



Select Committee on Economic Affairs

Corrected oral evidence: The Economics of UK Energy Policy

Tuesday 10 January 2017

3.30 pm

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Members present: Lord Hollick (Chairman); Baroness Bowles of Berkhamsted; Lord Burns; Lord Darling of Roulanish; Lord Forsyth of Drumlean; Lord Kerr of Kinlochard; Lord Sharkey; Lord Tugendhat; Lord Turnbull; Baroness Wheatcroft.

Evidence Session No. 10

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Questions 158 - 169

Witnesses

I: Rt Hon Greg Clark MP, Secretary of State for Business, Energy and Industrial Strategy, and Mr Jeremy Pocklington, Director General, Energy and Security, Department for Business, Energy and Industrial Strategy.

Examination of witnesses

Rt Hon Greg Clark MP and Mr Jeremy Pocklington.

Q158 The Chairman: Secretary of State, thank you very much for joining us this afternoon. This is the final public hearing of our inquiry into the energy market. We hope to publish our report towards the end of this month or at the beginning of next month. We have taken quite a lot of evidence from your officials already, so we are very much looking forward to talking about policy matters today.

Clearly, UK energy policy rests on three pillars: security, affordability and decarbonisation. We have heard throughout our inquiry that in respect of at least two of them there are serious concerns. On affordability, whether you are a domestic or a heavy industrial user, we seem to be at or near the top of the price table compared with other countries in Europe, our main competitors, for instance.

As far as security is concerned, a number of organisations and individuals have raised serious concerns about the capacity gap; one of the expressions that came up was “sailing too close to the wind”. There are growing concerns about security, particularly with the development of nuclear energy, which we will come to later, and how that is going to be backed up. We seem to be falling short on two of the three objectives. You are, if I may put it this way, a new broom, so you can afford to take a fresh look. In doing so, do you feel there is a need to up-weight security and affordability—because, obviously, decarbonisation is enshrined in legislation?

Greg Clark: Quite.

The Chairman: Quite a few of the witnesses who have spoken to us are concerned that the others are not given the same salience, yet they are vital to the success of our economy. Do you think there is a case for rebalancing the three-legged stool?

Greg Clark: I do. Before I answer the question, could I say a couple of things? The first is to thank the Committee for its patience in agreeing to see me after rather than before Christmas. I know that has slightly delayed the conclusion of your inquiry, but I am very grateful; it is much appreciated.

As you describe me as a new broom, can I say that I welcome the inquiry you have undertaken? As you might imagine, I have read with great interest the transcripts of the evidence you have taken so far. For a number of reasons, it is a timely inquiry and I hope it can be very influential. The creation of the new department bringing together the former business department and the energy department is a big opportunity as part of the same determination of some of the questions you have raised, which I will go on to talk about.

The commitment to publish and develop an industrial strategy for the country has big implications, and raises important questions for future

energy policy. You have taken evidence from people who referred to the CMA report. I am considering the recommendations that have been made there. I know you will be able to reflect on it as well, so I await your report and will read it with great interest, and perhaps you will have me back so that I can tell you how we have responded to your recommendations.

Finally, perhaps I could introduce my colleague. Jeremy Pocklington is the director general for energy in my department. He was the acting Permanent Secretary of DECC. I say "introduce", but I am conscious that in his Whitehall career he probably worked for several members of this Committee.

In answer to your question, Lord Hollick, this has been described as the trilemma, as you know. I think all three pillars continue to be very relevant. Security is the sine qua non. That has to be the first duty of any Secretary of State who is responsible for energy. I have seen the evidence you have taken, and you will know that Ofgem and the National Grid expressed confidence to me, as they have to you, that the position of our energy security is strong and robust. This year it is a bit better than last year, and there are various things that sustain it, which I will come on to talk about, such as the capacity market.

In the balance between the three components of the trilemma, we should add a fourth, which is that increasingly we should consider the industrial implications of energy policy, perhaps in a way that has not been considered before, as regards both the cost of energy to industry and the industrial opportunities that arise from decisions we make on energy policy. That has perhaps not had the explicit recognition it might deserve. I think we should consider that, and it is certainly something I intend to consider in my tenure in the role.

On the balance between these matters, I agree with what you said, Chairman. The decarbonisation aspect is laid down in statute. The Climate Change Act was passed in 2008 and is now very familiar. There is no ambiguity about that. Some of the questions about the costs of energy are pertinent. That is one of the aspects that I and my colleagues are and will be spending a lot of time thinking about, as I know from the evidence that you are, too. Security is very important there as well.

On the industrial side, already we are seeing big connections between the decisions we make on energy and real-life industrial effects. Just before Christmas, I was in Hull opening the Siemens wind turbine blade factory there. That has created 1,000 jobs and is a reflection of policy decisions, so it is an important aspect. I do not know whether the Committee's conclusions will reflect on that, but it is something to which I am very alive.

The Chairman: You mentioned the Competition and Markets Authority. In its report in June last year, it said there was "a lack of independent and authoritative assessment of the costs and benefits of different proposed and existing policies, including the trade-offs between different

policy objectives”—the objectives we have just been discussing. Do you think there is a role, possibly for a beefed-up Ofgem to be the kind of independent organisation that can look with a degree of objectivity at the real cost and the trade-offs between these various objectives? One of the most elusive things in our inquiry has been to find facts on which everybody agrees. If we had an independent body responsible for that, it would leave the department free to focus very much on policy rather than at the same time trying to be the overall regulator.

Greg Clark: On the assessment of costs of the impact of a policy, a lot of facts are already out there that always coincide. I think you have drawn attention to some of the differences between, for example, the Committee on Climate Change and energy-intensive users. Obviously, there are institutions of Parliament. The Public Accounts Committee, and the National Audit Office serving it, have reflected on these things. Ofgem is accountable to Parliament rather than to Ministers, so we have a lot of assessment and information out there.

Since the beginning of the Committee’s inquiry, rightly, at my instigation but prompted by the NAO and the PAC, we have been clearer in putting before Parliament the costs of some of the decarbonisation policies. We published a statement of the cost of energy to consumers, so we have done more of that. There is more transparency than there was. That is important and a good thing, but to your particular question—in effect, it is a recommendation by the CMA that Ofgem takes on that role—we have deliberately not yet responded because I want to reflect seriously on all the CMA’s recommendations. I will reflect on it before deciding. You may want to make a recommendation to me on it.

What I would say against the argument put forward, which you summarised very succinctly, is that I would not want this very important regulator not to be clearly focused on its function to serve the consumer interest and to be, as it were, a participant in the debate. It tends to be the case that regulators focus on their economic regulation function rather than being, as the OBR is, a separately established commentator on and evaluator of policy. That is a departure, but I will very much reflect on the recommendation and whatever the Committee has to say about it.

Q159 **Lord Forsyth of Drumlean:** In November 2015, your predecessor, Amber Rudd, in a speech on a “new direction for UK energy policy” said, “We want a consumer-led, competition focused energy system that has energy security at the heart of it and delivers for families and businesses. We want to see a competitive electricity market, with government out of the way as much as possible, by 2025”. Do you endorse that?

Greg Clark: Yes; I endorse the vision of moving towards an energy market that can serve consumers in a competitive way with a minimum of government intervention.

Lord Forsyth of Drumlean: By 2025.

Greg Clark: I will need to consider when we can reach that point. One of the reasons is that there will always be a role for competition policy. Ofgem is the economic regulator and this has been a market in which its functions have been necessary. Securing the other aspects of our energy objectives, in some cases laid down in statute, has required government intervention. Any Conservative would aspire to move towards, and direct policy towards, that ultimate outcome, but at this stage in my tenure I would not like to comment on whether 2025 is the time we can do that.

