on the IEM, government is excellent at doing its legal work on Euratom. There are various views on whether we had to give notice on it under Article 50. Presumably, we have a legal view as to whether we could become a member of the IEM if we wanted to. We may not want to, but do we know whether constitutionally, in terms of the treaties, we can remain a member of the IEM? If so, would that be something the department would like?

Richard Harrington: Our view is that we want to be as close to the existing position as we possibly can be.

The Chairman: Right.

Baroness Wilcox: You did not do any better than I did.

The Chairman: That is fair enough. We interpret it as we want to. If I show any frustration, I apologise. I am just trying to get to the heart of the matter.

Richard Harrington: I understand perfectly the reason for your question and I am trying to answer it as clearly as I can, but the answer is that we do not know. It is our policy to be as close to where we are now as we

can be in a post-Brexit world, but until we are allowed to get into these detailed discussions, as we will be at the next stage—

The Chairman: We understand you have no control over that. Is there an opinion as to whether we could remain as a full member of the IEM, or has that been discounted?

Dan Monzani: It is not a separate institution from which you have to withdraw separately, so it is open to the negotiations.

Richard Harrington: There is not an Article 50 issue as there was with Euratom.

The Chairman: I understand that. I was just giving that as an example.

Richard Harrington: It could allow us to.

Viscount Hanworth: Are you fully appraised of the experience of Switzerland in connection with the European electricity market, and could you comment on it?

Dan Monzani: I am reasonably familiar with it. Although each country is different, it has a number of bilateral arrangements with the European Union in regard to energy.

Viscount Hanworth: How successful do you think those arrangements are, because they seem to be a prototype for our future relationship?

Dan Monzani: I am not sure that there is an off-the-shelf prototype. Norway would be another example. There are also relationships with south-east European countries that have their own different ones. None of those is a direct prototype. Probably you are referring to some of the disputes that the Swiss and the European Union have had.

Viscount Hanworth: I would like to ask you whether you think there is a significant dysfunction in their relationship, because we have heard testimony that there are indeed a lot of problems.

The Chairman: Viscount Hanworth, we are going to come to Switzerland in particular in the last question. Perhaps you would come back to that.

Viscount Hanworth: It gives you forewarning.

Baroness Sheehan: My question is slightly related to what Stephen [Viscount Hanworth] was saying. When we had the Swiss Ambassador before us last week, he mentioned that the lack of a shared dispute mechanism had led to a legal void. Do you think it is conceivable that the Commission's experience with the Swiss situation will influence the way it moves forward with Brexit? I think the lack of a dispute mechanism is going to impact our positions within ENTSO-E, ENTSG and ACER.

The Chairman: Baroness Sheehan, I am going to ask whether we can come back to that when we get to Switzerland so that I achieve consistency between the two of you.

Q58 Lord Curry of Kirkharle: Minister, I declare an interest as a Trustee of Clinton Devon Estates, which have a solar enterprise. Having just installed smart meters, I have to say it is quite a discipline. How many times do we need to boil a kettle when I am viewing the result? To follow up the earlier conversation you had with Lord Krebs about 'plan B' if there is one, assuming we were to leave the Internal Energy Market, there might be pressure to deregulate, with the Great Repeal Bill and all the pressure on regulation. Are there rules around this that you might seek to amend in the event we do not reach an agreement and we have to leave the Internal Energy Market? I want to tease out your thinking on this a bit more.

Richard Harrington: I am unteasable on this particular point, although not generally in life. In all seriousness, as far as the IEM is concerned it is possible that we leave and we are not bound by the rules. You are really asking: are there things we would change now?

The Chairman: We are also doing this because we look at opportunities as well as the issues that arise from Brexit, so we are trying to get to those as well.

Richard Harrington: As you will know, the Bill that will be coming to the House of Lords—we still have not amended it in the House of Commons—is taking all the EU law and bringing it into UK law. At the moment, there is no way that there has been consideration of using the Withdrawal Bill as a way of deregulating or changing EU regulation with which the UK does not agree. The reason for that is that in this process—it is difficult—we are trying to maximise the certainty for businesses. If only it were a matter of snapping one's fingers—it is much more complex than that—but it is a matter of bringing existing EU regulations into UK law rather than making a lot of substantive changes. In the due course of time, you might be right. Whoever is in government and Parliament is perfectly at will to do so, but at the moment there are no plans to do that at all.

