



Energy and Climate Change Committee

Oral evidence: [Small Nuclear Power](#), HC 347 Wednesday 10 September 2014

Ordered by the House of Commons to be published on 10 September 2014.

Written evidence from witnesses:

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Members present: Mr Peter Lilley (Chair); Ian Lavery; Albert Owen; Dr Alan Whitehead

Questions 226-268

Witnesses: **Matthew Hancock**, MP, Minister of State for Energy, DECC, **Chris Pook**, Head of the Green Economy Team at BIS, and **Liz Keenaghan Clark**, Head of Nuclear Decommissioning Waste and Safety at DECC, gave evidence.

Examination of Witnesses

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Q226 Chair: Good morning again, Minister. This is technically, I think, your third session before this Committee in almost as many days, certainly as many weeks. We are grateful to you for coming to discuss the small modular reactor feasibility study and related issues. In particular, I would be grateful if you could update us on the Government commissioned small modular reactor feasibility study. When is it likely to be completed, and will it be published?

Matthew Hancock: Yes, it is likely to be completed relatively shortly and it will be published and we are looking forward to that.

Q227 Chair: There has been some delay on the original timetable. Can you tell us why?

Matthew Hancock: No, I can't. It is an unusual answer, I know, but I am sure that Chris Pook will be able to explain.

Chris Pook: Yes, the National Nuclear Laboratory and a consortium of companies and so on have been taking forward the study. I think one of the main reasons for the delay is the difficulty they have had in getting the information out of the developers of small modular reactors in order to inform their study and to come to a reasoned view.

Q228 Chair: That is interesting. Are you in a position to share any preliminary findings and, in particular, are you able to give an indication of your views for the potential of small nuclear in the UK?

Matthew Hancock: Yes. I think the best way to describe this is that there is undoubtedly the medium to long-term potential for small modular reactors, but while it is undoubted it is also potential. We should not be absolute about this. There is clear evidence around the world for the potential, yet bringing that potential to market will be a challenge. Bringing it to market at a cost that is cost competitive, at least with conventional nuclear and ultimately with other low carbon, zero carbon sources, is an important and as yet unverified request, but that is what we need to work towards. As an optimist, as we discussed, not at the last hearing but the one before that, this is an area that we undoubtedly need to look at, to continue to work on and I am very much looking forward to the report as a publication. It will inform the market; it will inform stakeholders and commentators; and it will undoubtedly inform the policy makers, too.

Q229 Chair: What sort of information? Will it give information whether the Government is or is not going to put resources behind development of small reactors?

Matthew Hancock: That is not a question for the report itself. The report will inform policy decisions. Whether we then put further money into making sure that we have the—whether we take that forward and how we take that forward is a policy question. I am very open-minded on that. I have some enthusiasm for small modular reactors as a potential solution to some of our energy needs in the future. I want to see the final report. I understand that the report shows that there is clearly technology developing positively in this area, but the question of whether it is commercially viable is still one that is open. But you can't test whether something is commercially viable unless you have a go at seeing whether it is commercially viable. Some other countries are further down the track in terms of getting through the entirely necessary regulatory hurdles to ensure safety of design, and what have you, especially the United States, so we can learn from what is happening there. Ultimately, we also have to work to see whether it can be commercially viable here, but we should do that with our eyes open to what is happening elsewhere in the world.

Q230 Chair: But if the Government did decide to deploy small modular reactors in the UK, what would be the next steps?

Matthew Hancock: The next steps would be essentially to do a feasibility study. The United States Government has spent \$450 million on bringing two designs to market, but there is a step before we were to make a commitment like that, which would be to do further work on how

SMRs can contribute in the UK. Of course then there is work on, for instance, siting, which is important to get right, and a whole series of consequential decisions. It would also be a classic case of making sure that the regulatory structure was fit for purpose for smaller reactors as well as larger ones.

Q231 Chair: We heard that the Office of Nuclear Power Regulation and the Nuclear Decommissioning Agency had no formal involvement in the SMR feasibility study. Why was this?

Matthew Hancock: Because the feasibility study is at a prior stage and that is exactly the sort of thing we would have to go to next as part of due diligence to see whether it could work.

Q232 Chair: Could you clarify what organisations were involved in the study?

Matthew Hancock: Chris, why don't you set it out? Do you have the list?

