



# HOUSE OF LORDS

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**The Select Committee on Science and Technology**  
Inquiry on  
**NUCLEAR FOLLOW-UP**

*Evidence Session No. 2*

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TUESDAY 10 DECEMBER 2013

10.45 am

Witness: Rt Hon Michael Fallon MP

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### Members present

Lord Krebs (Chairman)  
Lord Dixon-Smith  
Baroness Hilton of Eggardon  
Lord Jenkin of Roding (Co-opted)  
Lord O'Neill of Clackmannan  
Lord Oxburgh (Co-opted)  
Lord Patel  
Baroness Perry of Southwark  
Lord Peston  
Lord Rees of Ludlow  
Earl of Selborne  
Baroness Sharp of Guildford  
Lord Wade of Chorlton  
Lord Willis of Knaresborough  
Lord Winston

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### Examination of Witness

**Rt Hon Michael Fallon MP**, Minister of State for Business and Energy, Department for Business, Innovation and Skills (BIS) and Minister of State for Energy, Department of Energy and Climate Change (DECC)

**Q17 The Chairman:** I welcome the Minister of State for Energy and the Minister of State for Business and Energy in the same individual. Thank you for coming to join us for this session. This is our third attempt to meet you and we are pleased that on this occasion we have succeeded in arranging a session with you. As you know, this is a follow-up to our inquiry on nuclear R&D capabilities that was published a couple of years ago and we are very keen to hear from you how things have progressed in the intervening period. I should say that this session is being televised for those who have noticed, and I would like to invite the Minister to introduce himself briefly for the record.

**Michael Fallon MP:** Thank you, Lord Chairman. My name is Michael Fallon. I am Minister of State in the Department of Energy and in the Department for Business.

**The Chairman:** Thank you very much. I would like to kick off and it may be that the opening question evolves into a range of different areas, but if I refer back to our inquiry in 2011, we noted there was an absence of leadership and strategic thinking in government in this area, which has resulted in a lack of co-ordination of nuclear R&D activities and the perception among international partners that the UK is no longer a serious player in the field. We were struck by the extraordinary discrepancy between the view, on the one hand, of some senior government officials and the Secretary of State and, on the other, those of independent experts from academia, industry and nuclear agencies, the regulator and the Government's own advisers. We are keen to know whether this lack of co-ordination, accountability and clarity has changed in the intervening period.

We were presented by DECC with a diagram here that is extremely confusing. It does not help us. It has a lot of acronyms in it, but it does not explain who is accountable to whom, where the ultimate responsibility lies or who is providing the money. There are no connections at all between government departments on the diagram. I would like to hear from you how the nuclear strategy is being co-ordinated and how the interface is being managed, who is in charge of delivering the nuclear strategy, who is accountable and how decisions are made. That is an opener.

**Michael Fallon MP:** That is quite an opener, Lord Krebs. Thank you very much for it and let me begin by apologising for not having been able to meet the Committee before now. I do try to be accountable and I think this is my second appearance in front of a Lords Committee this week, with another one to go tomorrow. I try to be accountable but sometimes diary scheduling has made that impossible. I am glad we are meeting now.

Your report was a catalyst—something of a wake-up call to government generally and to the Department of Energy to make a better assessment of where we are in nuclear research and development, to work out where we want to be in 2050 and to map out how we get there.

That is the work we have been engaged in since your report was published two years ago and part of that is putting a new structure in place. Another important part of it is ensuring there will be and has already been a quantitative step up in funding available for nuclear research and, overall, making sure there is a proper strategy.

Yours was a very big opening question. You referred to a lack of this and a lack of that. I am much more concerned, as the Minister for nuclear, with where we are now and what we can do to get to where we want to be.

You referred to the structure and you have had the diagram with the structure. I think the structure, with respect, does show you how the Whitehall departments fit into the low-carbon co-ordinating group: the departments are on the right and there are other government departments involved. Of course, DECC and BIS are the leading ones, but there are others involved such as the department of the environment and the Scottish Government. There are other people with a very direct interest in this. They come together at a Whitehall level in the nuclear section of the Low Carbon Innovation Co-ordination Group, which has been meeting fairly regularly since the summer.

The strategy is led. It is accountable to me as a Minister and I am accountable to you in Parliament, but our principal adviser on the strategy is NIRAB, the Nuclear Innovation and Research Advisory Board. We have agreed the structure and membership of that board. I shall shortly be inviting a number of individuals to join it. The board will be chaired by Dame Sue Ion. That is an announcement I wanted to make to your Committee first. That is an announcement being made today. She is a former director of research at BNFL and is probably quite well known to your all in the nuclear industry. I expect that board to meet for the first time at the beginning of the year.

That board will be serviced by NIRO. That is the small circle underneath it. That is the Nuclear Innovation Research Office, which will provide a secretariat to the board and will

assist in better co-ordinating nuclear research and development across the UK. I have signed a contract with Gordon Bryan who will be the official leading that work. To start with it will be hosted in the National Nuclear Laboratory at Warrington, but it will build out from a core team and will provide the co-ordination and the logistical support for the advisory board.

That is the structure that we have put in place. There may be questions a little later about funding, but that essentially is the new structure that we are putting in place and it will be up and running from the very beginning of the new year.

**The Chairman:** Thank you very much. I will turn to Lord Jenkin of Roding in a moment, but could I just ask: in this diagram, where does the NIC fit? That is one of the things we have been told about: the Nuclear Industry Council.

