

Business, Energy and Industrial Strategy

Oral evidence: Draft National Policy Statement for Geological Disposal Infrastructure, HC 1092

Tuesday 10 July 2018

Ordered by the House of Commons to be published on Tuesday 10 July 2018.

Watch the meeting

Members present: Rachel Reeves (Chair); Vernon Coaker; Stephen Kerr; Peter Kyle; Mr Ian Liddell-Grainger; Albert Owen; Mark Pawsey.

Questions 1 - 146

Witnesses

I: Philip Matthews, Executive Director, Nuclear Legacy Advisory Forum; Ruth Bradshaw, Policy and Research Manager, Campaign for National Parks; Dr Pauleen Lane, Group Manager National Infrastructure, Planning Inspectorate.

II: Bruce McKirdy, Managing Director, Radioactive Waste Management; Stephen Tromans QC, Member, Committee on Radioactive Waste Management; Professor Andrew Blowers, Co-Chair, NGO Forum and Chair, Blackwater Against New Nuclear Group.

III: Richard Harrington MP, Parliamentary Under-Secretary of State, Minister for Business and Industry, Department for Business, Energy and Industrial Strategy; Stephen Speed, Director, Nuclear, Department for Business, Energy and Industrial Strategy; Umran Nazir, Deputy Director, Decommissioning, Radioactive Materials and Geological Disposal Programme, Department for Business, Energy and Industrial Strategy.

Written evidence from witnesses:

– [Add names of witnesses and hyperlink to submissions]

Examination of witnesses

Witnesses: Philip Matthews, Ruth Bradshaw and Dr Pauleen Lane.

Chair: Thank you very much all three of you for coming to give evidence to our Select Committee this morning on this important issue of geological waste disposal. We have a lot of questions to get through and we have three panels of evidence this morning, so we will get started straight away.

Q1 Stephen Kerr: Good morning. Can I ask some general questions to start with? Are your organisations and members satisfied that the draft NPS provides adequate justification for the need for geological disposable infrastructure?

Philip Matthews: No. In our submission we say that there are a number of strengths within the NPS as it stands. It covers quite a lot of the issues, but there are some key areas where we would like to see more information. In terms of the preamble and the context-setting in particular, there is a need for a lot more than we have just now. There are a whole range of things there.

It talks about CoRWM's decision and the 2014 White Paper, but we would like to see a lot more on the process by which CoRWM came to the decision that geological disposal was the optimal solution within the current state of knowledge. We would like to see lots more on the context for radioactive waste management within the UK at the current time. There are a number of communities that already have radioactive waste within their community, particularly in west Cumbria, but elsewhere as well. That needs to be recognised, because that is affected by the progress or not of the geological disposal facility development. We would like lots on the multi-barrier approach, which is the way the waste is going to be protected, the timescales that we are talking about, which are absolutely huge. This waste has to be protected for hundreds of thousands of years.

Q2 Stephen Kerr: Have you got alternatives in mind that you think should have been included?

Philip Matthews: No, we support the policy of geological disposal. We have a group of planning officers within our network. In terms of them being able to participate in this process, in terms of local planning functions, they really would need a lot more contextual information. I am sure the public will need a lot more information as well. Within our submission we have a whole range of things we suggest.

Dr Lane: Obviously it is not for me to comment on the merits of the policy statement at this stage. It is a matter for the scrutiny process that you are going through. It does contain all the headline elements as per a national policy statement, and as required under legislation, in terms of



HOUSE OF COMMONS

the different elements. As to the level of the adequacy, the scrutiny process that you are going through is able to test that.

Ruth Bradshaw: We do not have a strong view on that. We would leave it for others to comment on that. Our main concern is with the principle about the planning protection for national parks and whether that should be included.

Q3 **Stephen Kerr:** You do not have views on alternatives.

Ruth Bradshaw: We do not have a view on that. We do not feel that is our role to comment. We leave that to others who have the expertise.

Philip Matthews: If I could just come in briefly on that, our organisation's policy is to support geological disposal, with some caveats. We wonder why, in terms of the appraisal of sustainability, other options were not at least appraised. For example, the Scottish Government have a separate policy. We wonder why geological disposal with retrievability was not appraised as an alternative as well. It does not mean we actually support either of those as alternatives, but we wonder why they were not considered as part of that appraisal. It is not the NPS; that is the appraisal of sustainability aspect.

Q4 **Stephen Kerr:** This is a question for Pauleen. How does this draft NPS compare with the national policy statements for nationally significant infrastructure projects, in terms of scope, timeframe, comprehensiveness, complexity and so forth?

Dr Lane: It has a similar set of elements in relation to, as you have already highlighted, the statement of need. It has the elements in relation to the range of impacts that are considered to be relevant, and it gives indications against each of those impacts as to the expected weight the Secretary of State will give. It has all the elements that you would expect to see within a policy statement. If you compare it to the other policy statements, obviously they form a range. Some of them are spatially specific. Some of them are purely technology-based. Within that range of scope of policy statements, it has all of the existing elements.