The Chairman: Are there any potential advantages to energy security of Brexit?

Richard Harrington: As I have said as clearly as I can, I am hoping there will be as little change as possible in this field because it works well.

The Chairman: That is a very sufficient answer, Minister. Perhaps we can move on to investment and research.

Q59 Baroness Sheehan: The EU has used legislation and finance to try to build cross-border networks. The UK currently benefits from the Connecting Europe Facility, for example, which delivers the Projects of Common Interest scheme to facilitate infrastructure connections between member states. The European Investment Bank has been very instrumental in delivering the finance. It provided £9.3 billion for UK energy infrastructure between 2012 and 2016. We have seen instances of a hiatus—a delay—in the funding that the EIB has been providing. What

funding will the UK Government make available to replace the EU's investment in the energy network, which is currently received through the EIB and the PCI programme?

Richard Harrington: The projects that were signed before the Autumn Statement of 2016 have been clearly guaranteed by the Government until after the UK leaves. Those signed after the Autumn Statement of 2016, but before we leave the EU, have also been guaranteed by the Government, where they provide strong value for money and are in line with our current strategic priorities. The commitment made between companies and the Commission in respect of the CEF—the Connecting Europe Facility—which is grant finance, will also be honoured in the post-exit period, under the government guarantee. If you imagine that no satisfactory arrangements are made on exit—I have said that I hope and believe that that will not be the case—the Government will underwrite payment of such awards beyond the UK's departure.

The EIB's loans are made contractually, between the parties. They are not dependent on our being in the European Union, once a loan has been made. I have no reason to believe that that will change. There will be significant expenditure for us in this field. For example, we have the commitments under the Paris Agreement, which will involve a lot of investment in their own right. That is still very valid, and we are very proud to be part of it.

It is quite complicated. The Government have made some undertakings. I know that this is my get-out-of-jail-free card, which I keep using, and I appreciate the Committee's frustration, but it is too early to say what funding we will make available because we do not really know what the position will be. However, we are not standing idly by and ignoring it.

Baroness Sheehan: That is right. The legal position needs to be sorted out, with respect to both the existing loans and future loans.

I have two fairly quick questions. Could you give me any examples of future projects that are in the pipeline—pardon the pun—and could conceivably be adversely affected by Brexit if the EIB were not a key investor? Although the EIB is not always the largest investor, it is very instrumental in leveraging in other finance.

The second question is about the North-South interconnector between Northern Ireland and Ireland. We have heard a couple of witnesses speak about their concerns that the financing for that may be in jeopardy.

Richard Harrington: Your first question was about what particular loans might be endangered. May I write to the Committee on that?

The Chairman: You are very welcome to do that.

Richard Harrington: The procedure may be for me to write via the Lord Chairman. Whatever it is, I will be very happy to answer the question. It is quite detailed, so I would rather not say it off the cuff.

While you were asking your second question, on the island of Ireland situation, I was trying to think of examples for your first question, if you will excuse me. I think that it was about the SEM—the Single Energy Market—between Northern Ireland and southern Ireland, and any concerns that there may be.

The Chairman: We will come on to the broader Ireland issue in the next question.

Richard Harrington: I thought that that was the Baroness's question. I am sorry.

Baroness Sheehan: It was connected with that.

The Chairman: It was specifically about investment in the interconnector, was it not?

Baroness Sheehan: In the North-South interconnector.

Richard Harrington: I am very happy to restrict the answer to that.

Dan Monzani: There is not a lot that I can say, other than that it has been identified as a project of common interest. It is currently going through the planning stages. I think that it has received planning permission in the Republic of Ireland. It is awaiting planning permission in the North. Everyone recognises that it is an important piece of infrastructure. Hopefully, it will proceed, as planned, along those lines.

Earl of Stair: Can I turn to the island of Ireland, please?

The Chairman: I apologise; I have moved right to Ireland. I am sorry for cutting you up, but we need to talk about research first.

Q60 **Lord Selkirk of Douglas:** I should mention that I have an interest in a small family company and at least one wind turbine.