**Michael Fallon MP:** I co-chair the Nuclear Industry Council with the Secretary of State for Energy and Lord Hutton from this place. The Nuclear Industry Council is a partnership between industry and government. It is not a government body. It is one of the partnerships under the industrial strategy where industry and government work together on long-term issues for the industry; for example, ensuring that the skills base is rebuilt, that issues of supply chain are tackled, that the export strategy for the nuclear industry becomes more coherent.

Issues that lie between industry and government are managed by the Nuclear Industry Council, which meets three times a year. I chaired the most recent meeting last month. Of course, when NIRAB gets going it will have the right of access to the Nuclear Industry Council and will be able to speak at its meetings.

**Q18 Lord Jenkin of Roding:** Minister, there was some surprise at, but, in some circles, welcome for, the fact that you were appointed both as the Minister in BIS where you are retaining, I gather, most of your previous responsibilities and became the Minister for

Energy. The feeling was that there have been difficulties between the two departments and many people saw your appointment as a way in which this might be resolved. Are you aware that, in fact, this has not happened; that those who have to deal with the departments are still quite unclear—indeed, the Chairman asked this question—of where the responsibility lies. The question has two aspects, one of finance and one of accountability, and they are not the same. I remember you telling me on one occasion, “DECC may not have the money, but BIS has. We have the research department”. It is not clear. We will come later to the question of a nuclear research programme and who is going to do it. Who is responsible and accountable for that and where is the money going to come from?

**Michael Fallon MP:** Let me be clear. I am the Minister responsible for nuclear issues. I am directly accountable for them and I am accountable to both Houses of Parliament for them, but there is an interest in both those departments in nuclear industries and I was invited by the Prime Minister to co-chair the Nuclear Industry Council almost a year ago, long before my move to the Department of Energy. For example, I also co-chair the Offshore Wind Industry Council because there are big industrial interests alongside the direct nuclear interest. There is considerable and very useful overlap between the two departments. I do not recognise your suggestion of difficulties between the two departments.

So far as funding is concerned, of course the Department for Business has funding for the research councils and has the Technology Strategy Board. I also look after a number of other financial instruments such as the Regional Growth Fund, which in itself can be brought to bear where necessary on other sectors, some of which are energy-related. It is very useful to have a Minister working across the two departments. With respect, I find outside that industry itself is not too bothered which funding stream a particular grant comes from or whatever so long as the grant is there. They are not particularly bothered which Minister is coming to the meeting as long as the Government are there and I hope we can resolve these

things. In the Nuclear Industry Council we sit alongside each other, from BIS, from DECC and from the industry.

**Lord Jenkin of Roding:** Are you not aware that there are elements in this—perhaps I could mention the National Nuclear Laboratory, which I know will be one of them—who do not yet know with whom they are dealing? They find it very confusing. Are you not aware of that?

**Michael Fallon MP:** I am not aware that they find this confusing.

**Lord Jenkin of Roding:** Well, I am telling you.

**Michael Fallon MP:** I am the Minister responsible for nuclear policy and I am the person they should be talking to.

**Lord Jenkin of Roding:** That is a good message. I will tell them.

**Michael Fallon MP:** They can read the evidence.

**The Chairman:** Lord Jenkin, I would like to invite you to continue to ask more about NIRAB and NIRO. I think the Minister has, to some extent, talked about that.

**Q19 Lord Jenkin of Roding:** Yes. I am delighted to hear—I was not aware—that Sue Ion is going to chair NIRAB and we certainly very much look forward to your announcement about the appointment and its getting under way. This is a very important element that came out of the Beddington group report.

Turning to NIRO, this is almost seen as a body, as you rightly said, that will be managed by NNL at Warrington. Are you aware that they been interviewing candidates for the chairmanship of NIRO and are looking for support for when it will eventually be brought into existence? You rightly explained that they are interdependent in the sense that NIRO is there to serve NIRAB, but we have heard less about that than we have about NIRAB. Can you fill us in a bit?

**Michael Fallon MP:** I am not quite clear what your question means. Could you repeat it?

**Lord Jenkin of Roding:** I am sorry. We discussed this at some length with David MacKay when we saw him previously.

**Michael Fallon MP:** Yes, in July.

**Lord Jenkin of Roding:** At that stage, this was all at a very early stage. We now know, as you have told us, that NIRAB will very shortly, we hope in the new year, be brought into existence. The question is: when will NIRO be brought into existence?

**Michael Fallon MP:** NIRO is starting already. We have made the appointment of the director, Gordon Bryan, with—

**Lord Jenkin of Roding:** They are interviewing. They have identified and put names to the department.

**Michael Fallon MP:** I have appointed the director, Gordon Bryan, who has taken up his position with immediate effect. It is his job to provide the secretariat for NIRAB when it holds its first meeting in January, so they have to get moving straight away.

**Lord Jenkin of Roding:** It will be managed by National Nuclear Laboratory at its office in Warrington?

**Michael Fallon MP:** It will be hosted by the National Nuclear Laboratory. That is where the core of the office will be.

**Lord Jenkin of Roding:** We will want to see how that develops. It is obviously absolutely key to the whole question.

**Michael Fallon MP:** It is and I hope, Lord Jenkin, you will welcome that we have followed through on the Beddington work and—as David MacKay told you we would set it in place—we now have the framework in place. We have the office and we have the advisory board. The office is already operational but the board will be operational from the beginning of next month.