Lord Forsyth of Drumlean: You said “any Conservative”. A million years ago, when I was involved in government and we privatised electricity and gas, we thought we were creating a market system. We now seem to have almost a Stalinist system where the whole thing is controlled by government. If you endorse the objective, if not the timetable, could you say how you are going to achieve it?

Greg Clark: All Administrations who prefer market solutions and believe in markets have typically believed in anti-trust policy and competition policy and have not regarded it as possible to take one’s eye completely off that. The state of competition and the development of the market is in flux, and one needs to be advised as to whether the market is, as a matter of fact, competitive enough for the role of the state to diminish.

Some of the particular policy objectives mandated by Parliament, many of which occurred after your time in government, have required a policy response. The decarbonisation agenda with legally binding targets clearly required action; the legislation requires policies to be adopted in order to meet them. We will be advised by people with a statutory role, but others as well, as to whether the interventions and policies are, as it were, steaming ahead and can deliver the requirements without further need for government intervention.

What are the types of policies we are talking about? Clearly, the remit of Ofgem in having oversight of the competitive dynamics of the economic aspect of the market is important. On security of supply, we have put in place, I think correctly, a series of capacity market auctions that address those particular public policy concerns. They are pro-market rather than the state owning and running some supplementary capacity, which might be an alternative variant. We obviously have decisions to make, and we have made decisions. I am sure we will talk about some aspects of the energy mix, nuclear in particular, that have always involved a degree of government involvement, at least in the initial stages. Clearly, that follows from Hinkley, but my judgment has been that it is right to have a continuing role for nuclear, so it has required that response. But generally the institutions we have should be there for a particular policy purpose and limited to the time they are required for that purpose.

Lord Forsyth of Drumlean: Dermot Nolan, chief executive of Ofgem, told us that the energy market was less competitive than it was 15 years ago, and many witnesses, as you will have read, told us that the best solution in line with your objective is a technologically neutral competitive auction against a fixed carbon price. Is that the ultimate goal, and, if it is

not, why not?

Greg Clark: That is not a conclusion I have reached. It would be premature for me to conclude that, and I would be interested to hear the views of the Committee.

Lord Forsyth of Drumlean: What would be the argument against it?

Greg Clark: As was expressed in the Chairman's introductory question, there are a number of different policy objectives. There is security of supply, for which we have capacity auctions. A related dimension of security of supply is a positive preference for diversity. Part of the argument for nuclear is to have some diversity in the mix. When it comes to the pricing of the carbon aspect, over time I would like to get to a position where the investments can follow the market signals rather than be, as it were, explicitly determined—but we have a number of different policy objectives at the outset.

Mr Jeremy Pocklington: It would be helpful to separate different energy markets, particularly different electricity markets. We need to consider different markets in a slightly different way. We have been talking about introducing market-based mechanisms into the different markets. The most obvious example is a technology-neutral capacity market and any technology able to provide the guaranteed baseload, particularly for the winter peaks.

Similarly, in the renewables space we have moved to using a market-based mechanism to bring forward renewables, particularly offshore wind. We are in the process of ending demand-led schemes such as the renewables obligation, which was an uncapped demand-led scheme. We have a scheme for smaller technologies such as rooftop solar feed-in tariffs. That is now a capped scheme with a system of digression that reduces the support for small-scale renewables. That scheme ends in a couple of years' time. It is a system that uses market-based mechanisms for the different markets.

Lord Forsyth of Drumlean: I understand that, and I appreciate the difficulty. Perhaps I am being thick, but I am finding it difficult to see how all these schemes and the broad objectives fit with the statement that, "We want to see a competitive electricity market, with government out of the way as much as possible, by 2025"—or whenever the date is.

Greg Clark: Given the opportunities and the requirements, with a new department, in the context of an industrial strategy that recognises the importance of energy costs as well as energy security and climate change, it is right to reflect on both the institutions and the policies and, not least through the evidence of the people you have heard from, to set that out over the months ahead.

Q160 **Lord Turnbull:** Can I come back to the question of the trilemma and the department? I always thought that the creation of DECC was a mistake. I think it was done simply to provide an extra Cabinet seat for one of

Gordon Brown's favourites, so I welcome its return to BEIS. You described it as a big opportunity, but it will be an opportunity only if, as well as a change in the structure, there is a change in some of the thinking that underlies it. It seems to me that the whole thing is based on a serious flaw in the machinery of government. There are the three objectives, and the use of the word "trilemma" implies that you have to try to optimise some solution.

In effect, what happens is that one of the objectives, decarbonisation, has a mass of safeguards and supports. It has an Act—unique in the world. For a time it had a department of its own. It has the Committee on Climate Change, which is a very single-minded body; I will not go through all its strategic priorities, but they are all about the targets. There is no mention whatever in those targets of affordability, resilience and competitiveness.

That body also has a right of audience with Parliament. Who has the equivalent safeguards for industry costs or for the costs placed on households? The answer is no one—and at the moment I do not see that changing. Therefore, when you said in a recent speech that "The consumer is still at the front of my mind in every decision we make", I do not believe that is the case in how the department is working. You are still inheriting decarbonisation first, and the rest fit in as best they can.

Greg Clark: It is early days to make that assessment. Institutionally, bringing the two departments together and, as I think Jeremy would reflect, as the former acting Permanent Secretary of the old department, having colleagues working together rather than sending letters to each other is the right way to proceed with these things. In my view, the creation of DECC was a reasonable thing at a time when the whole debate on the legislative framework probably needed a focus. That is now in statute, so the implications for costs and business opportunities are there.

Obviously, Ofgem has a role for consumers, but so do I. As the Committee knows, energy costs, whether to business or domestic consumers, have long been, quite rightly, an area of significant public interest, and I am certain that will continue to be the case. Some of the other opportunities for new thinking, as you might say, Lord Turnbull, come from some of the adjacencies that can be exploited—for example, energy storage. You have taken evidence from the National Grid and others about the potential for greater interactivity of energy systems. That is a fascinating area to which some of our industrial capability and research in our universities and research institutions can be very well aligned and thought about, together with the future design of our energy system. In the Autumn Statement, an early dividend of that approach was that we were able to make a commitment, in addition to the science and research budget, to look at energy storage and linkages with, for example, electric vehicles and the work done in the automotive sector. There are a lot of opportunities.

Lord Turnbull: That is precisely why I think it is a good idea. This is not

a new department; you have gone back to the old one. I think it is an improvement, but every five years or so we get a new set of carbon objectives. I do not think there has been a single case when they have ever been varied. The idea that you can vary the profile does not seem to have arisen. There is a tendency to push for early decarbonisation and adopt technologies that are not yet capable of sustaining it. Proceeding a bit more slowly with those objectives and spending less money on subsidy and more on research would have been a better approach.

Greg Clark: We are obliged to achieve the targets. As to the best way of doing it, research and development have big opportunities and possibilities, and we ought to get there in the most cost-effective way possible, especially if, as I said to the Chairman, there is the further dimension of extending some of the interesting and, in some cases, world-leading research done in universities and scientific institutions in this country.

Lord Burns: If I may, I will press you slightly on the three objectives, as I have found this quite difficult to follow during the weeks we have been having these sessions. People talk about the three objectives and the question of balancing, and even the word "trilemma" indicates that somehow or other they may have equal weight, but it seems to me inevitable that the overriding aim is security of supply. I cannot believe there could be circumstances when the lights went out but we said, "But we have done rather well on our carbonisation objective".