What steps will you take to ensure that the United Kingdom can continue to participate in energy research projects with the EU, particularly to maintain its leadership role in nuclear research? The background to this question is that the Institute of Physics has noted the importance of keeping access to European research reactors, given that the United Kingdom does not have any of its own. In January, the Prime Minister stated her intention to seek "agreement to continue to collaborate with our European partners on major science, research, and technology initiatives". I have the impression that, in nuclear research, we have very advanced research facilities as it is. What steps forward can the Government usefully take, bearing those background factors in mind?

Richard Harrington: I will ask Katrina to answer that, as she has not been involved yet. I will pick it up at the end, if I may.

Katrina McLeay: That is quite okay. I can be involved as much or as little as is needed.

It is very valuable to raise the point about nuclear research. In a paper that was published on 6 September, it was highlighted as one of the four priority areas for discussion in the future partnership. As we have to keep saying, it is a subject for the negotiations, but it is a very high-priority issue when it comes to looking at what our future relationship with the European Union will be. Obviously, we have a groundbreaking facility here, in Culham. The Government have signalled their willingness to maintain nuclear research collaboration with European partners after we leave. They have done that by committing to underwrite UK funding of the JET project in Culham.

As the Minister has said on a number of issues, this is something that we will have to discuss with our European partners. However, it is of great importance to us and is something we are putting a lot of weight on in preparing for the negotiations.

The Chairman: You have made a specific offer on Culham, have you not?

Katrina McLeay: Yes. We have made a specific offer to underwrite the funding of JET.

The Chairman: Has there been any reaction to that?

Richard Harrington: It has received a lot of support within the industry. The Members of Parliament local to the facility lobbied me very extensively, and the Secretary of State has made it very clear that we are underwriting it. It is absolutely business as usual. We would have to, but we want to.

Lord Krebs: Does that underwriting have a time limit on it?

Katrina McLeay: Yes. It is until the end of 2020.

Richard Harrington: That was the original arrangement—until the end of 2020. It is not shortening a period for which they had been promised EU funding.

Lord Krebs: I assume that, had we stayed in the European Union, the default assumption would have been that there would be continued EU funding. What is the default assumption?

Richard Harrington: The default assumption is exactly the same. We moved our position to align it with what had been pre-arranged in the European Union. We are not saying that we are not going to do anything afterwards, but that is their current arrangement.

Lord Krebs: We will be outside the European Union then. If there is no European Union funding, is the default assumption that we will continue to fund it post 2020?

Richard Harrington: Yes. I think that it is fair to say that.

Duke of Montrose: Lord Selkirk mentioned the concern of the Institute

of Physics, about physics research and so on. Do the Government take a particular view on that?

The Chairman: We are looking at the general role of fundamental research.

Duke of Montrose: We rely on them entirely at this point, apparently.

Katrina McLeay: My focus is on the nuclear side, of which the physics is part. I do not want to stray too much into the territory of my wider research colleagues. As we have said, this is something that is of specific concern, to make sure that we still have access to facilities and European expertise, and vice versa.

Richard Harrington: From a broader research view, it is clearly our intention to agree a far-reaching science and innovation agreement with the EU. We want the framework for future collaboration that we have now. We hope to have a full and open discussion about it, when we can. We want UK businesses and universities to get involved in bidding for competitive EU funds, while we are still a member of the EU, and want to work with the Commission to ensure payment when the funds are awarded. We do not want stops and starts, hiccups and things of that sort. While we are still a member of the EU, we remain a fully paid-up Member State and have all the rights and obligations that come under that, including, of course, on science. Remember, we are a top five collaboration partner for each of the other 27 Member States. We are regarded as a world leader in science and research. We do not want things to change at all.

The Chairman: I do not want to put words in your mouth, but it seemed to me that the Government's biggest priority post Brexit was to remain a very strong partner in research and development and programmes like Horizon 2020. However, it is not for me to say that.

Richard Harrington: I could not have put it better myself, Lord Teverson.

Lord Selkirk of Douglas: I have a very brief question. Can absolutely top priority be given to safety considerations, against the background of both Chernobyl and Fukushima? I recall, as a student, the Atoms for Peace campaign. If the policy can be presented in a really positive way, with the highest possible priority given to safety—

The Chairman: Perhaps we can discuss that when we come on to Euratom and the safeguarding authority. However, if you want to respond, Minister, please do.