**The Chairman:** Where is the funding for NIRO and NIRAB coming from?



**Michael Fallon MP:** The funding comes from a range of different sources. Some again from BIS, some from DECC, and I can give you more details in writing about that. I have a number of financial announcements to make about additional research on the nuclear side, but essentially both these offices will be funded from the two departments.

**The Chairman:** If you could give us the detail in writing that would be very helpful.

**Michael Fallon MP:** Sure.

**Lord Jenkin of Roding:** Could I just ask: that does not include any money for research programmes—is that right?

**Michael Fallon MP:** No, that is not right. There is money for research and I will be announcing—

**Lord Jenkin of Roding:** I am sorry. I did not catch the answer.

**Michael Fallon MP:** If you want to ask me about the amount of money we are making available for research, I am very happy to go into that in some detail as I have another announcement to make on that.

**Q20 Lord Jenkin of Roding:** The money you have just referred to as for funding NIRAB and NIRO—that does not include money for research programmes?

**Michael Fallon MP:** No, the research money is separate from that. That is money simply for the administration.

**Lord Winston:** Can we get some clarification? Is that money streamed through the research councils?

**Michael Fallon MP:** The new money we are making available for research?

**Lord Winston:** Yes.

**Michael Fallon MP:** Some of it is coming through the Technology Strategy Board. Some of it is coming through the DECC budget. Some of it is coming through BIS. It comes from a number of sources.

**Lord Winston:** But not from EPSRC?

**Michael Fallon MP:** Not directly from EPSRC, no.

**Lord Willis of Knaresborough:** I would like to know how much we are talking about.

**Michael Fallon MP:** The current financial year had some £16 million from the research councils and some £80 million from new investment in various projects. That is in the current financial year. That includes some £15 million for the National Nuclear Users Facility, some £15 million towards the construction of the Jules Horowitz reactor in France, some £18 million of funding across some 36 different research and development projects from the Technology Strategy Board competition, and a final £38 million for the Nuclear Advanced Manufacturing Research Centre. These are sums that have already been announced for the current year.

For the future, this week we are announcing some £28.5 million. I announced £13 million yesterday for a nuclear research and development competition that will be co-funded by the Technology Strategy Board, DECC and the Nuclear Decommissioning Authority, which will run in March. In addition to that, I am announcing some £5 million towards the cost of commissioning the higher-activity phase 3 facilities at the National Nuclear Laboratory in which I know this Committee has taken an interest; some £8 million to establish a national fuel centre of excellence providing shared equipment and facilities run by the NNL and Manchester University, a further £1 million towards ADRIANA—as you may know, that is the Advanced Digital Radiometric Instrumentation for Applied Nuclear Activities—and £1.5 million for another early nuclear R&D programme that we are currently negotiating.

We have seen a step change in funding for nuclear from the position eight or 10 years ago when we were spending minimal amounts on research and development and I hope the Committee will welcome that.

**The Chairman:** That is welcome news.

**Lord Jenkin of Roding:** Could we have a list? I think it very important that we have a list of all that.

**Michael Fallon MP:** Certainly.

**Lord Peston:** I am just a bit lost on the source of funds. First of all, it might help me: the bottom box called “Public funders”, who or what goes into that bottom box?

**Dr Hollinshead:** Sorry. I am Dr Hollinshead I am the Deputy CSA in DECC. In terms of the diagram, there is a wider funding stream here. Beyond BIS, GO-Science, DECC and so on, there is a range of other people, as the Minister said, who fund low-carbon energy and, therefore, those are the other “public funders” in that box. Now, they belong to the Low Carbon Innovation Co-ordination Group that funds all energy innovation. We have a sub-group that is just for nuclear that will form a link back to that group that considers the overall strategy for all energy R&D in the UK with all the relevant players on it. That is how you get your connectivity between the nuclear area and the entire concentration of energy research and development in the UK.

**Q21 Lord Peston:** That was not the answer I expected. The point is that everybody you have mentioned has no tax or revenue-raising powers whatever. The ultimate source of funds must be the Treasury. Am I right about that and does it allocate funds to the department, who in turn are then allocating on?

**Dr Hollinshead:** Yes, that is right.

**Lord Peston:** What I cannot see in the structural diagram is that process. Are there meetings where the Treasury turns up and tells your department, “You can have this money in total or specifically”? How does it work? Or does it work the other way round: do you go to the Treasury and say, “I am very keen to do some research in this area or promote research in this area. Will you give me the funds?”.

**Dr Hollinshead:** Clearly, at the moment, we have research programmes that were bid for through our department's spending reviews for sums of money for particular programmes, which in my case—I am speaking only for DECC—included a line for nuclear. What we intend to do, with the advice of NIRAB and NIRO as they look across the nuclear landscape and prioritise things, is to use that as information to make future business cases for additional funding with the Treasury or else what we will be doing is looking at our own programmes in terms of prioritisation of what we can fund. The NIRAB advice will feed into how we design our own programmes going forward but it could also be used as the basis for making the case for additional funding. That is how it will flow back to Treasury.

**Lord Peston:** Minister, do you go to the Treasury and speak on behalf of your department or do officials go to Treasury? You made a very welcome announcement about more money, which I am sure we all welcome. Was it you who got that money?

**Michael Fallon MP:** It was the department. If you look across at this time of year, Lord Peston—

**Lord Peston:** But it was your initiative; the structure works that way round?

**Michael Fallon MP:** Absolutely, yes. It is not the Treasury suggesting that we do this. This comes from the departments and, of course, at this time of year we look at the likely outturn of the various spending programmes that we have, and whether they are likely to be overspent or underspent. Where there is any underspend, this is the time of year when we can start to re-allocate it.