Greg Clark: I completely agree.

Lord Burns: One of them is an overriding objective that has to be considered, and there are two others that we also wish in a sense to have taken into account: reaching the decarbonisation objective and affordability. I think Lord Turnbull is suggesting that, given the way things are currently structured, decarbonisation inevitably gets itself ahead of the affordability objective, but I want to make clear that there are no great trade-offs between the three objectives. One is an overriding objective, which is security of supply. We then wish to meet, as far as we can, the other two objectives, and you have now added an extra one, which is getting a worthwhile strategic business development out of them.

Greg Clark: To extend my comment on that, I completely agree with you that security of supply is indispensable. We need that. I regard the best way of approaching the others not so much as a series of trade-offs but as an invitation to see how we can solve them as simultaneous equations rather than separate ones where we regard them as inevitably compromising on one rather than the other. That can be hard. The easiest thing is to say, "We will do a bit more of this and a bit less of that". It seems to me that innovation in policy thinking, and literally in technological innovation, should push to secure our objectives in a way that has high regard to the current and future costs of energy and the fourth aspect that I have introduced, which is to consider whether there might be scientific and industrial opportunities for us.

If we can do that—it is hard, and that is why I say this inquiry, among others, is important—I would rather push thinking and bring in people, which again the creation of the department affords the opportunity to do, who may not have considered themselves to be energy buffs, but who may have experience of technological innovation in other fields, linking sectors together, to see whether we can do it in a more creative way than simply saying, “How much do you rate climate change over energy costs?”

Q161 Lord Sharkey: Can I ask about the targets that you are obliged to achieve? What do you see as the merit of the five-yearly carbon budgets mandating a fixed path for emissions reduction? Does it not make achieving the 2050 targets more expensive than it needs to be? Is there not a case for greater flexibility in how the target is reached? I think I am right in saying that you have the power to amend the percentage reduction under certain circumstances.

Greg Clark: On the 2050 targets, it is easy to have a very long-term target, decide that tomorrow will come and you will attend to it in the long term, and suddenly the long term arrives. I do not think it is unreasonable to break it down into required progress towards that, if you are to be serious about meeting it. The other merit of having particular carbon budgets for defined periods is that it sends a signal to industry, both the energy industry and energy users, as to what is expected and required so they can plan ahead. Perhaps Siemens is a case in point. If you know that the Government are going to stick by what is set out for the short or medium term, you can justify an investment that might not be made if the future seems uncertain.

I have inherited the target, which is very clear, and the approach of the budgets. The response from industry when we introduced and took through Parliament the fifth carbon budget was pretty positive. I have read the evidence but I cannot remember whether you took evidence on that. Not just the usual suspects, but the engineering employers, for example, who represent some of the energy-intensive users, commended the adoption of the fifth carbon budget for the purpose of knowing what the trajectory would be so that industry could plan ahead.

Lord Sharkey: Do you not think that doing it the way it is now mandated is creating more expense than is otherwise necessary? Is it not a very expensive way of getting where you want to be? I think it is correct that you have the power to vary the reductions either for 2020 or 2050.

Greg Clark: As regards the expense, it seems to me that you should do it in the most cost-effective way possible. There is advantage in certainty. If you can plan ahead with certainty in the fifth carbon budget—for 2028 to 2032—it gives some long-term certainty as to what is going to be required, so that, as with any undertaking, the more you can plan ahead for that and anticipate it, the more cost-effective it can be.

Lord Sharkey: To press the point, you have power to amend that

reduction.

Mr Jeremy Pocklington: There are flexibilities within the Climate Change Act that give the Government the ability to bank and borrow between different carbon budget periods. We have not ruled out using those flexibilities. We do not need to take decisions on them at the moment.

Lord Sharkey: Given what you have been saying, Secretary of State, it is hard to see under what circumstances you would choose to exercise those powers.

Greg Clark: I said that we need to pursue and meet the objectives we talked about, one of which is to do things in a cost-effective way and another of which is to encourage and reap the benefits of industrial success. It seems to me that should influence whether we avail ourselves of the flexibilities that Jeremy mentioned.

Baroness Wheatcroft: If when President-elect Trump takes office he changes US policy on climate change completely, would that be the moment you might consider revisiting our targets?

Greg Clark: As you know, Baroness Wheatcroft, the targets are laid down in legislation. We are obliged to plan for them. I do not detect any prospect or appetite among the majority of parliamentarians to change that, so it would be wrong to signal that when there is no prospect or appetite for it. Certainty requires meeting our objectives in a way that is cost-effective and takes the opportunities that we have.

Baroness Wheatcroft: But the Prime Minister has been very vocal about bringing down the cost of energy for users, intimating that it is something she might want to do quite quickly. How is it going to happen?

Greg Clark: Absolutely. Referring to the points I have been making to your colleagues, it is very important as we take decisions on future energy policy to address the question of how we can minimise the cost of decarbonisation. That is absolutely the right objective.

Lord Forsyth of Drumlean: I would like to pick up Lord Sharkey's point. Although this is an imperfect analogy, if you have a 30-year mortgage, when you start your income is lower and you pay less, and as your earning power increases you pay more. On the point about not using the flexibility you have, we have an economy where we want growth and the Prime Minister wants people to pay less for their electricity; and a few moments ago you highlighted the changes that could happen in technology, with storage and so on, which could make it much less expensive. So what is the objection, given that you have a long-term target, to flexing it to take account of the circumstances at the time?

Greg Clark: You need to make these decisions as they arise with each of the budgets. The benefit comes from the example you give of innovation.

Lord Forsyth of Drumlean: But you do not know the future.

Greg Clark: As an example, you can wait for technology to emerge, hoping, perhaps with some confidence, that it will do so further down the road, and then avail yourself of it; or you can note—it seems an entirely reasonable course of action—that not just the UK but most other countries in the world are embarking on an intense programme of decarbonisation and that, if that is the way we and the world are going, we can be active in developing the technologies ourselves, especially if we have industrial competitiveness in some of the sectors. We can be part of the development of those technologies. Some of our energy research institutions are world class. For example, you cannot get better in the world than many of the research bodies at Imperial College, so for us to be leading that and prospectively reaping the benefits seems to me a helpful course of action.

To give an example of that in practice, many people reflect that in the case of onshore wind we were slow to establish a regime and an industry in this country. We became almost exclusively, not totally, an importer of the components and value around onshore wind. On offshore wind, where we have taken a more active position on policy, with some costs up front—you are absolutely right—it has a dividend that we see in Hull at the moment with 1,000 jobs. It is a perfectly reasonable question and analysis as to what advantages are the best, but there is another side to the equation: if things are going to be done and you have the capability to be active, exploiting your assets in this area can have advantages.

Lord Forsyth of Drumlean: It sounds a bit too mercantilist for me, but, leaving that aside, I do not think you have really answered the question that both Lord Turnbull and Lord Sharkey put. What is the reason why, instead of taking a linear approach to the target, it would not be possible to flex it to take account of economic circumstances and the possibility of future technological development?

Greg Clark: For the future, in each case you weigh up the advantages. The budgets set by my predecessors were no doubt based on their assessment at the time, on the advice of bodies such as the Committee on Climate Change.