Chris Pook: I can. We commissioned the National Nuclear Laboratory to lead the study and we were able to bring together a consortium of the leading companies that you would expect to see involved in this field, plus universities—so AMEC, Atkins, Rolls Royce, Lloyd's Register plus the University of Manchester and the Nuclear Advanced Manufacturing Research Centre, part of the University of Sheffield. We also asked the newly formed Nuclear Innovation Research Advisory Board, chaired by Dame Sue Ion, to take a look at this work as well and to give their views. I think we are reasonably confident we are going to get a robust study and that is certainly going to help us answer the sorts of questions and issues that the Minister raised and, we hope, give us a really good basis on which to judge the next steps.

Q233 Chair: Previously, you said that this was not the stage at which the ONR should be involved. They told us that they may now undertake a very high-level feasibility study of a variety of different SMR designs. Should that work have been part of the original Government commissioned study?

Matthew Hancock: Given that there is a study that is about to be published, I think the best thing to do is to get it published and then work out what the next steps are. It is looking like the report will say broadly not only that there is the potential for this to be cost comparable in the UK, even though it has not yet been brought to market, but also that there is the potential for global demand for SMRs. I think that is another important element to this because, as we have seen with the development of conventional nuclear civil power, having a UK industry that is set up and well-regulated to be able to develop SMRs for the domestic energy market, it could also be a potential export. We need to look at it down the industrial end of the telescope as well.

Q234 Chair: That was very much the sort of thing that led this Committee to have a look at this area.

Matthew Hancock: Yes. It is that sort of thing that is in the report asking the question, "Is this an area that we should open up?"

Q235 Chair: We hope it will also help answer the question.

Matthew Hancock: Quite.

Q236 Albert Owen: Going on from what the Chairman has asked with regards to the Government's involvement, what is Government's role and how do you think the Government can play a helping hand in developing a market for the small modular reactors?

Matthew Hancock: The Government has a big role here. The first is that with funding first one feasibility study and the potential to do more. We are also funding regulators who are a necessary part of getting this to market. We also define the structure in which the energy market operates, and as a low carbon source, nuclear fits within that and would fit within the CfD regime, which we would have to ensure worked appropriately as and when that came, which would be a number of years down the track.

They are the first three levels. Firstly, making sure that the market and policy makers have the information on global progress on SMRs, which is basically where we are up to now with the publication of this report coming out shortly, then making sure that the regulators are involved and do the due diligence into the market and then ensuring that the market can function effectively after that.

As I mentioned, the US Government has gone further than that also with work to bring two different designs all the way to market, including helping them through their own regulatory processes. I would imagine that that will be something that some people might propose if we were to decide to go down this route.

Q237 Albert Owen: It is very encouraging what you have been saying there. I will come on to the regulatory in a second, but you mentioned about the US. Are you concerned, as many other people are, about the US experience in that an awful lot of money—I think you quoted \$450 million—has been invested and despite this they have not secured investors and customers in the United States or indeed in the global market. Are you concerned? How can we learn from that? What can we do better?

Matthew Hancock: I am not that concerned at this stage because the technology has to be proved to be usable, and clearly when the Government has decided to make an investment like that, people are going to wait for the Government investment to pay off. The tone of my response would be that it is early days.

Q238 Albert Owen: Have you been to the Advanced Manufacturing Centre at Sheffield University?

Matthew Hancock: I have, yes, although I was meeting their apprentices rather than looking at the detail of the nuclear policy at the time.

Albert Owen: Which is an excellent spin off of this kind of work.

Matthew Hancock: Yes, of course. Absolutely, yes.

Q239 Albert Owen: Absolutely. We have been there as part of our inquiry and we were encouraged by what we saw there. Again, although there are international players, there is a lead role for the United Kingdom to play.

Matthew Hancock: Absolutely. I am incredibly enthusiastic about the supply chain and the industrial strategy elements of this, and making sure that we learn as a country how to make nuclear power stations again. We have done it in the past; there is no good reason why we cannot in the future. It is interesting that the Sheffield Centre, in particular, is a national hub—some say it is a global hub—of expertise. It is built on the site of a former deep coal mine.

Albert Owen: I was there. It was a coal mine.

Matthew Hancock: It is thriving now.

Albert Owen: It is a huge success story. Credit goes to the previous Government for investing so heavily in regions such as Yorkshire where we saw the closure of many coal mines, so I agree.