Richard Harrington: I make it clear to Lord Selkirk that Euratom is to do with safeguards—basically, non-proliferation. The safety is dealt with separately and will not change in the slightest. The current regulatory regime will remain.

The Chairman: That is useful. Let us move on to Ireland.

Q61 Earl of Stair: On the island of Ireland, we have a very interesting situation. We have the North-South connector and the United Kingdom/Ireland connector, all linked up by a Single Energy Market. The Government have stated that, in the future, we ought to facilitate the continuation of a Single Electricity Market. What is your assessment of the difficulties in maintaining the Single Energy Market on the island of Ireland? How do you intend to address them?

Richard Harrington: Thank you for that question. As you said very clearly, the Government had a position paper in August that said exactly that—that we want things to continue. Whether we are in the EU or not in the EU, it is in the interests of both Northern Ireland and the Republic of Ireland to continue a shared electricity system. Politically, over there as well as here, there is cross-party agreement across the island of Ireland that the Single Electricity Market should continue. Even the European Parliament agrees with our Government that it is unique, effective and a workable solution that is needed for Northern Ireland. I look forward to discussions in the weeks and months ahead.

We are held up in sorting this out only by the progress of the general talks in Europe. I fully expect the position to be clarified very soon. We have talked about the visit to National Grid in Wokingham. That is what they have on the island of Ireland. There is one supply market. It is perfectly possible to say that there would be two supply markets, but it is also possible to have different ones in Yorkshire and Lancashire or Cornwall and Devon—neither of which is going to happen. I am certain that, as the Government believe, this can be sorted out very soon. It would not be in the interests of either party, so I am sure that it will be sorted out. It is the Government's policy to do so. We have not picked up anything to the contrary. It is all generally to do with the progress of the talks. If I could list all the things—as we all could—from the most difficult to the easiest, this would be much nearer to the latter than to the former.

Dan Monzani: This is an area that we have prioritised. You will have seen that we put out principles on it in August—quite early in the process. North-South co-operation between Northern Ireland and the Republic of Ireland was an important part of the Good Friday Agreement. The SEM emerged very much from those principles and collaborative arrangements. We see it as of the first order of importance and are making a lot of efforts to maintain it. It is part of the negotiating process, but Ireland, and the issues peculiar to Ireland, have been part of the first round of the withdrawal discussions with the European Union. You should see, therefore, that it recognises—as the Republic of Ireland does, naturally—the early importance of these issues. We are hoping to make progress, as the Minister said.

The Chairman: Can it survive our being out of the Customs Union? Does that make any difference to the Single Electricity Market in Ireland?

Dan Monzani: I do not think that the Customs Union is particularly relevant. We need to make sure that the market can continue to operate

on a unified basis, but that can be done with respect to the Single Electricity Market itself.

The Chairman: Can we move on to Euratom?

Q62 **Viscount Hanworth:** What are the key issues in contention between the EU and the UK in respect of our withdrawal from Euratom? I believe that there are issues over the ownership of fissile material and the matter of waste that may have been generated in the UK but that is held elsewhere. Can you elaborate on the full range of issues that are arising? The question is for you, Katrina. Did you hear any of that?

Katrina McLeay: As I am sure you are all aware, the first round of negotiations is the separation part. As you rightly point out, the key issues we have been looking at there are around the ownership of materials and equipment, and providing legal certainty about contracts that are in place. Those negotiations have been positive, broadly speaking. At this point, I do not necessarily want to say exactly what on the table has been and has not been agreed. I do not think that that is appropriate at this stage, when we are still in the process of concluding that negotiation, but the issues that you have identified are the ones that we have been discussing. A lot of the other issues that have been raised today, around freedom of movement and, potentially, other issues that affect Euratom, are things that we see being discussed in the next phase—in the future discussions. The very specific issues around ownership are the ones that are being dealt with in the separation agreement, but we are still finalising that eventual position.

Viscount Hanworth: I believe that the ONR has admitted that it will have difficulty in the short run, at least, in maintaining European standards of safeguarding. Could you comment on that?