Mr Jeremy Pocklington: I completely understand the point you are making, Lord Forsyth, and the importance of innovation in driving down the costs of decarbonisation. One additional factor that may be worth bearing in mind is that, so far, our focus in government interventions on decarbonising the economy has been on the sectors that are probably in the long term the easier ones to decarbonise, particularly the power sector. That has been the focus to date. Decarbonising heat and transport in the 2030s and 2040s will be more challenging, so part of the issue is sequencing between the different sectors.

Lord Kerr of Kinlochard: On the point about using the ability to flex, I am struck by your emphasis on industrial strategy. I was chairman of Imperial and I thank you for what you said about Imperial. I am not convinced that it is always best to be first mover. The Germans were the innovators in solar technology and the German industry has been wiped

out by the Chinese. The lumpen labour heresy has an equivalent here if you look at British industry. I hear what you say about Siemens building huge aluminium blades in Hull. We do not have an aluminium industry because the price of power in this country is so high. There is a tiny aluminium industry in Scotland, but basically the price of our power has been too high. Would it not have been better to let somebody else work on wind farm design and come in when the price came down? I am a director of a power company, so I say this with mixed feelings. I am sure that the price of offshore wind will come down; it is coming down, but I think it would have come down anyway even if we had not been following the policies we have been following.

Looking at the three-legged stool, it seems to me that the one aspect we have not talked about today is the one that really has been left out: keeping down the costs. The lights have not gone out, but the costs have gone up quite strikingly compared with the competition.

Greg Clark: You make a reasonably compelling case, Lord Kerr, and that is why one needs to consider these matters in the context of not just energy policy per se but its consequences both for users and for companies and firms that might be expanding in the area, and what is the right solution case by case. I note that we missed the boat on onshore wind, but we have been able to take some advantage from offshore wind. That is not to say one does it in every area where one perhaps does not have the beginnings, or even more, of a prospectively competitive industry, but you can lose an opportunity.

Your inquiry is on energy, but as the Economic Affairs Committee you obviously take an interest in British industry generally, and you will know that the automotive sector has been one of the success stories of recent decades. My conversations with many of the major automotive investors tell me very directly that our programme of research and innovation—often in universities and research institutions, sometimes in industry institutions—in battery storage and networks of charging points that have implications for energy makes us an attractive place in which to invest, as well as all the labour costs and other aspects of productivity. That is a tangible and appreciable thing.

I know from my visits around the world, as I am sure your Lordships do, that all the major motor manufacturers are convinced that electric vehicles will be the future. That clearly has implications for power. The industrial strategy is there to be discussed and debated, and, if it is to endure, it needs debate, validation and testing, but the proposition I would make is that the interface between automotive and energy is prospectively a fruitful one for us industrially because we have strengths there. That will not apply to every aspect of it, and in those areas one might be better advised to wait for others who have a lead to be able to exploit it.

Lord Kerr of Kinlochard: I do not dissent on motor cars at all, but I do not see the role of government in this. It seems to me that Mr Musk and the motor car industry will be working on batteries and so on. I am

particularly worried about putting up the costs of power in this country in various ways that are paid by the consumer, industrial or private, rather than by the Government, if they wish to pick a winner and subsidise it, using their money or taxpayer money, as opposed to the consumer's money.

Greg Clark: It is a fascinating discussion. On the point as to whether this should be entirely without government involvement, the fact is that some of the research done around it comes from universities and is funded through the research councils. I am told directly about the excellence of our universities and the effectiveness of our research funding, which is peer-reviewed and of a very high standard. That is the excellence of our science, which is publicly funded, in parts.

There are other aspects as well. It is known that one of the things that will determine the take-up of electric vehicles is whether there is an available network of charging points. That is a regulatory requirement of government, whether it is standards for housebuilding or networks in other places. That is a decision one should take. Even with those enticing industrial possibilities, the point of resolving these things simultaneously, as it were, is that you do not say, "This is fantastic and we will put in whatever money is required to do it"; you need to consider absolutely the value for money for the bill payer and the taxpayer.

The speech I was quoted as giving was at the launch of a consultation into smart systems. If you can make the grid smarter, to integrate storage more cost-effectively, for example, as the Committee will know from its evidence and experience, you can reduce the amount of redundant, or mostly redundant, capacity and bring costs down. It is possible. It is difficult, but you can see a way through to solve the equations simultaneously and get lower costs for users and taxpayers, a big industrial opportunity, energy security and decarbonisation.

Lord Burns: One of the ambitions we had for the inquiry right at the beginning was to try to get to the bottom of just how expensive energy was, particularly the whole question of energy-intensive businesses. We have received quite a lot of evidence on that, as Lord Kerr mentioned. The argument is that we are either at the top or near the top of the list whichever way one looks at it. We have been told about various compensation schemes that have now been put in place. It has been suggested that our success in reducing emissions has been rather greater from a production point of view than our consumption of emissions, because effectively the result of the high-cost policy has been to export our emissions. The picture that is painted of our success is rather dishonest because we have done it both by ending the production of many of the things that are intensive users for other people to do. The whole confusing picture is fraught with difficulty when it comes to explaining just what is going on. Is that a fair description of what has happened, and can you make any progress in creating a system that is more straightforward and easier for many people to understand, and does not damage particular industries in quite the way that has been

happening so far?

Greg Clark: To be clear, it does not constitute a success, and never will, if something is done in another country with the same climate consequences by way of emissions. For that reason, I have looked closely at the very interesting comparison between costs from the Committee on Climate Change and the evidence from the energy-intensive industries. You have had a note. Perhaps I will ask Jeremy to talk through the comparison. There are obviously differences between electricity and gas prices.

Mr Jeremy Pocklington: From the evidence you received, the overall picture is that the price of our gas, which is a major component for many energy-intensive businesses and wider industry, is among the cheapest of our EU competitors, but you are right that our electricity prices are among the higher of our EU competitors. As the note points out, we have taken a number of steps for electricity-intensive industries to reduce the burden on that sector. The issue of carbon leakage, which you raised, is an important one. More than £350 million has now been given in compensation to those sectors. They have exemptions from 65% of the costs of EU ETS and the carbon price support—essentially, the limit under state aid—and 85% of the costs of renewable generation. Again, there are constraints on what we can do in relation to state aid.

The other decision taken in 2014—I was in the Treasury at the time—was to freeze the level of carbon price support. I remember that at the time it was very much welcomed by people like the EEF representing the key sectors, so it is something that this Government and the Government in 2015 were alive to.

Lord Burns: What is the timing for when they begin to be effective? When do we see the results of the compensation measures?

Mr Jeremy Pocklington: They are coming in now.

Lord Burns: When is the £350 million to be paid?

Mr Jeremy Pocklington: That is the amount we have already paid to energy-intensive industries since 2013. That has been wrapping up. I do not have the precise figure, but the amount will be about £300 million a year. Those are quite significant sums. The decision to freeze the level of carbon price support was in the scorecard for the budget at the time. I recall that it was increased to more than £800 million by the end, so the numbers add up. In a budget, these were tough decisions, but they were the right decisions and were welcomed at the time by the EEF.

Lord Burns: Would you accept that we were pretty slow off the mark on this, and that a lot of business moved before the scale of the problem was admitted and action was taken?

Mr Jeremy Pocklington: I have not seen evidence to that effect. It was a matter for the 2015 Government rather than the current one. They were responding to submissions and evidence at the time.

The Chairman: We should pause for a few minutes while the Secretary of State attends a Division in the Commons, and then we can resume with Lord Darling.

Sitting suspended for a Division in the House of Commons.