Matthew Hancock: Yes. It is amazing what it has done since 2010. Is there an election coming up?

Albert Owen: It is a long-term project of which my ex-colleague—I am very proud—has taken the lead on and is still there.

Chair: Perhaps we could move on?

Q240 Albert Owen: Yes, it is a very important part of this inquiry. You mentioned the potential and economic benefits and skills—you met the apprentices—and I think they have a long-term future there in this kind of thing. What is the Government doing to ensure that this leads to tangible economic benefits? Again, I understand that your report is in the phase that you outlined, but do you see the UK as being a centre of excellence for nuclear in the future?

Matthew Hancock: Yes, I do. I see that whether or not we go down the SMR route and as I say—

Q241 Albert Owen: Because of the transferable skills?

Matthew Hancock: Exactly. I am optimistic about the SMR route but, even so, we are absolutely determined that, as we go through a new generation of nuclear, we make sure that we get the supply chain, the skills and the capacity domestically in order to be able to develop nuclear in the future. There is absolute no reason why one of the most advanced countries in the world cannot build a nuclear programme. After all, in the defence space we have nuclear capabilities and the skills that are needed. There is absolutely no reason why we cannot do that and that is why we have a nuclear industry strategy in order to make sure that, especially given that this industry is so interconnected with Government through the necessary regulatory regimes, and because the scale of finance is so large, and because the end customer is a hugely intermediated industry, there is a very important role for an industrial strategy approach to make sure that we get the skills here in this country.

Q242 Albert Owen: You touched on it in your first answers to the Chairman, with regards to the report moving forward, but is the Government minded—and I just want clarity on this for myself and for this evidence session—to provide public funding towards a demonstrator project?

Matthew Hancock: That is a decision that is yet to be taken. A decision around that will be informed by this report, and if we do, we would want to make sure that we support UK businesses as part of the design and development.

Q243 Albert Owen: I understand you have to be cautious. I was just asking were you minded to. We could then patent it as British, is what I am suggesting

Matthew Hancock: There is not a formal signed off Government decision on that yet.

Q244 Albert Owen: Moving on to the regulatory issues that you mentioned, do you personally agree, from your experience thus far, that it takes too long for a nuclear reactor to go through the GDA process? We have had one that has gone through the process in my own constituency now. My point is if we want to see this technology develop and we want to be ahead in the game, is there some issues with the GDA process that we need to look at?

Matthew Hancock: In short, yes, I do. The first GDA process is inevitably going to take longer. When you develop regulatory processes, the regulators learn as well as industry, and the first company to go through any regulatory process always brushes some of the jagged edges off. I was involved with Metro Bank going through the first approvals as a bank—the first time a bank had been approved from scratch in about 100 years—and, boy, was that a difficult process for them and it is now much, much easier. The Government will take an active role in trying to improve that GDA process and, of course, we have to make sure that it is rock solid, but there are ways to reduce to the burden of the regulatory process while maintaining its clarity and effectiveness, and that is what we have to do. Not only, I hope, will the process get easier because people have been through it, but, from the Government side, we are actively looking at how we can improve the process and I have, in fact, kicked off a piece of work to do that.

Q245 Albert Owen: I agree with everything you said there, particularly about conventional nuclear sites and of course safety is paramount. I think GDA will improve as more applications go through the process. But would you like to see the ONR streamlining the GDA process specifically for small nuclear reactors?

Matthew Hancock: The question of whether we need a separate GDA process for small modular reactors is an open one that we need to consider.

Q246 Albert Owen: Because with the GDA—and I am aware of it in my own patch we are going through that system and it is absolutely right that we do—a lot of it is about scale, the massive scale of a conventional new power station, compare this with smaller reactors. Is there a need to go through—

Matthew Hancock: Any GDA process ought to be designed in part around a design that it is signing off. After all, that is why we have the process that way round to sign off each design. A simpler design, you would hope, would lead to a quicker regulatory process and that is absolutely what the regulators do. Whether you need to bifurcate the process into one process for large and one process for small, as I say, is an open question because ultimately what counts as small is a matter for definition. There is no formal Government definition of what a small reactor is. In fact, you can put a whole bunch of small reactors alongside each other and then you have a very large power station. I would rather not get tied up in linguistic knots and say, "Let's make sure the GDA process is as reasonable and fast as it can be, subject to needing to be secure, and just the logistical arrangements, for instance, of hiring people with the right skills who understand each of the different designs that are being approved." But we are doing some work on how that process can be improved.