Katrina McLeay: We are working very closely with the ONR to ensure that we meet our international obligations when we leave. We have made a commitment to reach Euratom standards.

Viscount Hanworth: We have heard that there are doubts about whether we will reach those standards within the available time. That is what I want you to comment on. Are you confident, or do you recognise the difficulties?

Katrina McLeay: I recognise the difficulties with the project of setting up a state system of accountancy and control for nuclear materials. It would not be right to say that this is a very easy thing that the ONR can do in a week. However, we are working with it and it has made quite a lot of progress so far. You have heard from it already, so you know what its views are. It is making progress on recruiting staff and developing its IT system. We will continue to work with it. I do not want to say at this stage that it definitely will or definitely will not reach a Euratom—

Viscount Hanworth: I apologise for this, but I am not reassured.

Richard Harrington: Perhaps I shall be a little more direct than Katrina has been. We are rushing this Bill through as quickly as we can, with support, to make sure that the safeguards regime is in place—and in place very quickly—when we leave Euratom. We are providing the money necessary to do it—set-up costs of approximately £10 million. That is for the IT platform and related things. We are negotiating with Euratom itself about the purchase and transfer of the kit that goes with it. The money is not the relevant thing; I am sure that that can easily be agreed. The issue is the legal process. Recruitment is beginning, to recruit the necessary inspectors and qualified people to do it.

We have no choice but to do this, because we are leaving Euratom, as we know. Perhaps this is where I can be a little more direct than Katrina. The reason that we are doing this is precisely so that there is no drop whatsoever in the standards of safeguards.

Viscount Hanworth: You say that there is no choice, but it was precisely our choice to leave Euratom, which was not necessary.

Richard Harrington: I was not commenting on that; I was talking about the position once that decision was made. I agree that some lawyers say some things and some say others. I have read it all, of course. The point that I was making was that, once that decision was made, we had to prepare properly to make sure that this country is not left in a position where—absurdly—it would be like North Korea, without any form of safeguards regime. We took the decision not to go for a “lite” version, as the Americans would say, of Euratom, but to go for the full safeguarding regime. We have every reason to believe that we can get that done in the time necessary. That is the reason why I asked for the first slot for Second Reading of this Bill. We have the Bill Committee next week. It will come over to your Lordships quite soon. In fact, I will meet interested Members of the House of Lords this afternoon to discuss it.

The Chairman: A number of us will probably be there, Minister.

Viscount Hanworth: If we cannot achieve it in the time allowed, may we not retain some of the pre-existing arrangements?

Richard Harrington: I am sure that if we had to we might, but I do not think that it will be necessary.

Viscount Hanworth: You are confident, in spite of what we have heard from the ONR, that all this can be done in the available time.

Richard Harrington: We are working with it very closely in order to do so. I cannot predict exactly, but that is the whole reason why we are doing what we are doing so quickly.

Viscount Hanworth: We are seeking reassurance, but we are not getting it, if I may say so.

Richard Harrington: I thought that I was giving you suitable reassurance.

Viscount Hanworth: It does not sound very reassuring. I am sorry—I must stop being so contentious.

Richard Harrington: I want it to be reassuring. I wanted to say that that is our clear intention. That is why we are doing what we are doing. One can pick one's clichés out of the cliché bag on this kind of thing—cliff edge is the current one. We have no intention of letting that happen.

The Chairman: At the other end, as well as at this end, people often talk about potential associate membership of Euratom as being on the agenda. Is that something that is just talk, or is it possible?

Richard Harrington: There is no legal definition of associate membership. There are two current, but different, associate membership arrangements, with Switzerland and, I believe—I will be corrected if I am wrong—with Ukraine. However, they are much more limited. They are limited to research and development, important though that is. It is not as if there is a pre-prepared associate membership option that we could elect to take. I cannot say directly that we would seek associate membership, because there is no definition of that. However, what we can seek—and are seeking—is an agreement that is as close as possible. Again, there is a mutuality of interest in doing that.

The Chairman: Duke of Montrose, we have gone through the first bit of the question, but we have certainly not gone through the second bit. Could you do that?

Q63 **Duke of Montrose:** Indeed. First, I declare my interest with an estate in Scotland. We have a small, 500-kilowatt hydro generator going there.