Q5 **Stephen Kerr:** Does it have a sufficient level of detail and guidance that would allow guidance for developers' applications?

Dr Lane: It has statements that are intended to give local communities an indication as to the issues that will be considered. It has statements that are intended to give an indication to developers as to processes that are required of them, whereas there are some elements of it where there might be a greater range of discretion. I should say that the policy statement is obviously read in conjunction with the appraisal of sustainability, and therefore that is relevant as well. It is not a completely standalone document. You have to read the whole suite in order to understand the full extent of this.



HOUSE OF COMMONS

Q6 Stephen Kerr: Are there any specific improvements that you would like to see to the NPS that would assist?

Dr Lane: That is not a matter for me at this point, as the Planning Inspectorate. Apologies.

Q7 Mark Pawsey: Dr Lane, one of the challenges of this process is that the sites are not specific. How does that make it difficult? Normally, where there is a major infrastructure proposal, we know where it is intended to be. This does not have that focus, so how does that change things?

Dr Lane: As I said, within the suite of policy statements there are a range of approaches, some of which are spatially specific. You will have dealt with one recently that was spatially specific. On the other hand, there are some that are based around the technology. In this case, this is one that has adopted an approach of the onus is on the developer to identify locations that would potentially satisfy the criteria laid down in the policy statement. It falls within the normal range of policy statements that sometimes they are spatially specific, so, for example, the waste water one was spatially specific in relation to the Thames Tideway Tunnel. On the other hand, most of the energy ones, with the exception of nuclear, are not spatially specific. It does not make it more difficult. It just means that you test different elements at different stages of the process.

Q8 Mark Pawsey: This is a proposal that will give rise to community concern. What happens if a proposal comes forward that the community has not had proper engagement with? At what stage should community engagement take place and how should it take place?

Dr Lane: You have had the actual process of compiling the policy statement itself. As it says within the legislation, the Secretary of State has had to judge, in the process of compiling the policy statement, that they will have attempted to engage communities that are potentially affected. Obviously that is more wide-ranging where you have a non-spatially specific policy.

Once the policy statement is approved, then you move into the stage where a developer identifies to the Planning Inspectorate that they have a potential location that they are considering, and at that point they then trigger the sections in the section 40s of the Planning Act, which require them to engage with the relevant local authorities in the first instance, and then with the communities themselves. There is provision within the legislation, both in the drafting of the policy statement and subsequently. If you move from a non-spatially to a spatially, at that point you would trigger the very specific engagement with communities.

Q9 Mark Pawsey: How would you judge whether or not that engagement has been effective and has met the requirements?

Dr Lane: That is not a matter for us to judge in relation to the policy statement. That is a matter that is included within the process that you



HOUSE OF COMMONS

are undertaking here and ultimately for Parliament, as to whether they feel the Secretary of State has adequately engaged in the drafting of the policy statement. When it comes to an actual application there's a separate set of rules that govern the way in which the Planning Inspectorate would judge the engagement of a developer with local communities on a particular project.

- Q10 Mark Pawsey:** Last week the Committee visited Sellafield. We got some understanding of the nature of this waste and the fact that we have not had a long-term solution to the problem up until now, or even looked at it properly until quite recently. We recognise that there is a need for effective long-term disposal, but what would happen if no community came forward?

Dr Lane: That is a matter for the Secretary of State, in the sense that there is a plan. It has been incorporated into the legislation that there is potential provision. It does not mean that no project could come forward. It just means that it might come forward without a national policy statement, if that is the question you are asking. Are you saying that no community volunteers?

- Q11 Mark Pawsey:** We know there is a problem. As a country, we know we need to deal with it. The route we are taking is that developers need to identify a site, engage with the community, and the community needs to come forward. What happens? Do we just continue to postpone any decision until a community does come forward? What happens if one never does?

Dr Lane: The Secretary of State has laid down a process in relation to community consent, which is actually parallel to but slightly separate from the policy statement. I cannot comment on that, because we do not deal with that in the Planning Inspectorate, in terms of the process that BEIS have outlined for identifying potential communities with consent.

- Q12 Mark Pawsey:** Is there a possibility that the Government could impose a geological waste disposal facility?

Dr Lane: That is not a matter for me.

Philip Matthews: I have been heavily involved in the parallel Working With Communities policy. One weakness of the NPS at the moment is it does not interact closely enough with that. Just to add to what Dr Lane has just said, this will not proceed unless we find volunteer communities that wish to enter the process. We are not clear yet because the communities policy is still to be finalised, but there may be some sort of local authority veto over whether they proceed. There will also be, at the end of the 20-year period of engagement, a test of public support alongside that. The NPS has its engagement criteria and requirements for engaging local government and communities and so on. This is very different from other NPSs, in that there is this parallel process that essentially affects whether there are any communities involved and how they are maintained in the process.



HOUSE OF COMMONS

Q13 **Mark Pawsey:** That does not solve the problem that we identified as a Committee. If no community comes forward, we continue with the temporary arrangements that we have had for the last 50 years. We carry on forever in this limbo period.