Chris Pook: This is something that the feasibility study may touch on and, of course, the challenge for an SMR is inevitably it will be first of a kind and there will need to be an administrative process of discussion with the regulator.

Q247 Albert Owen: Okay, that is a useful answer. With regards to regulation on an international level, do you think there should be greater collaboration with other countries so that we can get an international product?

Matthew Hancock: There is already an awful lot of international collaboration on regulation. We have to be happy at a domestic level that we are comfortable. In fact, I go further than that, I would say we want to have a regulatory regime in the UK that is regarded as one of the best globally and that could become an asset for UK industry as well when designing new SMRs. In a sense, I am turning your question on its head and say let us make sure we have a regulatory system that is best in class.

Q248 Albert Owen: I do not disagree with anything you have said, but my worry is that because it is the first of a kind that will be reinventing a number of wheels—

Matthew Hancock: No, no, the ONR works with US and Canadian colleagues, for instance, because their SMR market is further ahead. Of course we should piggyback on developments of others; that is absolutely right.

Q249 Albert Owen: A final question: what discussions has your Department had with other international companies and international counterparts on regulation?

Matthew Hancock: I will hand over to Liz.

Liz Keenaghan Clark: Obviously, a lot of that is lead by the regulator, but certainly they are in very close contact with the US and also, as the Minister said, with Canada as well, talking about whether there is some kind of triangulated process they can do. Obviously, as the Minister said, we need to be convinced that in the UK we are happy to sign off various reactor designs. The regulator guards their independence very fiercely, but they do recognise the potential for streamlining and for reducing eventual costs and lengths of processes if they learn from the

regulatory process in other countries, especially in Canada, where they have a very similar system to us. There is that international collaboration going on and we are hoping that as the SMR work gets further developed that will bear fruit.

Albert Owen: Thank you; that is very helpful.

Q250 Chair: Thank you very much. Just further to Mr Owen's remarks about the speed of the regulatory process, Tim Yeo—in the previous session when we had the industry in—remarked that there seemed to be a strange sort of lethargy about the approach to this. Most think the business is full of dynamism, but they seemed to be waiting very much on Government and, in my experience, Government tends to show a degree of lethargy about those things. Are you aware that if we are to make anything of this it has to be done with drive and determination? We start with an unusual advantage: we are one of few countries in the world that produces nuclear reactors for submarines, so we have some expertise. But if we just drift along, we will be overtaken by others.

Matthew Hancock: Yes, I agree wholeheartedly with that. I think it needs drive and determination from the Minister down if this is going to work. We will wait for the study and then see what happens after that.

Q251 Chair: Have you any idea of a timetable that might be feasible to have the first one or batch of these reactors up and running?

Matthew Hancock: I think that you can get an advantage for setting a target. We think that it would take five to seven years to bring the demonstration project to life, that sort of medium-term timescale. In the context of UK energy needs, that is relatively short, if I may say so. But if we can be at the shorter end rather than the longer end of that that would be even better. The point we make about the need for a clear support and direction is an important one and in the UK, for instance, it was cross-party support in favour of nuclear and one of the things you can do in Government in the process of going through necessary due diligence is also give a bit of a sense of direction to the industry and, indeed, to the regulators.

Q252 Chair: I seem to recall it took us less than 10 years to get the first civil nuclear reactor up and working and delivering electricity to the industry. It is extraordinary producing something 50 years on that will take nearly as long.

Matthew Hancock: Or half as long if you work the better end of the timescale.

Chair: Let us hope so, but the safety implications are important and Mr Lavery will ask some questions about that.

Q253 Ian Lavery: Yes, I will just touch on the siting, the safety, the security of the SMRs. Do you think siting the demonstration SMRs on existing nuclear sites is a good idea? Do you think it is the best idea?

Matthew Hancock: That is undoubtedly an option that removes some further barriers to deployment. There are eight sites approved at the moment for further deployment, of which five have strong and clear interest. The further three sites are at different stages of interest and they are options that undoubtedly have a smaller regulatory hurdle than getting new sites approved because getting new sites approved has to go through various different planning processes, including the EU Habitats Directive, which can be complex.