We have already discussed the question of the safeguards regime, which was the nub of the question that I was going to ask. How will the Government address the need for the ONR to be an independent body in order to be recognised by the IAEA? Are you confident that the UK's post-Brexit safeguards will deliver to existing Euratom standards?

Richard Harrington: The ONR is already recognised in the other things that it does. I know that you know that, because of the evidence that you have had. The ONR currently exists—it just does not have the safeguards umbrella within it.

Duke of Montrose: But it is not independent of government. Is that not the issue?

Richard Harrington: It is.

Katrina McLeay: It is an independent regulator under the Energy Act 2013.

Duke of Montrose: To an adequate standard for the IAEA's purposes?

Richard Harrington: Yes.

Katrina McLeay: Yes. The IAEA will continue to do its own international verification here. It is not that the whole system will be run by the ONR. The IAEA will still come and inspect our sites.

Baroness Sheehan: I will follow on from the Duke of Montrose's line of questioning. The independence issue arises because at the moment the UK Government's Department for Work and Pensions has oversight of the ONR, which implies that it is not independent. Is that right?

Richard Harrington: I think that I am right in saying that these independent bodies are responsible to a government department. For example, I remember that, when I was at the DWP in a different context, the Health and Safety Executive came under the DWP's umbrella. That is to avoid conflicts with government, so that civil servants dealing with the day-to-day business of the sector do not have any say in what goes on in relation to a regulator.

In this case, the ONR is structured as an independent body—as many regulators are. It is not a wholly owned subsidiary of BEIS or any other department. It was set up specifically so that people would know that it was an independent regulator. For example, in another context to do with energy, we deal with Ofgem. We deal with the Pensions Regulator. There are lots of regulators, but I do not think that anyone would say that the Government control them. In fact, in my previous dealings with the Pensions Regulator, many would say that the contrary was true. That happens; it is why they are set up as independent bodies. I do not think that that is an issue, because the ONR has its credibility in all the other things that it currently does. We are slotting in an additional regulatory function under that existing independent umbrella. I refer, of course, to the safeguards function that we are discussing in relation to Euratom.

Duke of Montrose: You said that, from our point of view, we think of it as independent in every regard. You may have to go to Europe to make sure that it agrees and does not question whether there is too much government oversight.

Richard Harrington: That has not been brought to our attention.

Katrina McLeay: As far as we are aware, the International Atomic Energy Agency is happy for the ONR to fulfil the role of the SSAC. We continue to discuss exactly how that will work.

Lord Curry of Kirkharle: It is not just about this particular regulator—this applies to a lot of regulators when we leave the European Union. The extent to which the regulator is independent and can hold government to account is the issue, in my view. The current oversight sits in the European Union. Will it require greater powers in order to fulfil that function?

Richard Harrington: No. On the safeguarding regime, we hope to replicate the powers that Euratom has, to do with safeguards in the UK. I do not think that there is an issue beyond that. We have no intention of

building a less powerful or less effective form of regulatory regime—or, indeed, one that is directly controlled by government.

Lord Curry of Kirkharle: No—quite the reverse. The independence from government is the real issue.

Richard Harrington: I suppose that it is similar to one's view of how accountable Euratom is to the European Commission, and vice versa. Euratom has built an excellent reputation for independence. We hope to do exactly the same.

Katrina McLeay: Let us think about how the state system works. Currently, the site duty holders report their safeguards information to Euratom. Euratom reports it, on behalf of the Union, to the IAEA. Other people are not involved in that chain. The same would be the case here. The reports would be with the ONR, as we are still discussing. In theory, the reports would go to it, instead of Euratom. It would then send them on to the IAEA. BEIS would not look at any of that material, unless something was brought to our attention. We would not be looking at it, in some way, and having a view on it.

The Chairman: Lord Rooker is normally our champion in this area. Unfortunately, he could not be here today.

Richard Harrington: Lord Teverson, please pass this on to Lord Rooker. If he would like to meet me separately, I would be delighted to do so.

The Chairman: The only trouble is that he might well take you up on that.

Richard Harrington: He would be very welcome to do so.

The Chairman: I would leave a large gap in your diary.

Richard Harrington: He would not be unique in that context.

The Chairman: Of course, he is an experienced Minister himself.