Philip Matthews: Within the current policy that is absolutely right. It is a voluntarist process. What I would say is that in other countries like Sweden and Finland they have actually succeeded with this. Going back to the recommendations that were made to Government, upon which this policy is based, we are very clear volunteerism is central. Because of the nature of the material, the great longevity of the process and so on, it is absolutely vital we have a consenting community enter the process and it is not something that is imposed on that. Certainly, it would require, in my understanding, a new policy to be enshrined for Government to proceed without a consenting community being part of it.

Q14 **Peter Kyle:** To follow on, you can see that the Committee is quite concerned with this and wants to get the facts absolutely right. Dr Lane, is there any other example where community consent has been separated and runs parallel to an NPS when it comes to a nationally significant infrastructure project, or is this the first time?

Dr Lane: This is the first time that there has been a separate process identified as an issue of community consent that is separate to but parallel to an NPS, yes.

Q15 **Peter Kyle:** From your experience, has there been any problem in the past of having it as part of the NPS?

Dr Lane: It is a different nature and a different scale of issue. The NPS and Planning Act process is primarily concerned with the land use elements and balancing the way in which those land use elements impact on the community, in terms of the matters that are under direct control. This is different, in the sense that this is about, as you say, a national issue. It is about a context. I can understand why the Department has done what it has done. We have been able to resolve all other projects through the land use process, the impacts of the scale and nature within the Planning Act process. The way that BEIS have approached this recognises that this is different.

Q16 **Peter Kyle:** What we are asking communities to do here is not to just make a decision that is about the present generation. You are asking a community to make a decision that is going to affect many, many generations to come within that community. If there is one site that has been built there and it lasts 150 years, and we know that the material itself is going to need a home for up to 1,000 years perhaps, we are asking a community to do something that is going to last a very long time. Philip, in your experience, is this something that is going to make communities just unbearably cautious?

Philip Matthews: That is a major challenge. If you are a local elected member, local council leader or a local community organisation, you have



to ask what your initial reaction to this would be. We suffer, in some ways, from a low level of understanding of the issue. We have this waste already and we need to do something with it. As CoRWM, who you will be hearing from later, have recommended, this is the internationally accepted best practice solution. Almost every country except Scotland is pursuing geological disposal. That is absolutely given but, as you say, there are 150 years for the operation and the material has to stay safe under the surface for more than 300,000 years. It raises an awful lot of intergenerational questions—ethical and philosophical questions. Therefore, it very much has to be rooted in a community that buys into the process, that has a long process of engagement and understanding and at the end of it has the right to say yes or no. The developer also has the right to withdraw at any stage in the process as well. That community consent is absolutely central to how they should operate, given the complexity and the nature of what we are talking about here.

Q17 Peter Kyle: Staying with you, what do you think has gone wrong with previous attempts to get community consent or just to get the process done. What are the lessons?

Philip Matthews: The last process was perhaps too rigid. There were a number of cut-off points throughout the process where there could be an exit. We do not actually know what this new process will be, in terms of the communities aspect, in terms of whether there would be a local government veto, how that would operate and at what stage. I think it is a more fluid process. It is also an NPS, a national infrastructure project, which is different from before. Some elements have changed and we are not against those changes at all. One of the main reasons it failed last time was due to a lack of clarity about the investment package that had come to the community in west Cumbria last time—it could be anywhere this time—as part of that. We need to see a lot more clarity from the Treasury and from the UK Government on exactly what is proposed, how that would operate and so on as well, because I think that was absolutely fundamental to their rejection of the process last time.

Q18 Peter Kyle: Ruth, do you have anything to add to that, as to the lessons from the previous attempts?

Ruth Bradshaw: Not specifically on that. On the issue of the community role and how communities will be consulted, one of the issues we raise in connection with national parks is because these are national designations, where there is a national interest in them, when you are thinking about the community that should have a right to make decisions on a national park, potentially that is the whole of the nation. Obviously the practicalities and the costs of actually consulting at that level are huge. That is another reason why we are arguing that national parks should be excluded as potential locations for the new facility.

Q19 Albert Owen: On the lessons learnt, of course there was a lot of work done by Nirex in the previous period that identified areas that were not suitable, as well as what was suitable. Is that covered by this national



planning policy?

Philip Matthews: It is not. RWM, who you will be hearing from later, have done a lot of work in geology. We really need the deep boreholes that are part of this to establish the local geology. It is absolutely essential this goes in the correct geology and the range of geologies that would be appropriate for that. Given the flexibility in terms of where the headworks of this might be from the underground storage, which could be a number of kilometres away and at different levels under the surface and so on, it is possible in many locations to find a suitable geology. I agree that there is not a screening process in that sense because until we get deep down we cannot really be sure what the geology is. I think many areas of the country would have a reasonably suitable geology.

Q20 **Albert Owen:** I will come on to national parks and a possible exemption. Do you think the policy statement and its principles, impacts and supporting documents have covered this sufficiently?