Q162 **Lord Darling of Roulanish:** Secretary of State, welcome back to the questioning on the energy market. You have been asked by lots of colleagues about the fact that, whatever else it is, it is not a competitive market in the normal sense; in fact, it seems a bit of a dog's breakfast. Mr Pocklington said something interesting. He said that we have a more straightforward auction as far as capacity is concerned, where you say, "This is what we want, and it has to be green". If it is possible to do that for the additional capacity, why can we not move to a system whereby the Government specify, "This is the amount we want; it has to be green to a certain standard. We want it at the lowest possible cost"? In other words, cut out all the complication and all the rest of it and try to get something where we can actually see what we are paying for.

Greg Clark: It is an interesting suggestion.

Lord Darling of Roulanish: I want your interesting response to it.

Greg Clark: I go out to vote and my colleague sets an interesting course of questioning. My instinct is to look to have the market run itself with the minimum of interference. The capacity auction is there not to run the whole market but to have that sliver of it that is required to keep the lights on on a cold winter's day. If one were to junk the whole thing and have a government or Ofgem-run auction for the whole of electricity supply, my instinct in response to the question is that that would be extending beyond what I would prefer.

Lord Darling of Roulanish: Why not? Surely, it makes it much, much simpler. Instead of a complicated field of different regimes for different types of generation, if it was made much simpler, we might get to the bottom of what the true costs are and at the same time you keep your green commitment, and at least you can see what is going on. This was never going to be some great design from square one. I know. I was in that department 10 years ago, when, incidentally, it looked after business and energy, and I can tell you that that by itself does not solve the problem. What we have now is the result of several different Governments with several different policies. You end up with a Christmas tree, except that on this one the lights do not work.

Greg Clark: I will certainly consider carefully the evidence of my distinguished predecessors. As I gather Jeremy has said, in my view we have made an improvement in going to a capacity market. My intention is to take a more strategic approach and consider what are the right institutions and the right design of the policies. I cannot say that I have contemplated that total solution, but if it is either a personal recommendation or part of the Committee's recommendations I will consider it as well as all the other suggestions.

Lord Darling of Roulanish: While you are in reflective mode, can I ask you about a second point that has also puzzled some of us? When we heard from Ofgem, some of us got the distinct impression that it was almost as if it did not see competition as its responsibility, and then of course there is the CMA. You said earlier that you and Ofgem were looking at these things. In light of the complaints we have had—we mentioned intensive users—that consumers generally in this country rightly or wrongly perceive they are paying too much, is there not something to be said for simplifying the regime so that there is some proper regulation and we can see why we are paying so much? If it is unavoidable, it is unavoidable, but perhaps there are areas where it could be avoided. At the end of the day, that is a decision you can take as the Minister responsible. It is for you to sort out the quangos rather than the other way round.

Greg Clark: I agree. Ministers decide. The competition responsibility of Ofgem is there. I read Dermot Nolan's evidence, and he is very conscious of that; it is part of Ofgem's responsibility to consumers, and it reports to Parliament on the discharge of that. We have a recommendation from the CMA that it should have a more explicit and perhaps salient competition duty, which I am considering in my response to that report.

Q163 **Lord Darling of Roulanish:** Can I ask about nuclear? As you probably know, we had EDF and others before us a few weeks ago. There was a lot of concern about the reactor that is to be built. Do you want to pause for the Division?

Greg Clark: Shall I do that and then come back? I am told it will be the only Division.

Sitting suspended for a Division in the House of Commons.

Lord Darling of Roulanish: We were talking about EDF, Secretary of State. You will recall that there has been some concern about the deliverability of the project. Is there anything you know now that would give you concern about the financial position of EDF?

Greg Clark: There is nothing I am aware of that would give me concern.

Lord Darling of Roulanish: Were you concerned by what the director of finance of EDF said when he resigned last year? He raised all sorts of difficulties about unproven technology, costs and so on. A finance director walking out is the sort of thing you would expect to cause concern to anyone.

Greg Clark: That was very much in the public domain here and in France. During the consideration that the Government made of the contract for difference, we looked at all aspects of the proposal. It was supported by the board of EDF, as you know. It has been the subject of controversy in France. Some members of the board, including the finance director, did not agree with it. Nevertheless, the board approved it and that was the basis on which it decided to make the investment.

Lord Darling of Roulanish: The contract has been signed.

Greg Clark: Yes.

Lord Darling of Roulanish: Does your department continue to monitor the condition of EDF so that we would know immediately whether it was running into difficulty?

Greg Clark: For any contract such as that, obviously we have close involvement in scrutiny of its execution.

Lord Darling of Roulanish: Are you doing that?

Greg Clark: Yes, as we would with any other organisation.

Mr Jeremy Pocklington: We have established a process of formal quarterly meetings looking specifically at the Hinkley project. That involves all the key people in government: in the department, the Treasury and the Infrastructure and Projects Authority in the Cabinet Office. We meet quarterly with the NNBG—the new nuclear build group—and we will have a regular series of meetings with EDF, including, I think, a meeting between the Secretary of State and the chairman of EDF at least once a year.

Lord Darling of Roulanish: Are all the technical issues now resolved?

Greg Clark: In terms of the design technology?

Lord Darling of Roulanish: Yes.

Greg Clark: It is for the parties to the contract to deliver it, but they are in constant communication and nothing has arisen that gives us any reason to suppose—

Lord Darling of Roulanish: I take it they have not been resolved.

Greg Clark: I am not saying that. I am not aware of anything that has been raised that is causing me concern.

Lord Darling of Roulanish: The reason I ask is that this is not like a contract to buy a car, which, if it cannot be delivered, you can send it back. Ultimately, if this goes wrong, the risk falls on the British taxpayer, does it not?

Greg Clark: No, because the design of the contract is that payment is made only for the electricity generated.

Lord Darling of Roulanish: De facto we would be left with a half-built power station that was not going to be producing electricity, which presumably would leave a gap in what we have.

Greg Clark: That is not remotely what we anticipate. The first thing is that approval was given on the basis of due diligence that made us content that there was every prospect of its being delivered. The second

thing is that the construction risk is entirely with the promoters. That was deliberately entered into. Jeremy will add to this, but there is nothing we are aware of to indicate that what we agreed to is not proceeding.

Lord Darling of Roulanish: The same thing was said about the Edinburgh tram, but I will leave it there.

Q164 **Lord Tugendhat:** Can I ask a couple of questions about the index-linked price guarantee? First, does it move downwards as well as upwards? In the event of our entering a period of negative inflation, does the ratchet go down as well as up at a time of rising inflation?

Greg Clark: I defer to Jeremy on how that is structured.

Mr Jeremy Pocklington: This is the link to CPI for the strike price.

Lord Tugendhat: Yes.

Mr Jeremy Pocklington: I do not want to mislead the Committee. Let me double-check that point and get back to you.

Lord Tugendhat: For most of our lifetimes inflation has been endemic, but in recent years it has not been and one can envisage circumstances in which there could be a prolonged period of, if not negative inflation, at any rate zero-rate inflation. To what extent is that taken into account?

Secondly, can you tell me what index the link is to, and is there a provision for changing the index? You will recall that we changed from RPI to CPI—I do not think it was in Lord Darling's time; it was in Gordon Brown's time, maybe even earlier. One might well see circumstances in which we change to something else in future. To what index is this tied, and under what circumstances can the index be changed?

Greg Clark: It is CPI, but I will ask Jeremy whether there is any provision for a change.

Mr Jeremy Pocklington: I do not think there is provision for us to change the index, but let me set that out to make sure I am not misleading the Committee. From previous experience, with the change from RPI to CPI a lot of contracts continued to be linked to RPI.