Q254 Ian Lavery: In the last strategic siting exercise that was carried out by your Department, they ruled out a number of potential sites because of size. Will you revisit the siting exercise to see if any of those sites now would be basically compatible for an SMR?

Matthew Hancock: Yes, of course. Part of due diligence and the feasibility around this is to look at all of the different siting options, whether that is on sites that have existing permissions or whether it is on future sites.

Q255 Ian Lavery: What do you think the public reaction will be to potential sites, particularly in heavily populated areas?

Matthew Hancock: The places in the country where nuclear is most popular are the places where nuclear power stations are. People tend to support nuclear power stations when they have one on their doorstep and when lots of jobs in the local community rely on them. In a sense, that is why siting near existing nuclear power stations is an easier route. It is why many replacement power stations go on the site of the existing power stations. That is why we are talking about Hinkley C, and potentially Sizewell C, precisely because of the concerns that people can sometimes have when there is a proposal of a new nuclear power station in an area that hasn't had a nuclear power station. Having said that, in the UK nuclear power is extremely well-regulated and very safe. We can see the regulatory clarity around nuclear, for instance, operating today because two of our nuclear power stations are undergoing maintenance because of a fault that was found. The process was gone through immediately, in an incredibly rigorous way, and I reviewed how that happened. We have a very clear process and safe regulation; but, nonetheless, if you are talking about getting a new type of power station going, in terms of SMRs, if you take away some of the concerns of local people by siting them in places where nuclear power stations are essentially popular, of course it makes it easier.

Q256 Ian Lavery: In the SMR feasibility study, was there any consultation with the general public about the SMRs?

Chris Pook: Not within the feasibility study, no. It focused very much on the technical aspects, the financial aspects of SMR development and also some of the regulatory barriers and siting issues that might need to be overcome.

Q257 Ian Lavery: What sort of consultation will take place with the general public about the—

Liz Keenaghan Clark: The feasibility study itself is looking at the potential economic benefits and costs and also the technical readiness of various SMR designs, with a view to hopefully say these ones are the ones that are the most advanced and the Government should potentially do further work and take a further interest in. Obviously, if this Government or a future Government does decide to do that then at that point in time they would have to make some kind of public policy statement and do some kind of consultation on the fact that they were minded to take forward SMR technology. At that point, they would probably also have to say something about what they intended to do to find future sites for deployment of SMRs. But there is a bit of further work to be done before we get to that point.

Q258 Ian Lavery: Minister, you mentioned before that if you get a whole number of these SMRs together that basically you have a power station, which is very interesting, because there are a lot of concerns about security and proliferation of sites. In terms of security and proliferation, what do you think is the best option—individually deployed sites across multiple sites, rather than located as farms, like you mentioned before?

Matthew Hancock: I think we should look at all options. I think, in terms of proliferation and safety, the most important thing is to have a very strong regulatory structure. We have one for conventional nuclear and we absolutely would have one that would cover SMRs. I think that we have proven over 50 years as a country that we can deal with these issues and have safe nuclear of whatever scale.

Q259 Albert Owen: Just on the siting, and I do agree with what you said about the acceptance of areas such as my own, what Mr Lavery was talking about was some sites have not been identified as suitable sites because of scale and this could be different, so we are looking at potential other sites. The advantage—do you agree?—of looking at those sites is that they have the infrastructure in place and we are running a parallel inquiry on network costs and one of the biggest network cost is the transmission and the transmission is already in place. But also there is a skill base there. Many of these sites are in decommissioning phase and they obviously have a skills base there. Is that a factor in this report, the feasibility study, when you are looking at potential sites?

Matthew Hancock: It is not a factor in the feasibility study that we are about to publish because that is about SMRs as a concept, not where they would be. But that is absolutely a factor, in terms of future siting considerations, yes.

Q260 Albert Owen: Have you had dialogue, your Department, with the Welsh Government because some of those sites are not just—

Matthew Hancock: We have done, yes. I have not personally, but officials have.

Q261 Dr Whitehead: Would you agree that the UK nuclear industry is effectively locked into a uranium fuel cycle for the foreseeable future?

Matthew Hancock: I wouldn't. It depends how long into the future you look, but there are different options, there are different potential fuels. Uranium is the pre-eminent fuel at the moment, but that does not necessarily rule out others. But development is at an earlier stage.