Philip Matthews: It was interesting that the appraisal of sustainability suggested that the most appropriate policy would be a policy that excluded national parks and designated sites and so on. I think that is a reasonable thing because, as I said, there is this flexibility about where the above-ground works will be in relation to the underground side. I find it slightly curious that the appraisal of sustainability said one thing and the policy immediately ignored that. It is up to the Government to listen to the appraisal of sustainability. They have an absolute right to choose a different approach and they justify why they chose that approach. I would question why it is necessary to have national parks within that for the reasons that have been made by Ruth.

Q21 **Albert Owen:** Do you want to elaborate? You mentioned it earlier on to Mr Kyle?

Ruth Bradshaw: This is a huge development. I am sure you are all aware it is absolutely massive. There is no doubt this is a major development and there is a strong presumption against major development in national parks as part of national planning policy. We just feel that has not been taken into account in the national policy statement. The additional protection for national parks and AONBs—other designated sites—is not included. BEIS, as all Government Departments do, has a statutory duty to take account of the statutory purposes of national parks and that has not been reflected in decisions that have been made on the national policy statement so far.

It is also important to remember that, from an economic perspective, national parks deliver huge amounts to the economy. A lot of that depends on the high-quality environment in those areas. If that is put at risk or there is even a perception that the environment in those areas is going to be undermined, fewer people will go there. The products that are made there will potentially be less attractive to sell. There are huge economic risks as well as the environmental risks.



HOUSE OF COMMONS

Q22 **Chair:** Would your exclusion of national parks exclude Sellafield from being a site for geological disposal?

Ruth Bradshaw: Sellafield is not in a national park, I do not think, is it?

Chair: No.

Ruth Bradshaw: Oh, sorry. It would exclude the Lake District, yes.

Q23 **Chair:** Is Sellafield excluded?

Ruth Bradshaw: It is the principle we want to establish that national parks should not be included, so yes.

Q24 **Chair:** Yes, but I am asking you a specific question. I am just asking; I do not know the answer. If you got the changes you wanted to the national policy statement, would you be able to dispose of the waste at Sellafield.

Ruth Bradshaw: As far as I am aware, Sellafield is just excluded from the Lakes. It is not actually within the Lake District.

Chair: So it would not affect Sellafield.

Philip Matthews: I am pretty clear that most of Copeland borough, which is where Sellafield is located, is not within the national park. The other thing we need to be aware of is the actual facility itself could be significantly offshore, under the sea, as well. There is enough coastal land within Copeland and that part of west Cumbria to have the headworks and the facility completely outwith the national park boundary.

Q25 **Chair:** When the scheme was scrapped in 2013, would any of the sites that were being looked at then have fallen foul of the national parks?

Philip Matthews: I was not directly involved in the last process. I can respond to that in writing afterwards. As far as I am aware, they were not.

Q26 **Albert Owen:** Are you excluding areas of outstanding natural beauty as well as national parks.

Ruth Bradshaw: The same planning protections apply to AONBs. As an organisation, our main focus is on national parks.

Q27 **Albert Owen:** Can I be devil's advocate here? When it comes to pylons, for instance, the argument from protest groups in areas of outstanding natural beauty and national parks is that you can put them underground, that it is the visual impact that is the greatest and you need to mitigate that visual impact. Why does that not apply for this particular project?

Ruth Bradshaw: It would have a visual impact, because there is a huge, kilometre squared surface development, as well as the underground development.



HOUSE OF COMMONS

Q28 **Albert Owen:** If that was outside the boundary of the area of outstanding natural beauty or national park, is it your protest against it being anywhere near it, or is it the visual impact on the surface? I need to just clarify that.

Ruth Bradshaw: It is the principle that major development should only be allowed in national parks in exceptional circumstances. The position on pylons is that new routes should avoid national parks or AONBs wherever possible, and if it is not possible then they should be undergrounded. Something of this scale would have a much bigger impact underground than a cable route. There are potentially wider impacts on the environment.

Q29 **Albert Owen:** I have one final question for Dr Lane. Will equal weight and importance be given to each of the assessment principles, impacts and associated documents, and would further guidance be helpful?

Dr Lane: Each of the assessments is conducted first in its own right, and it uses the wording that is associated with it within the national policy statement. Where the wording says, for example, "very significant weight is given" or "limited weight is given", that is tested within that particular definition. It is only when you come to the overall planning balance where you are testing the need element of the case versus, if you like, the collective output of the mitigated outcomes, that you need to effectively sum them up. It is not a mathematical formula.

Q30 **Albert Owen:** I am kind of following you. In a further stage there will be further guidance.

Dr Lane: No. The national policy statement is the guidance. This is the statement, and so it is important that the national policy statement is clear on that element for each of the different areas of assessment.

Q31 **Vernon Coaker:** Mr Matthews, in your evidence you stressed the importance of local community consent. You felt that should be added to the assessment principles. There is already a Working With Communities process, so why would you add it? What value does that add?