**The Chairman:** We very much welcome your announcement of a list of funding initiatives. Could you explain how those initiatives were chosen—what was the process and how transparent was it—and, within those initiatives, how transparent will be the process of allocating the funding?

**Michael Fallon MP:** Some of these funding initiatives are purely competitive. They are competitions organised by the Technology Strategy Board, which has a very good track record in organising this kind of competitive bidding process. Others are simply allocations that we have made in response to various bids. As you can imagine, in my department there are organisations talking to us the whole time about various projects they want to push forward. When we have NIRAB, of course, we will have a clearer source of external advice on the landscape, as it is described. At the moment we have our internal processes. All these bids have to be subject to preparation of a proper business case. They all have to be justified as value for money and yes, of course, they have to be reported in each case to the Treasury.

**Q22 Lord Willis of Knaresborough:** Minister, may I put on record that those extra resources of £28.5 million are hugely significant and very welcome, and I think it is important to say that. I have three brief questions.

First of all, you said that none of that money, unless I misunderstood, is going through the research council. So EPSRC is not allocating any of those resources. It is going directly to TSB, ADRIANA, a new research board and the national centre. Could you tell me whether this is for one year as part of the 2014-15 extension to CSR or is it phased over a longer period than that and, in which case, what will happen thereafter? Thirdly, given that TSB is set up to attract funding from the private sector as well, has that £13 million to TSB built in an additional sum that you expect to get from matched funding from industry?

**Michael Fallon MP:** Some of these allocations are spread over a number of years. The first one, the £5 million, will be spread over three years towards the cost of commissioning the phase 3 facilities. Some of the others are spread over the spending year period: the ARIANA money and the early R&D money and the £30 million R&D competition. That money is spread over the spending year period.

**Lord Willis of Knaresborough:** One year?

**Michael Fallon MP:** No, it is spread over the spending year period, so up to 2015-16.

**Q23 Lord Oxburgh:** May I add my congratulations to those of Lord Jenkin on persuading Sue Ion to take over the chairmanship of NIRAB. I think that is an excellent appointment. You commented that NIRAB would have access to the Nuclear Industry Council. It would be a very good move, I suspect, for the chairman of NIRAB, ex officio, to be a member of that body because you want the information and the views expressed on the industry body to feed in directly to NIRAB. I think if you could do that, it would be of mutual benefit.

My main question relates to the future of NNL. It has effectively been a contracting organisation for the past few years and its programme has been determined by what jobs they could bring in from wherever in order to keep their work going. For it to become a national nuclear lab it needs to have a rather different set-up. It does not mean it cannot do contractual work. In fact, I think contractual work would be important, but it also must have core funding. We discussed this a little bit with Professor MacKay and I wonder if you could let us know whether any of the sums that you have spoken of are intended to provide core funding for NNL or how that is to be done.

**Michael Fallon MP:** On your first point I am very happy to look at whether NIRAB should have an ex officio seat. We do not have ex officio on the Nuclear Industry Council. It is already a very large council and its membership, of course, is not for me. It is for the council itself, but I do not see any reason why not and it is certainly something I will suggest to the Nuclear Industry Council. There are always a number of people clamouring to sit on the Nuclear Industry Council.

**Lord Oxburgh:** That is good.

**Michael Fallon MP:** But the body gets larger and larger. I am very happy to look at that it would seem, to me certainly, to make sense.

So far as the National Nuclear Laboratory is concerned, I think we are trying to do two things with the laboratory: first of all, to develop its internal capacity to undertake world-class research and I think the announcement I have made this morning about commissioning of phase 3 of the central laboratories will help provide a world-eating facility for experimentation with some of the highly-radioactive materials for applications in new fuel technology and reactor technology and decommissioning and dispersal and so on.

**Lord Oxburgh:** That is all welcome.

**Michael Fallon MP:** I hope you would welcome that and I would see some of this phase 3 funding eventually becoming part of its core funding. Of course, we also want to help the NNL to develop its profile in world-class international research collaboration and I think that is why it has been so important to pay our subscription, if I can put it that way, to the Jules Horowitz reactor in the south of France and have NNL in there is a managing partner for the United Kingdom for that reactor, as it did with the Holden reactor project as you will recall. I also think it is important for the Government to support the NNL in its partnering work with other national research laboratories: in the United States, for example, as well as in France. I think those are the two core ways in which we see the NNL developing and for that, of course, it needs money.

**Lord Oxburgh:** Exactly. The question is: when and how?

**Michael Fallon MP:** Indeed, but, having set up NIRAB, we will have advice from NIRAB and I think we will have a much clearer picture of how the industry itself wants to see the research effort taken forward.

**Lord Oxburgh:** When would you anticipate some clarity on the routes for the funding and the amounts?

**Michael Fallon MP:** A substantial amount of funding has gone in this year. We have announced additional funding for next year over a range of programmes and I am sure

NIRAB will want to advise us fairly quickly on how some of that funding can be put on to a longer-term basis. I certainly see that as one of its functions. It will become our key adviser on that.

**Lord Oxburgh:** I think you said you saw NIRAB having its first meeting early in the new year.

**Michael Fallon MP:** I am about to send out invitations to membership of NIRAB and people have to either accept or decline my invitation in the next few days, but I certainly hope the first full board meeting will be held in January.