Lord Tugendhat: Yes. Index-linked National Savings remain on RPI, for instance, but could you let us have the answer to those two questions?

Mr Jeremy Pocklington: Of course.

Q165 **The Chairman:** Secretary of State, there has been speculation in recent days that the Chinese are playing hardball on providing the finance for Hinkley, and they would be prepared to do so only if Bradwell is given the go-ahead. In those circumstances, if that turned out to be the case—you might or might not wish to comment on that speculation—would the Government be prepared to step into the shoes of the Chinese and fund it out of government funds?

Greg Clark: First, I have not heard that speculation; and, secondly, the contract has been signed. We are entirely satisfied that every part of it is predicated on it being an independent party, so there is no prospect of that.

The Chairman: But if the Chinese decided not to provide the loans, would the Government step in?

Greg Clark: That is speculation I have not heard, so I do not think I should comment on something that I do not recognise at all.

Baroness Wheatcroft: It may have been speculation that, despite the argument that we are paying a high price for this because we are now devoid of any financial risk, we are being asked to provide some sort of financial underwriting. Is that true?

Greg Clark: The approval—the original case—involved a Treasury guarantee, which was £2 billion. That was part of the state aid approval. In the final terms we agreed with the contractor, and EDF in particular, we agreed with them that they would not avail themselves of that guarantee.

Baroness Wheatcroft: There is no financial guarantee at all—no underwriting.

Greg Clark: The reason I am pleased about that is that, technically, it is part of the approval given under state aid. It is technically there, but the agreement we have with EDF is that it will not avail itself of it, and it wrote to me on that.

Baroness Wheatcroft: Those agreements will hold good.

Lord Forsyth of Drumlean: As we are asking technical questions, I was intrigued that the difference in cost between the Government's initial estimates and those of the National Audit Office has been explained by saying that the NAO used a different discount rate from the Government. Why did the Government use a different discount rate?

Greg Clark: I defer to my distinguished and long-experienced Treasury colleague. My recollection is that we used the Treasury required discount rate.

Mr Jeremy Pocklington: Our estimate, which has a lower and higher rate of £11 billion and £21 billion for the top-up payments, uses the social discount rate as required in the Green Book, which is the standard government methodology for assessing the costs and benefits of projects. As I understand it—there are people more qualified than me—that is a better way to value the economic case for the project, whereas the National Audit Office used a different discount rate based on the cost of borrowing, which is an accounting tool.

Lord Forsyth of Drumlean: The difference in the outcome was what?

Mr Jeremy Pocklington: The National Audit Office's number, which is not a government number, was £30 billion.

Lord Forsyth of Drumlean: That is quite a variation, is it not?

Mr Jeremy Pocklington: With the perfectly logical explanation I have set out that they are different numbers for different purposes.

Lord Forsyth of Drumlean: You think that the Treasury's discount rate will prove to be the correct figure, not the £30 billion.

Mr Jeremy Pocklington: I think that is a better number to use for an economic assessment of the project that is consistent with the Green Book.

Baroness Wheatcroft: To clarify one point about that guarantee, were EDF to go bust, which some people think is a possibility, would the agreement amount to nothing and the guarantee come into play?

Greg Clark: The agreement requires the volition of both sides for it to come into effect. EDF has said it will not avail itself of it, and anyway it requires our agreement. We had approval for it, but we have agreed with EDF not to make it live, as it were.

Baroness Wheatcroft: That could not change.

Greg Clark: No.

Baroness Wheatcroft: Fine. Thank you very much.

Greg Clark: It could only change by agreement.

Lord Sharkey: I am not quite certain I understood that. EDF says it will not avail itself of the agreement that exists, but it is none the less a legally binding agreement, is it not?

Greg Clark: It requires the Government also to agree to it.

Lord Sharkey: Therefore, you can simply say no if it tries to invoke the agreement.

Greg Clark: Correct.

Lord Sharkey: What kind of agreement is that? It is a rhetorical question.

Mr Jeremy Pocklington: The formal language is that EDF has said it has no present intention.

Lord Sharkey: I understood that. My question was about what it actually legally commits us to. I understood the Secretary of State to say just a moment ago that we can simply say no if it invokes this agreement.

Greg Clark: That is my understanding.

Baroness Wheatcroft: Present intentions can change.

Greg Clark: When it came to the discussions and the agreement, I thought it was worth agreeing that we should not have it there—to be cleaner—that there was no government money to be used in this.

Baroness Wheatcroft: But now you are telling us there could be, if EDF changed its mind.

Greg Clark: It has agreed that it will not avail itself of it, but, to be clear, it was part of the agreement of the state aid clearance that there could be a £2 billion guarantee.

Lord Darling of Roulanish: I would find it really helpful if you could write to us both in respect of that and in relation to the discount point, because £30 billion seems a massive difference. If these economic assessments are to mean anything, surely the numbers have to be ones you can make a sensible decision on, yet they are miles apart. If you can write to the Committee on both points, it would be most helpful.

Greg Clark: I am very happy to do that.

Q166 **Baroness Wheatcroft:** Can I ask about security? You mentioned it at the beginning of the session. Clearly, the department is relatively sanguine about energy security, but some of the people who have given evidence to the Committee, for instance Dieter Helm, think that the margin at the moment is concerningly narrow. What gives you reason to feel relatively calm about it, when I gather we are facing snow across the country this weekend?

Greg Clark: In all the discussions we have had in this Committee, security is the foundational policy requirement. We are advised by National Grid, among others, and its forecast is that its electricity margin is more than adequate. It is 6.6% this winter, which is an increase on last winter. One is advised by the grid on this.

Baroness Wheatcroft: Do you think 6.6% is a comfortable margin in most things?

Greg Clark: It is higher than it has been. Jeremy may have a historical perspective.

Mr Jeremy Pocklington: The margin of 6.6% is higher than it has been for the past two winters, but the more substantive point behind that is the framework by which we set the right margin. Ultimately, it is set by the reliability standard approved by Parliament. That is based on a slightly different definition, but we set the margin in order to ensure that we are comfortably meeting the reliability standard. It is essentially a question of how much insurance we want to buy.

Baroness Wheatcroft: How much of that insurance comes through the interconnectors?

Mr Jeremy Pocklington: The interconnectors are a factor, and they can compete in the capacity market. At the moment, I think we have a little more than 3 gigawatts of interconnection installed capacity. That is de-rated in numbers to take account of the fact that the infrastructure is not always performing and available, so on a de-rated basis it is 2 gigawatts.

Baroness Wheatcroft: If Brexit proceeds, how confident are you about the interconnectors continuing to be serviceable for us?

Mr Jeremy Pocklington: The interconnectors work on a market-based mechanism. Essentially, an important issue for us is ensuring that those market-based mechanisms work in the future as they do now. Essentially, they provide electricity under contract.

Baroness Wheatcroft: Do you envisage any change because of Brexit?

Mr Jeremy Pocklington: We are looking at this carefully and we are not complacent. A lot of the issues are about the detail of how electricity markets work, but we are confident that interconnection can continue to play an important role in providing secure electricity supplies, and affordable energy supplies—an important issue for this Committee.

Q167 **Baroness Bowles of Berkhamsted:** I would like to move on to the CMA's remedies for the retail market. One of the problems is that there is reluctance by people to spend their leisure time trawling the internet to find where they should be switching in order to get cheaper electricity. The question must be whether the problem is that it is difficult to build competition in the retail market because you have lots of companies with lots of different tariffs not really treating loyal customers to the best tariffs, whereas customers see that there may be a decrease in wholesale prices somewhere and, whatever tariff they are on, it does not feed through. Is switching the only solution to try to tell consumers that basically they have to do better?