Philip Matthews: I appreciate that of course the two should run seamlessly together, and that is absolutely right. Our sense is just, going back to some of the earlier discussion here, that there is not necessarily the clarity at the present time about exactly how that community consent process, voluntarist process, ability to veto the process from the local community, will interact with the NPS properly. We would like to see the two brought together very clearly. A lot of people will look at the NPS possibly in isolation, and it is very important that they understand that wider context as well. Local community groups might look at that, planners and people within the Planning Inspectorate as well. It is important we see this as a rounded approach that draws together the two strands of current government policy.

Q32 **Vernon Coaker:** Essentially, in your view, by including it in the national



HOUSE OF COMMONS

policy statement it would give it much more clout, emphasis and reassurance.

Philip Matthews: As a principle, yes. The Working With Communities policy is a standalone thing, and that should remain as such. We have responded to a recent consultation on that. It is very important that everyone is clear about how the two interact together over what will be a very long time, possibly 20 years until there is a test of support, and then 150 years of construction and operation. It is very important that we have a connection between the two throughout that process.

Q33 **Vernon Coaker:** Can I ask the two of you if there is enough room for local authorities and campaigning organisations to actually inform that process through the national policy statement?

Dr Lane: I have spoken earlier about the duty of the Secretary of State to engage potentially relevant bodies in this process. Once a project actually comes forward, there are arrangements where the proposer must engage with local authorities. In one of our advice notes we encourage, for example, proposers to consider planning performance agreements so that they ensure that local authorities are sufficiently resourced in order to be able to engage appropriately. Then during the actual process, if a project comes forward for examination, the local authorities have a statutory right to be engaged through the local impact report. Obviously, we would encourage them to do that as well.

Q34 **Vernon Coaker:** We have heard from Mr Matthews that he thinks the national policy statement needs strengthening. Do you think, as it is currently drafted, it should be strengthened to ensure that what you have just said actually happens?

Dr Lane: The things that I have just referred to are actually laid down in the Planning Act, so they are generic to the structure of the process that we are engaged in here.

Q35 **Vernon Coaker:** I will tell you why I am asking. The reason I am asking is because what people will think is they will be cynical about it. This goes back to what Mark Pawsey was saying. They will assume that in the end the Government's policy is geological disposal, and therefore they will think, if all of this is not laid out in the national policy statement, that, essentially, all that is right, it is in legislation, but in the end the Government will do what they want.

Dr Lane: In that sense the question that I was asked earlier illustrates the opposite. This is unusual for a policy statement to have a parallel process in relation to community consent. My slight concern is that importing the question as to the test of the validity of community consent into a national policy statement takes it to a place that they were never meant to be. Actually having the separate process that is tested in its own right does not overreach the way in which the Planning Act was constructed. The Planning Act was constructed in order to have a formal engagement at each stage of the process, in generic circumstances.



HOUSE OF COMMONS

What you have here is a particular set of circumstances and that, presumably, is why BEIS have put forward the proposals that they have.

If you import into the policy statement the question as to community consent, you would have to write down in the policy statement exactly how that would be done, because the inspectorate has to carry out a neutral objective process. You would have to determine now, at this point with the draft policy statement, exactly what that process would potentially look like and what the test would be. I am hesitating, trying to stay away from words like “referendums”. You would have to have a clear, objective process with some formal means of testing in it. That is not what national policy statements were originally meant to be under the Planning Act. Here you have a separate process, which is intended to lay that out. That is why I am just a bit concerned that if you pull the two together, you may have confusion rather than clarity.

Vernon Coaker: Yes, although maybe you could make a general statement of the importance of consultation. Your point is that is already included in bits of legislation. I am just saying on something as controversial and important as this it may be, in the way that Mr Matthews has said—

Dr Lane: The formal elements are included but, as Mr Owen’s question illustrated earlier, if you put things in the national policy statement you should also identify the test to which they are subjected.

Ruth Bradshaw: I am sure in terms of the legislation it probably refers to local planning authorities, rather than local authorities. I am not sure, but it is just because national park authorities are local planning authorities but not local authorities. We would obviously want to make sure they were being consulted in all this.

Dr Lane: They would be classed as—

Vernon Coaker: As a campaigning organisation or another body.

Ruth Bradshaw: As an NGO, I do not think it is specific to this NPS particularly. It is a difficult process to engage in as a small organisation. It is often quite a lengthy process with different stages where you need to interact, in terms of going through the nationally significant infrastructure project planning process. It is not specific to this NPS. It is the process really.

Philip Matthews: I would agree very much with a lot of what Pauleen said there. There is a lot of complexity in this in the role of local government. As Pauleen said, there are clearly defined roles for local authorities within the NPS process. Within our submission we have just suggested some ways in which, within that NPS context, they could be enhanced. This issue of the link with the other policy is challenging. I accept what you are saying. To be honest, in terms of the communities policy we do not actually know the form of what the test of public support will be, because that will be 20 years down the line. If you had said 20



years ago we could have done it online, people would not have understood that. We do not know what the method might be, but I still think it is important that we make that link in some way. I can see there may be a challenge for the Planning Inspectorate in how that is worded, but I think it is important there is some sort of connection there.