**Lord Oxburgh:** That is excellent news.

**Michael Fallon MP:** I hope we would all congratulate Dame Sue Ion on her appointment.

**Lord Oxburgh:** Absolutely.

**The Chairman:** Before I turn to Lord Jenkin, who would like to come in again, could I just ask one follow-up question to Lord Oxburgh's? Do you envisage then that the NNL, when it has changed its role and becomes a national research centre, will also be the lead body internationally for the UK? One of the things we heard before in our inquiry in 2011 was that the UK seems a bit of a reluctant partner in international programmes and it is important for us to know who the lead individual will be on international research collaboration. Do you envisage that being the NNL?

**Michael Fallon MP:** Yes, I do. I hope it will take a more active role in international collaboration from now on, not least, of course, because we have the resurgence of our civil programme here in the United Kingdom. I think we have something of a legacy in this area that we have probably neglected for too long.

**Lord Jenkin of Roding:** You mentioned the Jules Horowitz reactor and that certainly is welcome. It is a facility that is being built. It will have considerable capacity. The other one I have been told about is the Holden research reactor in Norway where, again, we are



involved with NNL in the lead. What I have been asked is, for instance, with Jules Horowitz, “What is the UK going to bring to the party?”. It raises the question: with all the spending that you have announced—no doubt, there will eventually be others—does that amount to a national nuclear research and innovation programme? I put the emphasis on the word “national” because that is what seems to be missing at the moment. It is not a unified programme that the NNL can then take and say, “This is what we can contribute and we want your help”.

**Michael Fallon MP:** First of all: what are we bringing to the party? We are bringing £12.5 million to the party. That is our financial contribution to the new reactor in the south of France. That is a significant contribution and it puts us right in there as a key member of the new reactor project as it is taken forward. I am not pretending that these various announcements and structures will instantly create overnight a new national programme, as you have put it. There should be a programme, but I think this is a good start. As I said, we are stepping up the funding and putting a clearer structure in place that I think will give us the genesis of a national nuclear research programme in the future.

**Lord O'Neill of Clackmannan:** In some respects we are playing catch-up at the moment because we have been out of the game for such a long time. Would you envisage, with some of the new partners who are coming into the civil programmes, that we would have the opportunity of getting alongside South Korean or Japanese research in areas such as fast breeders? It is one of the ways of dealing with the Sellafield problem. Certainly, we still have another 15 or 20 years to go on the fast breeder, maybe a bit less, but, since we cannot recreate Dounreay, can we get into partnerships with the people with whom we are already in partnership in terms of the funding for some of our civil programme? Would you envisage government-led initiatives in that area?

**Michael Fallon MP:** Yes, I would and we have made very clear to all overseas interest in our new civil programme that there are opportunities there to participate on the research side as well as getting themselves familiar with our regulatory structures. We have made that clear to the Chinese, the Koreans, the Canadians, the Americans and indeed to the Russians through Rosatom. There is plenty of scope for that and there is plenty of scope now for us to collaborate in these third countries; to collaborate, for example, in South Korea and in China with some of their research.

**Lord Oxburgh:** I think it is clear that some of the questions to which we would like answers you cannot possibly answer at the moment because it will depend on the advice from NIRAB. NIRAB will be a very important element in the structure. I suspect that this Committee will maintain its interest in things nuclear. When would you imagine would be a good time for us to return to this to look at some of the details that fill in the broad outline that you have sketched for us today? In other words, if we were to come back in late spring or something like that, would that be appropriate?

**Michael Fallon MP:** I think that is for you to decide.

**Lord Oxburgh:** You know how fast things are going to move.

**Michael Fallon MP:** I want things to move fast and I think this Committee has played an extremely important role in that. We did a lot of work through the Beddington work streams and we have done a lot of thinking about the new structure and how the effort can be properly funded. I think we do need to give the chairman of the board and her board some time to design their programme of work. I think that is only reasonable, so perhaps spring could come a little later next year.

**Lord Oxburgh:** It may well.

**The Chairman:** I wonder if I could just ask another question about the NNL. As it changes its role from a consultancy contracting organisation to a strategic research leadership

organisation, would it be worthwhile making some comparison between what we envisage for the NNL and what is going on in other countries? There might be lessons to learn about how countries with well-developed nuclear R&D programmes run their system. Do you think there is any merit in taking a look see?

**Michael Fallon MP:** Yes, certainly. I think that is a very good idea. There are some very advanced research programmes, obviously, in the States and indeed in France that we could well learn from in terms of how the research effort is modelled and how it is shaped.

**The Chairman:** Again, with regard to the NNL in terms of the leadership required to bring about this change, is that something that will be addressed by the NNL itself or with the advice or NIRAB?

**Michael Fallon MP:** Certainly with the advice of NIRAB. It will be for NIRAB now to be in the driving seat and sketch out its own programme of work and to advise us on how it sees the direction of this effort in NNL, but I think I have sketched out for you what the Government want to see happen with NNL.

**The Chairman:** Yes, that is very helpful.

**Q24 Lord Peston:** We are talking about research here, are we not? One word you have not used at all, Minister, is “universities”. Is there a university involved in all of this, in particular in terms of producing enough researchers to work in the areas that are dear to your heart?

**Michael Fallon MP:** One of the announcements I made this morning was the collaboration between Manchester University and the programme. It was the national fuel centre announcement, the £8 million to establish a national fuel centre of excellence. That will be a collaborative effort between NNL and Manchester University. That is one example of how there is very direct collaboration.