Greg Clark: One of the striking things about the CMA report is that it reported that there was £1.4 billion annually of detriment, as it described it, to consumers, which is a huge amount of money, and, therefore, I think it requires a response as to how that can be brought down. The proposals that the CMA put forward involve lots of different things, including ways to encourage more switching, such as making a database available to people who do not switch so that other companies can market to them.

We have not responded to the CMA report, but let me make some observations on the market. There is no doubt that the ability to take your business elsewhere and the incentive on companies to provide a cheaper tariff is an important part of the competitive market. That is crucial, but I agree with what I understand to be your thinking, Baroness Bowles, which is that a large number of people may not have the personal resources every year, or whatever, to be sure that they can interrogate the market and get the best deal. Some of those people have taken the view, especially with the bigger players, rightly or wrongly, that

if they are with a reputable name with some blue chip value and they regard themselves as having been loyal to that name—I know this from conversations—they may not get the best deal in the market but they will not be abused. I think the evidence from the CMA report shows that customers of some of the big firms who are on the standard variable tariff are paying very much more than is in touch with a competitive tariff.

One of the things on which I wish to reflect in considering the CMA remedies is whether the pro-switching recommendations, which may be important, are sufficient to deal with the detriment being suffered by people who do not switch. I was interested in the evidence you heard that, even in optimistic scenarios, it was felt there would still be large proportions of people who do not switch. I feel an obligation to consider what would be in their best interests as well.

Baroness Bowles of Berkhamsted: Do you think that you will be looking at whether having too many different tariffs is the wrong way to go? Why should not each electricity company offer just a standard variable tariff, and competition would be around how good it could make that? That would be real competition, would it not?

Greg Clark: This is an area where one needs to proceed carefully, because there have been regulatory interventions that have not been successful in the past. The CMA report goes into some detail on that. I would not want to speculate before the Committee as to whether one remedy rather than another might be favoured, but it is something that I and my officials are spending a lot of time working on in determining our response to the CMA report. I very much recognise the motivation behind your question.

Baroness Bowles of Berkhamsted: Further down the track, if whatever you choose still has not worked, and we end up with a half-competitive market, as it has been expressed, do you think that an even more radical change could be looked at? Some people have suggested using it on an insurance-type basis. It is almost going back to its being a basic utility, saying that half-competition has not worked.

Greg Clark: I have in mind the detriment for the affected consumers, and I want to see it addressed. The companies themselves can do that, and we have taken some steps in recent weeks to assist with that. Ofgem is now publishing tables of the difference between the standard variable tariff and more competitive tariffs for each of the suppliers. Some of the big players introduced customer-exclusive deals whereby very cheap tariffs were available to everyone apart from their own loyal customers. In response to the widespread outrage at that practice, correctly in my view, all of them have now been withdrawn. There is a dawning recognition on the part of some companies that it is not all about switching, and a business that is not thoroughly competitive in every respect and is regarded, as you say, as a basic staple of people's lives has a requirement to take an interest in the welfare of its customers in economic terms.

Q168 Lord Kerr of Kinlochard: When you were defending yourself against the savage attack from the ruthless competitive capitalist Lord Darling for being too Ministry of Gosplan, you cited the capacity market auction as proof that you could be virtuous and competitive when keeping the lights on. How do you think the capacity market auctions have worked? In evidence to us, the department said, "The Capacity Market was introduced to ensure that the electricity market attracts sufficient investment in new generation capacity". How much new generation capacity has it attracted?

Greg Clark: I think it has been a successful innovation so far. I am just looking for the latest figures—perhaps Jeremy will have more details. The latest auctions closed on 8 December. They obtained 52 gigawatts of de-rated capacity for the winter of 2020-21 at a rather lower price than a lot of market observers were expecting. Out of that has come some new build, as well as some existing capacity.

Lord Kerr of Kinlochard: How many new power stations?

Greg Clark: I do not know the number.

Mr Jeremy Pocklington: It is 1.5 gigawatts of new gas generation, which I suspect is the key thing behind the question, including a new combined cycle gas turbine and a new open cycle gas turbine. It is proving successful and bankable in bringing forward new investment in thermal generation.

It is important not to misunderstand exactly what the role of the capacity market is. We do not want to use the capacity market to bring forward new investment before it is needed, because we want to achieve the security of supply standard—the reliability standard—which is based on very prudent assumptions about the right amount of insurance to buy; but if it is cheaper to do that with existing capacity in the market, it might well be the most sensible thing to do and the best thing for consumers. The capacity market is working; it is making sure we are getting the capacity we need. It also brought forward new gas generation. It brought forward only a very small amount of what we know is new diesel generation. It also brought forward some new interesting proposals, such as new battery generation to provide peaking capacity.

Lord Kerr of Kinlochard: How many power stations were procured as a result of the 2014 auction?

Mr Jeremy Pocklington: I do not have the historical record to hand, but I come back to my point that, if the capacity we need to meet the reliability standard set by Parliament can be delivered by existing capacity, it will often be the cheapest thing to do for consumers.

During the course of 2016, we reviewed the capacity market and made a decision, exactly with the issue of security of supply topmost in our mind, to buy more capacity than we would otherwise have planned to do, and to buy it earlier—four years out—rather than waiting to buy it one year

out. That is exactly to ensure that we have as much capacity in the system as we need, including managing the fact that we have an energy system in transition. It is an auction process that is working; it is competitive and it is clearing at a lower price than certainly the department and most external observers had expected.

Lord Kerr of Kinlochard: That is a very spirited defence. Congratulations on it. One reads in the press a certain amount of criticism that the 2014 and 2015 auctions produced no new generating plant. In the 2016 auction, certainly the price was lower than the pundits had expected, but it produced one. Most outside observers seemed to think that there might have been a case a few years back for us to start building more combined cycle gas turbine power stations as the cheapest way of achieving our short-term emission reduction targets. We seem to have got the worst of all possible worlds in a way, because we have a managed market, not a competitive one, so Lord Darling is not happy, yet the way it is working means we are not producing the kind of generation that would most cheaply achieve emission reductions and keep the lights on. I am nervous about a department that is driven to demand reduction measures paying companies to switch off, or to be prepared to switch off, when demand on the system is high. I was even more worried when the representatives of those companies giving evidence to this Committee said it was an excellent system and they were delighted with it. That made me really nervous, because it made me think that you must be paying them very large sums of money.

Running the industrial strategy of the United Kingdom on the basis that you have to pay people to be ready to switch off when we do not have the power to run the plant is not very good. We need more generating capacity. The capacity auction is very good for a company such as Aggreko, which wants to sell small generators that you stick in a hospital car park in case the lights go out, but it is not very good for building a medium to long-term national generation system.

Greg Clark: It seems to me that the capacity auction was there for the purpose, going back to your earlier point, of making sure that we could say with confidence that in future winters we would have enough electricity. It seems to have achieved that purpose at a lower price than might be expected. If you constrained more specifically the type of technology that was admitted, you could have a higher price and different technology. It is open to one to do that.

On the point about the demand-side response, we are going to see not just in this country but around the world in a smarter grid the possibility for installations, not so much for people, to draw the electricity they need at the times when it is cheapest to do so. That seems a positive feature of interactivity that previously was not available and is part of the technological development of the industry and the sector. It is one of the areas that can reduce bills in future so that you do not have capacity that might be needed at peak times sitting idle for most of the time.