- Q36 **Peter Kyle:** Philip, one of the things that I was struck by, and we as a Committee were struck by, visiting Sellafield, was how many of the problems and challenges of previous generations have been kicked down the road for this generation to solve. Do you have a ballpark figure or any number that comes to mind of how much more we are going to have to pay for a geological solution to disposal than had it been done 20 years ago, when it was first discussed?

Philip Matthews: I do not. You have RWM and CoRWM coming in later. They might be able to give you a view on that. I think our legacy of waste goes right back to 1940s in the UK. Part of the challenge at Sellafield, more than any of the other stations, was how that site was managed over many decades. It was not managed in a way that you would manage a site now, so the clean-up costs at Sellafield alone are absolutely astronomical. It is very important we clean up Sellafield and we recognise the issue that the storage above ground causes for communities all around the country, particularly in west Cumbria. In terms of the actual cost now as opposed to what it would have been before, I would not be able to answer that. I am sorry.

- Q37 **Mr Liddell-Grainger:** I have been listening with great interest, because not only do I have Hinkley C, I have the national park at Exmoor, so it is obviously of concern. I know Hinkley C is not included in the high-level waste storage. Given the timescales and the construction, do you think the draft policy statement successfully addresses the challenges and the impacts we have to consider for the whole lifetime? It will be our great grandchildren that will finally see the stuff dug out of this place, if it is ever. Do you think it is robust enough? I do not mind which one leads on it, but it has to be slightly crystal-ball-gazing, but also do you think what we are doing is getting it right?

Dr Lane: Without commenting on the overall merits of the policy statement, I would say that it contains a set of tests in relation to the land use impacts that we would expect to see in a national policy statement. We will test those as we have done in 70-odd development consent orders that have been done to date. Each one of them has their individual characteristics. I fully accept your point about the timeframe. Therefore, we have to be thoughtful about the way in which those things are characterised. Obviously, there are certain elements of this policy statement that are different. The boreholes, for example, are on a shorter timeframe than the main facility, and there is the construction phase and the operational phase and then the longer-term phase.

Actually, the immediate phases, which are the boreholes and then the potential construction impacts, are probably on a closer timeframe to



other projects, so, for example, the new nuclear project. We dealt with the Hinkley development consent order. A lot of the impacts that would be land use impacts actually occur in the early stages because they are related to waste extraction, transport, mobile workforce, et cetera. All of those that we have dealt with and therefore, if you like, we have a policy statement, it does have certain words in it that attempt to give a framework to those decisions. We have, I hope, successfully tested those on other projects of a comparable nature in the land use planning terms, but I fully accept your point about the much longer-term perspective.

Philip Matthews: Sorry, I was not clear exactly what the—

Q38 **Mr Liddell-Grainger:** The point is we have a framework. Do you think it is robust enough? You have not really got a view on whether or not it is. Do you think it is robust enough?

Philip Matthews: Do you mean in terms of this and the communities policy?

Mr Liddell-Grainger: Absolutely, and the future. We are thinking, what, 120, 200 years. Is it robust enough? I am asking to crystal-ball-gaze slightly.

Philip Matthews: It is very challenging, of course. It is very long term. As Pauleen was saying, the lead up to test in support, which is when your consent will actually be given hopefully, that could be 15 or 20 years. If you think about the community side of that, you could have several electoral cycles locally, change of leadership in the community. Many people involved in that test of support are probably at primary school just now and so on. There are a lot of challenges on the community side over that.

In terms of the actual planning and the technical challenges, it is very important that, while we support geological disposal now, one thing we said in our submission is we need to keep applying a BAT test—a best available techniques test—to this at regular intervals to assess whether things have moved on. For example, one thing the Nuclear Decommissioning Authority is doing now is looking at the options for near surface disposal. That can never take the place of a GDF at all. That is a small element of it, but things move on. It is very important that the policy should always be sat within an appraisal of what the best option is just now. At the moment, that would appear very much to be geological disposal.

Q39 **Mr Liddell-Grainger:** In my short time here, I started with Hilary Benn. If you will remember, he was the first. Have we moved on? We are on the fourth Government in my time. Have we moved on?

Philip Matthews: Yes, and I do speak to people quite regularly who have been involved in those processes much longer than I have. There is a sense of cynicism possibly, scepticism, about how this will progress, but we are where we are now. The new policy has certain merits. The devil



is in the detail, really, both in terms of the NPS and the communities policy, that it is done in absolutely the right way. I cannot guarantee it will succeed, but it has succeeded in some other countries, Sweden and Finland being good examples.

We have to approach this positively. We have to learn lessons clearly from last time, and I am not sure we have learned all the lessons of that. We have to have a policy framework that absolutely maximises the opportunity for a number of communities to enter and a number of communities to progress through, and then choose whether they wish to actually consent to this occurring.

Chair: Thank you all three of you for coming to give evidence to our Select Committee this morning.

Examination of witnesses

Witnesses: Bruce McKirdy, Stephen Tromans QC and Professor Andrew Blowers.