**Lord Peston:** Would you agree, since you also used the expression “world-class” that world-class means world-class researchers? If you ask where they come from, we could recruit them from abroad but, presumably, we would most like to recruit them via our own higher education system.

**Michael Fallon MP:** Indeed.

**Lord Peston:** That would be very much dear to your heart, would it?

**Michael Fallon MP:** Absolutely. Another reason for looking across this between BIS, which has responsibility for the research councils and the universities and has the science budget, and the Department of Energy, which has the more direct responsibility for nuclear. That is why we are trying to join all this up.

**The Chairman:** How was the link with Manchester University that you referred to determined? Why was Manchester selected, or was it an open competition?

**Michael Fallon MP:** I think there has already been some collaboration between Manchester and the NNL, but I would be happy to confirm that. Lord Krebs has been passed a list of some of the other collaborations that are going on. They involve some of the more obvious universities that specialise in this particular area.

**The Chairman:** Yes. Perhaps you could send us a copy of that list. That would be very helpful, because we would like to see the NNL as a truly national laboratory rather than just collaborating with one university.

**Michael Fallon MP:** Indeed, but I think one way of strengthening this is to invite, as I am doing, some academics to sit on NIRAB itself. There will be a very direct university presence as NIRAB shapes its advice. There will be academics on the board.

**Lord Jenkin of Roding:** Just to follow on from Manchester: of course, the Dalton Nuclear Institute is a very important in Manchester University and works very closely with a lot of other organisations, notably the NNL. Coming back to the research councils, you have laid

considerable emphasis on the funding that will come via research councils. Normally the pattern there is that research councils wait for projects to be put forward by enthusiastic researchers and then, if they are accepted, will then fund them. To what extent could that be credibly regarded as part of a national research and innovation programme? What influence would the research councils bring to bear on their selection of the projects put to them so they would fit in with NIRAB's and the Government's overall research ambitions in this field?

**Michael Fallon MP:** Of course, projects go up to research councils. There is bidding into the research councils, but there is also, through the Technology Strategy Board, a competitive element. We are able to call for research projects in particular areas, but I do not want to exclude the ability of universities and institutes to submit projects of their own design, on their own initiative, for research council funding. I do not want all research to be directed by the Government.

**Q25 Lord Winston:** Minister, I do not feel entirely happy with the response to Lord Jenkin. The backbone of British research is the PhD student in a university working, usually, on a research council grant. The Engineering and Physical Sciences Research Council puts around £7 million a year into fission research and rather more into fusion research. That is a tiny sum and there is clear evidence that young people who are bright are not going into fission research because they feel that it is a dead end; there is not enough funding for research. Surely the right mechanism is to ensure that the research councils are in charge of that kind of funding and have more say in how it is distributed rather than the TSB.

**Michael Fallon MP:** I think there is a balance there, but I certainly take your point. I hope you also take mine that we should not have this all completely controlled and directed by government; that we should allow scope for universities and the various research projects to put their bids in to—

**Lord Winston:** But research councils are not government. That is the Haldane principle. They are independent of government.

**Michael Fallon MP:** I understand that, but I thought the suggestion lying behind Lord Jenkin's work was that all this effort should be aligned through some national programme. I am a little wary of that.

**Lord Jenkin of Roding:** I recognise the point about "some", but I think there needs to be, and you have satisfied me that there will be, a central monitoring of this so that you can regard this as part of a national nuclear research and innovation programme.

**Michael Fallon MP:** I have satisfied you, Lord Jenkin, but I have upset Lord Winston this time. I, quite rightly, protect the integrity of the research councils.

**Lord Winston:** You have not upset me. I should have declared an interest. I am an academic at Imperial College, although I do not work in physics, I have to say, just to make that clear. I do feel that one of the concerns has been that the research councils have had very little money to play with in this area.

**Michael Fallon MP:** There has been incredibly little money in this area. That is very clear to me looking back over it as a new Minister who came into the department last spring. There has been appalling little money devoted to nuclear research and we are stepping that up. It started to change before I arrived at the department, but I am determined to step it up further.

**Q26 Earl of Selborne:** I would like to move on, Minister, to the site selection issues of the Managing Radioactive Waste Safely programme, a topical one. Of course, you have just completed a public consultation on the review of the siting process for a geological disposal facility. This was triggered by Cumbria County Council opting out of the process of finding a repository and that was attributed widely—we talked to Professor MacKay about this in July—to the failure of local communities to identify any benefits, so there was no buy-in

from local communities. For the new programme the Government plan a public information-sharing and discussion process. What is going to happen this time to make it more likely that communities will buy in?

**Michael Fallon MP:** Last time the two communities most directly affected did buy in and they voted in favour of the scheme. The problem was that the county council, which of course contained members from the other side of the county who were not directly affected, voted against it. Looking back on it now, I think that was extremely unfortunate. They did not have a direct interest in it and they effectively were able to veto the project.

What we are looking at now is making sure that that direct interest of the immediate local communities—the district councils concerned—should dominate the process and we should not allow it to be vetoed by some wider group that does not have a direct interest. That is what we will be consulting on. There are a number of options in the consultation process and we need to see how we can learn from that aspect of it and give communities more confidence to engage in the process, while still retaining the voluntary principle that this should be for communities to step forward and want to host rather than Government directing them to host.

**Earl of Selborne:** But if the community level at which the discussion should take place is not to be the county council, why will it not include parish councils as opposed to the district councils? You have to decide which is the host community and at what level you will involve the local community. As I understand it, parish councillors are excluded because they are not elected or some of them are not elected.