Q262 Dr Whitehead: Would you perhaps go any further than that, in terms of any concerns about the locking in in a uranium cycle, particularly in the context of depletion of uranium ore quality and reduction in production across the world with the pretty much inevitability of very rapid uranium price increases over the next 10 years?

Matthew Hancock: There are two ways to answer that question. The first is that almost all energy supplies have at times lived under the threat of predictions that they would run out. It does not always happen. For instance, the data that we run out of oil as a globe is constantly been pushed further and further into the future and so I would apply that element of scepticism to your description of the future of the uranium market. However, we should be open to other safe fuel—

Q263 Dr Whitehead: That is a quote from a paper in September 2013 from a leading member—

Matthew Hancock: Of course, leading members of all sorts of things make predictions about the future and they do not always turn out to be true.

Q264 Dr Whitehead: No, it did not say it would run out; it just said that the inevitability of shortage of supply and very high price spikes as a result.

Matthew Hancock: I used to be an economist. I know what happens when you try to forecast the prices of different commodities or exchange rates, or what have you, and you normally do not look very smart. That is my first point—a degree of scepticism as to predictions of future and terminal changes. The second thing is that of course we should be open-minded. On the flip side, of course we should be open-minded to safe fuels. There is a lot of talk about the potential for thorium to be a useful fuel in the future, and, absolutely, if the industry develops reactors based on different safe fuels then we will look at them and I am open-minded to them. But we should do that obviously within a regulated context to make sure they are safe, with a view to the very long-term fuel disposal questions, which are an incredibly important part of any nuclear programme. Likewise, I mentioned thorium, there are also potential PRISM reactors that are available and may have other advantages, in terms of reduction of proliferation. There are a whole series of options. We should absolutely keep scanning the horizon, but we should do it in an open-minded way, rather than making an assumption that uranium will necessarily spike in price.

Q265 Dr Whitehead: Is there any active work under way within your Department about the question of thorium as a source, particularly in relation to small modular reactors and a particularly good fuel in that context?

Liz Keenaghan Clark: Less so in the context of small modular reactors because thorium could potentially be a fuel for any type of reactor system. We are not particularly driving the work forward ourselves. However, we are involved in several international aspects of work and are assisting funding them. I think there is various work going on in the Nordic countries, for example, that we are interested in and involved in. We also have very close links with various people in the industry that are researching this area and we have always said that we are completely open to all different types of fuel but we will be led by the industry on it, taking the market approach—obviously we are already interested in, say, MOX as part of our plutonium disposition programme—and then we will continue to look at these fuels and see if they are appropriate ways to go into the future. In the meantime, we will make sure that we are taking our role on the world stage in appropriately funded international research programmes into their use.

Q266 Dr Whitehead: PRISM is the use of reactor effectively to reprocess spent fuel rather than sticking it in a hole in the ground. It seems to be rather a logical way to do it, does it not?

Matthew Hancock: Yes. We did a report in December 2011, which no doubt you saw, on this option and there has been some work going on since then. I don't know whether you want to say any more.

Liz Keenaghan Clark: PRISM is one of the three options that we are considering for plutonium reuse, along with, as I just mentioned, reuse as MOX in conventional reactors or the CANMOX system that would be burnt in CANDU reactors. The Nuclear Decommissioning Authority on the Government's behalf are currently doing much further in depth work into all three of those options, spending up to £10 million with the developers, so that we can get a very good idea of the technical and operational issues and risks. We are taking that forward and they are hoping to present the Government with some evidence towards the middle of next year on the outcome of that work so Government can then take a decision, a future decision about the plutonium disposition programme.

Q267 Dr Whitehead: In view of its dual function as developing a small modular reactor and its role in the reprocessing sector, would the Government, in your view, be positively supportive of development of such reactors as part of an early programme?

Matthew Hancock: Yes. We are very active in making sure that we open up those options and at this stage the most important part of that is engaging in the R&D that can bring them closer to reality.

Q268 Chair: Any further questions? Good. Thank you very much indeed, Minister, and your officials. We are very grateful to you, particularly for your marathon efforts. Without pre-empting the conclusions of your study or, indeed, of our own report, should either or both conclude that this is a viable technology that should go forward, given that it is the one form of low carbon technology where Britain potentially has a relative advantage at the start and expertise that might be internationally marketable as well as providing opportunities for people working at existing power stations, I hope it will be pursued in those circumstances with a great deal of willing. Thank you.

Matthew Hancock: Thanks very much.