Richard Harrington: Exactly.

Viscount Ullswater: Before we come on to the last question, there is one bit of the Duke of Montrose's question that has not really been answered. It is the very last sentence: in what ways does the Euratom safeguards regime exceed that required by the IAEA?

Katrina McLeay: The IAEA has two different approaches. One is for non-nuclear weapons states, where it has a greater requirement for reporting and assurance. As a weapons state, we have made a voluntary commitment to put our materials under safeguards, so the IAEA's expectation is less than it would be if we were a non-weapons state. Euratom carries out assurance activity—checking the reporting and so on—to what we think of as roughly what would be appropriate for a non-nuclear weapons state. It is perhaps not exactly equivalent, but it is at that sort of level.

Q64 The Chairman: We will come on to Switzerland. Last week, we had a teleconference with a witness who was the Ambassador for the Swiss on energy. To sum up his message, he described to us very clearly how, in respect of interconnectors and everything else, Switzerland was at the heart of the European energy system, but said that its influence on anything was pretty near zero, except where it had a unique selling point and managed to get a bit of leverage—specifically, with one or two of the member states around it. One of them was Germany. I have forgotten the other, but the options are limited: I presume that it was France. Despite everything that we would agree with, that there is mutual benefit in all sorts of areas of co-operation, so why disturb that? However, the message came through that that was not how it worked. Do you think that we are in a similar situation? What particular leverage do you think we have as a nation in the Internal Energy Market and how Europe will develop its energy markets into the future?

Dan Monzani: I cannot comment too deeply on other countries, although the size, geographical location and natural resources that different countries have affect their relationships cross-border. The Swiss have quite a lot of hydropower, which is useful to their neighbours. One of the things that we have is the fact that we already have the same rules and regulations as other members of the IEM, and 20 years or more of experience of influencing and helping to design those rules in Europe. I am talking not just about successive UK Governments, but about the regulator and the system operator, National Grid, which is very highly respected in the technical groups that we have mentioned—ENTSOG and ENTSO-E. Ofgem is similarly respected in ACER and in other ways. I would expect us to be influential—partly because we have been for 20 years—by weight of our thought leadership and our leadership in the early liberalisation of our markets.

We are also a large system and are very important partners for the interconnector projects. Those are not going ahead simply because we want them to, but because they offer benefits to neighbours—particularly Ireland, of course, which will remain a member state. We have talked at some length already about the importance of continuing the SEM there and about our close relationship with Ireland.

The Chairman: Okay; right.

Dan Monzani: As we touched on earlier, when it comes to the exact mechanisms for how that influence is exercised, we should look for the best routes. In some areas, as with the Norwegians, those may be membership, associate membership or observer status. They may simply be the influence that we can exert through the expertise in the regulator and the system operator.

Baroness Sheehan: This is just a thought that occurred to me, but I will put it to you anyway. An interconnector between the Republic of Ireland and France is in the planning stage. Would that have any impact on what you have just said, as regards Ireland's dependency on the UK?

Dan Monzani: It is quite early in the planning stages. It is quite a long interconnector, so I imagine that it is a few years off. However, I am sure that it is something that would be positive, in the same way that interconnection between our country and other countries is positive. It would also give the island of Ireland a second connection to the IEM.

Baroness Sheehan: But it would reduce its dependency on the UK.

Dan Monzani: We are not seeking to exploit a geographical position to gain leverage. We have set out in our principles that we see it as really important that we try to keep the Single Electricity Market on the island of Ireland and that North-South co-operation remains important.

Richard Harrington: It would still be in the southern Irish interest to remain in a single market. It would make no difference to that.

Baroness Sheehan: Of course.

The Chairman: Minister, do you feel that there are any lessons to be learned from the Swiss or the Norwegian position?

Richard Harrington: I would point to the differences in situation, which Dan has explained very well. Basically, they are threefold. The first is bulk—our size relative to the Swiss and, therefore, our importance to the Single Market. The second is history—the fact that we helped to form it. Thirdly, there is the fact that we are already in it, unlike the Swiss, who are not.

The Chairman: Minister, Katrina McLeay and Dan Monzani, thank you very much for giving us your evidence today.

Richard Harrington: Thank you for having us.