District councils, of course, do not normally have the facility to conduct the sort of debate that is needed on to what extent international guidelines on geological depositories are being met or to what extent engineered solutions are acceptable. These are the sort of issues that

need an informed debate and I would have thought it is unlikely to happen unless you can structure the debate in such a way that people can participate in a way that is fully informed.

**Michael Fallon MP:** I certainly agree with that and the purpose of the consultation has been to a better way to have this community involvement and engagement and to do so at the right level. Some parish councillors are, of course, simply co-opted on to the parish council. They are not directly elected. I think the district council is the best-placed democratic body because of the impact on jobs and on the local economy. I think it is best assessed at district council level. Some counties are extremely large and, as I said before, there are parts of Cumbria County Council that simply would not have been affected at all and had no direct interest in it. My instinct is that the district council is the right level. As you asked us to do and you would expect us to do, we have been consulting on all this. That consultation has now closed and we will now publish our response and set out a way forward.

**Earl of Selborne:** Is it not going to be very important to define what you mean by a host community?

**Michael Fallon MP:** Yes, I accept that.

**Earl of Selborne:** It should not exclude all tiers of local government and indeed other community groups, should it?

**Michael Fallon MP:** It should certainly include community groups, of course, but I do not think it is right, at a county level, that a county should have a veto over a project. I want these decisions about hosting to properly engage the local community and I do not think some overarching local authority should have the right of veto. I think that was unfortunate.

**Q27 Lord Winston:** Minister, what you are saying is something that would touch on something that both Lord Jenkin and I would agree with very much. I wonder whether you feel that one of the problems in nuclear has been consistent failure to engage the public by



successive Governments and what this Government might do to improve that public engagement to make sure that many of the anxieties that local people have might be assuaged.

**Michael Fallon MP:** As I said, that was one of the purposes of the consultation and we are still thinking about that and still open to it. We have not made any final decisions on that, but engaging the public more generally is one of the important work streams of the Nuclear Industry Council. I do not think it is sufficient to rely on the current public acceptance of nuclear power. It is there in the opinion polls at the moment, but it is not necessarily secure or bedded in.

Obviously, an accident that takes place abroad can affect it and so on. I think the industry and Government needs to continue to work at this to help people to understand that nuclear power is clean and efficient and safe provided it is properly regulated. This is work that we need to keep returning to and at the moment we are addressing this through the Nuclear Industry Council's work stream.

**Q28 Lord Oxburgh:** Minister, recognising that all communities of nations are idiosyncratic in all sorts of ways, I wonder to what extent the department has looked at other European countries, particularly the Scandinavian countries, and how they have managed this. In fact, what you are describing as your preferred way forward is quite close to what happens in Finland where there is a broad consultation, the Government then have a target area with which they would like to go forward and the one group that can veto that—and it is a clear, uncontested veto—is the local community, more or less as you have suggested. There is quite a lot of experience of doing this and it is probably worth seeing whether there is any value in looking at that.

**Michael Fallon MP:** I will certainly do that. I have not looked very closely at how other countries do this, so that is a very worthwhile suggestion. We have not made any final

decision on this, obviously. We have just finished the consultation and I was just sharing some thoughts with you as to what went wrong with the previous process and how we might improve it. I am troubled by this issue of the veto, but we have not come to conclusions yet.

**Q29 Lord O'Neill of Clackmannan:** Minister, the two issues of research and the siting of this facility raise a problem: how far do Government assume leadership and a sense of national priority, and do they leave it to the research community to put forward bids for money or, in this instance, the identification of the site? It is a national priority and it is something that, at the end of the day, you have to make a decision on. We hoped that, under the old system, a decision would be made, but it seems that the interests of bed and breakfast providers in other parts of England were of greater significance than finding a bed for nuclear waste. I feel that we can have any number of consultations, but the buck will stop with you.

In political fairness, as an opponent to you, I will say your predecessors, my own party, were singularly inept in their handling of this, but you have a chance now. You have a groundswell of public support nationally behind the industry and if you want to realise one of the biggest concerns that people have—a home for the waste—I think you have to show more leadership than this kind of getting close to it but not too close. I know it is out of character for you, but I think a rather more aggressive approach might be appropriate.

**Michael Fallon MP:** Successive Governments have wrestled with this problem. It existed when I first came into Parliament in 1983. I think NIREX was recommending that the waste be stored in a mine at Billingham on Teesside. That was 30 years ago, so there is a long and fairly sad history to all this. I still hope that we can cling to the volunteer principle. I still hope it is possible to find a way in which a local community can have an interest and see an interest in hosting this kind of disposal facility.

I am not going to rule out other options if it turns out, under whatever new process we come up with, that no community is willing to step forward. Of course, we will then have to look at other options, but I see this as part and parcel of the revival of interest in nuclear power. I think it is probably the first time for a very long time that we have had all three of the major political parties in favour of nuclear power. I do not think that has happened in my political lifetime. They are all now in favour. We had a very, very large majority when the nuclear issue came up in discussion on the Energy Bill in my House.

We have the restarting of the civil nuclear programme with the agreements with EDF on Hinkley and the guarantee now given to Horizon, and the prospect of 12 new reactors spread over five sites. You are right: this is a time to capture some of the public support we need for nuclear and GDF, the disposal facility, is part of that. We will certainly have one very good go at getting this facility located for the long term, so we are not giving up on it.