Chair: Thank you very much to the three of you for coming to give evidence to the Select Committee this morning. I think you were all in the earlier session, so would have heard the previous evidence. Ian Liddell-Grainger is going to kick off the questions.

Q40 **Mr Liddell-Grainger:** I am repeating myself from the last question to the last panel. I would be interested to hear certainly from Bruce and Stephen on the previous attempts. I said I had done four Governments now. We have learned lessons. We have looked at what we can and cannot do. Reflecting on those lessons, because you have all been around long enough, what changes and what improvements should we be making, and what should we be doing, collectively and individually, to make sure we do not miss those lessons again and that this attempt is successful?

Bruce McKirdy: I suppose one of the key lessons from all of the previous processes and looking overseas as well has been the volunteer process is the one that is most likely to succeed. Those programmes that are more advanced around the world have been based on consenting communities coming forward. After the failure in 2013, to proceed with a volunteer process was the right thing to do.

Another point that I think was made earlier was the decision-making process in the 2008 policy paper, which led to the failure in 2013, was very rigid and required local authorities to make decisions before sufficient information had been provided on which to base those decisions. The current policy, as published in 2014, has a less rigid decision-making process and focuses on making information available early on in the process.



Another one was geological suitability. It was the feeling of local authorities that to take the political risk of entering into this process without knowing anything about the potential suitability of the geology in the area was just not realistic. From that, we have now carried out a national geological screening exercise, which will feed into the process and will be published when the Working With Communities policy is published.

Then finally from me, there is the need to show the benefits to the community and the benefits from a very early stage. Under the 2008 process there was a vision of a significant benefit with all the jobs that came with the development, but also with additional investment, but there was nothing early on. The 2014 White Paper for the first time set out payments that would be made to local communities right from the outset, when they entered the process.

Stephen Tromans: I would agree with those comments. It is clear from previous attempts that imposing a solution from above will not work. You cannot direct and defend it. It has to be done by working with a community. Before that process starts, you need an extremely clear, open and transparent method of getting to the site. People need to understand what the ground rules are before you begin that process, and those rules need to be perceived as being just and fair. In relation to the most recent attempts, the problem was essentially trying to make decision points too early in the process. The reason that the previous attempts failed in Cumbria was you effectively needed three green lights from the two district councils and the county council. Without the green light from the county council, the process was killed off effectively in the cradle.

CoRWM's view is certainly we must not repeat that mistake by having too rigid a process with firm decision points too early on. Where the decisions are to be made, they need to be made, as Bruce said, at a stage where everyone has sufficient information, so you do not run the risk of some kneejerk reaction that strangles the process early on. That is one of CoRWM's key concerns about the Working With Communities process as it is envisaged at present.

Q41 **Mr Liddell-Grainger:** Andrew, can I leave you on this one? I want to go back to one thing that Bruce said. Bruce, you are in charge of this project, basically. Given that we have the draft national policy statement, do you have enough detail and guidance to submit your application? If not, what would you like to see in it that would make the difference? I suspect you have touched on some of them already.

Bruce McKirdy: I have to say I think we do have enough guidance to make the DCO application, but there are also some improvements that we have suggested through our normal interactions with BEIS. I would agree with one of the earlier comments that the case for geological disposal versus alternatives could be strengthened in the preamble to the consultation document, drawing on the information that was generated



HOUSE OF COMMONS

from a previous incarnation of CoRWM and from overseas experience, that for some of the waste there will always be a requirement for a geological disposal facility.

Q42 **Mr Liddell-Grainger:** Do either of you have anything to add on that?

Stephen Tromans: In general, yes, it is fit for purpose. CoRWM would like to see—and this picks up I think some comments that were made in the previous session—a more overt and stronger link between the Working With Communities process and the NPS. That is in the sense that we think it should be made clear that an application for a development consent order should not come forward until the test of community consent has been passed. When it does come forward, to avoid confusion, obviously all of those public participation and consultation processes, which are embedded in the law, will kick in. However, we think it should be clear that there is an explicit link between the DCO process beginning and the Working With Communities process having been completed successfully.

I would also agree with what Bruce said: that the document would be strengthened considerably if there was a clearer discussion as to why geological disposal is the preferred option over the main alternatives, which are essentially long-term interim storage, and also the question of whether you have retrievability. Do you have a GDF that potentially remains open for many hundreds of years to allow you to retrieve the material, rather than closing it as the material is being placed in?

Q43 **Mr Liddell-Grainger:** Just on one thing you said, Stephen, very briefly, is there an argument for more than one site?

Stephen Tromans: CoRWM has no view on that, really.

Q44 **Mr Liddell-Grainger:** What do you think?

Stephen Tromans: There is certainly room for more than one site. It could be possible to have a number of sites. One would need to look at the cost implications of that and also the practicality. It may be hard enough to get one site, so trying to get a number is harder still potentially, but yes, there is no reason in principle why one could not have more than one site.

Q45 **Stephen Kerr:** Staying with Bruce, how involved were you in helping the Government to draft the NPS?