Lord Kerr of Kinlochard: That is different from you paying them to

switch off. That is them making an economic decision at some time in the future. As I understand it—I do not know what the numbers are—quite large chunks of British industry are being paid by you this winter because they are ready to shut down their plant and send people home if there is a demand surge. Am I wrong?

Greg Clark: I will ask Jeremy to comment, but part of the contracts that a lot of suppliers have with their customers is that they are interruptible for precisely those reasons. They are precisely the organisations for which that is not a problem. Jeremy can speak about the capacity market.

Mr Jeremy Pocklington: It is a complicated area, and there is a range of different activities going on. On demand-side reduction in the capacity market, two things are happening. There is an element where companies, either individually or through aggregators, are saying, "Hang on. We will use our back-up generator and attach it to the grid to provide some additional capacity, or we will use it so that we do not draw on the grid at peak times".

There are very interesting areas of innovation where aggregators in particular, but others as well, are looking at turndown DSR where, for example, air-conditioning is made less electricity-intensive just for the peak half-hour; the classic one is to change the temperature of fridges just for that peak half-hour. It is an evolving landscape. There are quite a lot of interesting innovative business ideas. I would be a little wary about the notion that demand-side reduction is all one thing. It is a complicated array of different business models operating within a market.

Lord Forsyth of Drumlean: As a policy, we are paying people to turn on diesel generators in order to have fewer carbon emissions.

Mr Jeremy Pocklington: No. This policy is about ensuring security of supply.

Lord Forsyth of Drumlean: Yes, but the effect of the Government's policy is that people are turning on dirty diesel generators, which are there for emergency purposes, in order to give a leg up. Is that what you are saying?

Mr Jeremy Pocklington: On the specific issue of air quality, this year we have significantly tightened our standards in order to minimise the impacts on the environment. In order to win a contract you need to meet those new higher standards.

Lord Forsyth of Drumlean: Therefore, they will be used only if they are approved generators.

Mr Jeremy Pocklington: I understand the question; it is a very valid one. We are talking about generators being used for the peak half-hour or hour; they are not being used for extended periods.

Lord Forsyth of Drumlean: It is a bit like an episode of "Yes Minister",

is it not? Because of the policy, which is about reducing carbon emissions, we have hospitals and other businesses turning on those generators.

Greg Clark: This is about security of supply.

Lord Forsyth of Drumlean: Yes, but the security of supply problem arises because of the third leg of the stool. That is the point.

Greg Clark: No. In any system, there will be variation in demand against supply; you will always have means to bring it into balance.

Lord Forsyth of Drumlean: Secretary of State, the point I am making is that you closed down the coal-fired power stations very quickly, thus creating the problem of the margin of supply, and then we are paying people to turn on diesel generators. It seems a bit odd.

Greg Clark: Whatever level and whatever set of policies you have, you always have to bring into balance peak demand against supply to have assets that come on stream literally for half an hour. Jeremy is right about emissions. That should not be considered as part of the climate policy because it has no appreciable impact. It is literally for half an hour, sometimes in a year.

Lord Sharkey: How much money are we talking about? How much annually is paid to those people in order to reduce, mitigate or stop whatever they are doing?

Greg Clark: In terms of the demand-side response?

Lord Sharkey: Yes.

Greg Clark: I do not know whether we have that broken down.

Mr Jeremy Pocklington: We would have to prepare a note. These are relatively small sums. The overall capacity market cost is larger; it is about £1 billion, but the demand-side reduction, which typically comes through the transitional arrangements auctions—another complication—is much, much smaller.

The Chairman: If you could send us a note on that, it would be helpful.

Q169 **Lord Tugendhat:** We are getting very near the end. Have successive Governments focused too much on electricity generation at the expense of heating and transport?

Greg Clark: Electricity generation has particular qualities, such as security of supply, which is a foundational requirement, as we talked about. It is appropriate that the capacity and resilience of the electricity system is always going to be there. On the decarbonisation agenda and the contributions to it, Jeremy Pocklington said earlier that power generation achieved some of the earlier progress. Heat and transport will be required to make a bigger contribution in the future to meet our targets. Transport is one of the areas where the move to decarbonisation and the development of new technology—electric vehicles and battery

storage—come together, so we expect to see that. Part of the requirement to get to the 2050 target is for heat to make its contribution too. There is something special about electricity with the kind of sequencing in carbon savings that we discussed.

Lord Tugendhat: I cannot remember who was responsible for the Green Deal, but it did not do very well. What conclusions have you drawn from that?

Greg Clark: The Green Deal policy—perhaps everyone recalls it—was an attempt to make available more domestic energy efficiency measures than would be the case through a grant scheme. It was a loan scheme for energy efficiency improvements that paid for themselves. There is a long history of its scrutiny by the National Audit Office and the Public Accounts Committee that established that take-up was low and the financing costs were unappetising to people. It has been discontinued. It is evident that it did not work, but I do not think we should lose sight of the potential contribution both to savings in household energy costs and CO₂ emissions from energy efficiency, and we need to find better ways than the Green Deal proved to achieve them.

The Chairman: You visited Japan just before Christmas to meet Toshiba. I think Toshiba is hoping—indeed, it is part of the Government's plan—to build a nuclear facility in Moorside with a capital value of some £10 billion. Although it was quite unconnected with your visit, according to the newspapers Toshiba subsequently announced a write-off of the order of \$4.3 billion. If one compares that with its shareholder funds of \$3 billion, in some senses it is bust. Are you still confident that it will be able to build the nuclear facility at Moorside, and do you retain confidence in the design that it proposes to use?

Greg Clark: This is at quite an early stage. For example, no contract for difference has been negotiated for any of the prospective new nuclear power stations, but through a consortium, of which it is a member, Toshiba has proposed to build a new nuclear power station at Moorside in Cumbria. When I was in Japan with my officials, we also had discussions with Hitachi, which is involved in a consortium with an interest in Wylfa in Anglesey. It has always been apparent that, as with Hinkley for that matter, a number of investors and companies will come together to make a proposal, but it is some way from the stage at which we need to make an evaluation of the consortium's case, and of the technology. It is at an earlier stage than that.

The Chairman: You have made an important commitment to the nuclear industry. We have already talked about some of the vulnerability of Hinkley C. We are now looking at the vulnerability of one of the other major parts of that programme, possibly part of the programme that would have provided a degree of back-up had Hinkley C been deferred or delayed. Will you be publishing as part of your industrial strategy a fallback position in the event that the bet on nuclear does not turn out as you hoped, and will you be able to install alternative generating capacity that will keep the lights on and factories operating?

Greg Clark: I do not regard it as pursuing a better policy. When we took the decision to approve the contract for difference for Hinkley, it was on that particular case. We discussed it and we have made an evaluation of that. We also said that we wanted replacement of some of the nuclear fleet that is coming to the end of its life, but there are a number of different potential plants that can offer that. Each of them goes through a very rigorous and independent assessment, in terms of the GDA process, of its technical robustness. The financing, as was the case with the EDF/CGN project, will be particular to each one; each case will have to be evaluated in turn. We have said we want to continue the nuclear industry in this country and we want to see those proposals continue to develop, but we are not at the stage of approving them yet. As to energy mix, which goes back to our discussion on security and resilience, my view has always been—the context of the industrial strategy gives the opportunity to revisit this—that diversity is a good principle as regards sources of power.

The Chairman: Indeed. On that note, thank you very much for coming to give evidence this afternoon.

Greg Clark: Thank you. I am sorry that we were interrupted by the bell.