**Q30 Lord Wade of Chorlton:** When we proposed the NIRAB and that it should have a strong independent chairman, one of the issues that we discussed was that this person could take a role in drawing to the attention of the public the importance of nuclear power and its ramifications. They would possibly become a much more public figure than people who sit behind the scenes on other issues in Parliament are likely to be because some difficult decisions, as has just been discussed, will have to be taken. Do you foresee a role for Sue Lon, who would be an ideal person to do it?

**Michael Fallon MP:** She is certainly independent and, I think, perceived to be an independent figure with a strong nuclear background. Whether she would be willing to step forward as the public front of nuclear I do not know. That is something I would have to discuss with her—whether she says that is part of her role when the advisory board gets going.

**Lord Wade of Chorlton:** The industry needs a voice to be respected by the general public.

**Michael Fallon MP:** I think that is right. The industry does need to speak up now and I think that is beginning to happen. We have more voices being heard at the Nuclear Industry Council. There are more conferences being organised and there is a growing interest in the economic potential of the revival of our civil programme.

**Q31 Baroness Perry of Southwark:** Minister, I was very heartened to see that you are intending to do something about schools and the school syllabus for nuclear understanding and nuclear sympathy. Also, I think your document mentions that there will be teacher training in this field as well. I certainly know that there are teachers who tell their pupils that nuclear is very dangerous and nuclear waste is very threatening and so on. It is very important to get the next generation growing up to feel that there is an argument for nuclear, is it not? I wondered what your strategy would be. Who are you going to get to write these new syllabuses for schools and for teachers?

**Michael Fallon MP:** Yes, I think that is a very important point. The work on improving public understanding of nuclear is being done as one of the work streams of the Nuclear Industry Council. In fact, it is being led by a professor from Manchester University and that is certainly part of making sure that, in the educational system, people are not poisoned against nuclear right from the start. With the development of the new plants, I hope that in places such as Somerset, Anglesey and the other sites that are now coming under consideration we will see in the schools and the colleges a new attitude to nuclear.

**Lord Oxburgh:** Just a quick one to follow that up. One of the best things for families to do on a wet day in the Lake District until not very long ago was to go to the Sellafield museum. I do not know how the decision to dismember and close it was taken, but it was a bit of a disaster and, indeed, it addressed the kind of things that Baroness Perry was referring to.

Just to comment more broadly, having worked in different parts of the world in the public sector: one of the things that very often is done in parallel with a new programme is to set up a public information facility. For example, if you go to Singapore, where water is a key part of the infrastructure, visiting the water museum close to the international airport is remarkable. You may think it is virtually impossible to have a museum of water, but they manage it and it is a good education facility. In these various facilities that are being planned around the country, it would be worth a little push—for Government to say, “Look, we are giving you this money to do the work but also you have a responsibility to us and to the local community to let them see why we are doing it and how it is spent”.

**Michael Fallon MP:** I am very happy to think about that. It is already being done at the two new sites at Hinkley Point C and there is a visitor centre, which I have visited, at Wylfa in Anglesey, which sets out the plans for Wylfa B and the timetable. There is lots of information and it is well used, I understand, by school parties from Wales, but that is certainly something I will take forward. There are visitor’s centres at existing nuclear stations, but I am sure there is more we can do there.

**Q32 Lord Rees of Ludlow:** I wanted to ask you to comment on the signal we are sending to young people choosing careers in science and technology. We have had some welcome incremental steps, but, as you say, from a very low base, in the past 20 years. One would have thought there was a possibility that the UK could take a more active part in fourth generation nuclear, as with other kinds of renewable energy. If we look towards 2030, do you think it is realistic to be such serious players again in the nuclear industry as we were 30 years ago?

**Michael Fallon MP:** I do, personally, and we have to replace our nuclear fleet. It is an indictment of the past that the year that Hinkley comes on-stream, eight of our nine stations will be off-stream, unless the last four are extended, which shows you that are just in time to

start replenishing the nuclear fleet. The method of finance that we have chosen is unique. We have persuaded somebody else to come forward with the £16 billion and we have persuaded them to take all of the construction risk as well. I think, with the financing solution that we have found, we have the very real prospect now of following on from Hinkley to a second EDF station at Sizewell and then the two Hitachi stations at Wylfa and Oldbury, and then we have a third consortium engaged at Moorside near Sellafield. So we have the prospect of 10 to 12 reactors at four or five sites. This is a growth industry. The supply chain involved in Hinkley had a huge exhibition at which I spoke. I toured the stands afterwards and I saw virtually every college in Somerset had a stand there offering the different courses already that the nuclear industry is going to need. These were not simply in design and technology but also in management in how these projects were going to be put together. I hope that young people will see this revival of nuclear as a huge career opportunity, as a growth industry for the future and as something that, once again, this country can do well in.

**The Chairman:** Minister, that is a very positive note on which to end this session and I thank you for coming to meet with us. I think I speak on behalf of the Committee in saying that we welcome the news that Dame Sue Ion will be appointed as the chair of NIRAB and that NIRAB will start its work early next year. We welcome your announcements about new funding and we welcome your commitment to making the NNL the lead national laboratory for strategic research on nuclear R&D. As Lord Oxburgh has said, we retain an interest in this area and we see now that things are beginning to happen. I feel it is quite possible the Committee will want to come back and look at things some time in 2014, just to pick up the story and check that things are moving forward in the way that you have so encouragingly portrayed to us. Thank you very much indeed.