Bruce McKirdy: We made inputs through our appraisals of sustainability and some of the technical basis on which it was made, but we did not see the full NPS until it had come out as a consultation document. We are going to be the developer that will apply under it and so it would not be appropriate for us to be intimately involved in its drafting.

Q46 **Stephen Kerr:** That is good to hear. What is your role in terms of identifying suitable geological locations for these potential sites?



Bruce McKirdy: We need a site that has both a willing community and suitable geology. I mentioned that we had done a national screening exercise, looking at the geology of the whole of the UK, except Scotland, who have a different policy, against the requirements of our safety case. That would be published when the Working With Communities policy comes out. Then we will embark on a stage of the process that we call community engagement and information provision, where we will look to engage with communities who are interested in the process. We will also, when we find interested communities, look at the available geology, look at the results of our screening, and then undertake feasibility studies in those areas.

Initially, those would be desk-based studies before we got to a position where we could move to the next stage of the process, which would be carrying out investigative boreholes. We would drill those to find out more about the site and to confirm whether or not it would be suitable for the long term.

Q47 **Stephen Kerr:** A community could put itself forward as a potential location before the suitability of the geology had been concluded upon.

Bruce McKirdy: Yes. We could not finalise the suitability of the geology until a community had come forward. It has to be that way round. We have an idea of those communities that might have reasonable prospects, from our geological screening, but you really need to do deep boreholes and measure what is going on underground before you can confirm that. We do not have that information for most of the UK.

Q48 **Stephen Kerr:** Interestingly, you said the consent of the community was a prerequisite, and yet it is not one of the expressed principles behind the assessment in the NPS.

Bruce McKirdy: It is not in the NPS, but the point is that the Working With Communities policy requires us to get a consenting community before we can put in a DCO application. We cannot put in a DCO application for boreholes until we are engaged with the community and we have a community partnership. We cannot put in a DCO for a GDF until we have had a final test of community support and confirmed with that community. You will never have a position where we are applying for a DCO without a consenting community, because sequentially it goes the other way round.

Stephen Kerr: That is very useful. Thank you.

Q49 **Albert Owen:** Stephen, you have partly answered the second part of my question. The first part I wanted to ask you is how pressing is the need to find the solution for high and intermediate level waste?

Stephen Tromans: Clearly, it depends upon the way in which the waste is being stored and managed at present. If there were serious doubts about the management of that waste then the need would become more pressing. The waste can be managed. Obviously, the NDA has that role,



as the Committee has seen at Sellafield, so there is no immediate risk. However, what one needs to bear in mind is that if you look at the stores where it is kept, the package it is kept in, one is talking about integrity based on a few hundred years. The life of the building at Sellafield is probably 300 years, the life of the packaging 150 years.

CoRWM's concern is how one can really guarantee the stability of society, the economic capability to deal with these things and the institutional control in 300 years. None of us has any idea on that, so it is not really responsible to just push it down the road and say, "We will wait a few hundred years and something may turn up". That is why our view is that there is an urgency. It is the right thing to do. As CoRWM has said, we should move on with trying to get a GDF as soon as is practicable, consistent with maintaining public confidence in the system. That is the important point. It cannot be rushed in that sense, so a lot of time will need to pass to win the public's trust in the proposal, to gather all that is necessary. The right thing to do is certainly to start now.

Q50 **Albert Owen:** You were very clear that GDF is the solution and that the interim storage is not, basically, and you have come down on that side. Can you explain a little about the Scottish issue? They have a different policy. Has that been looked at seriously? Have you come to a different conclusion, or if you were asked to do it in Scotland what would be your findings?

Stephen Tromans: The Scottish policy is either on the surface or near surface, so it might be underground but quite shallow underground. That is on the basis that, essentially, if I can put it this way—I may be mischaracterising it—it keeps the options open and that is the right thing to do. In its deliberations in 2006, CoRWM looked at that issue very carefully. There were different views on that. It is not totally one-sided. There are some good reasons for deferring a decision. However, the risk of serious harm to health and the environment in the relatively short term if institutional control were not maintained persuaded CoRWM the right thing to do was not to have a policy of keeping it indefinitely above ground or near the surface but to move on with the GDF. That remains CoRWM's view. Having said that, the Scottish Ministers are one of CoRWM's sponsors and CoRWM respects their right to make that decision politically. We do not necessarily agree it is the right thing to do, but we will support them clearly and provide what help we can.

Q51 **Albert Owen:** Take the politics out of it. Is that not a sensible position, in the sense that it could be there for a long period of time and then an alternative solution could come down the road?

Stephen Tromans: It can be there for a long period of time. There are no obvious alternative solutions coming down the road that we are aware of. The consensus internationally is that a geological disposal facility is the correct solution to deal with these very long-lived wastes. We have a concern that the longer you put off taking that decision the greater the



HOUSE OF COMMONS

risks of the sorts of harm that we have talked about, in terms of security, safeguards, all of those things, as well as simply the environmental risks.

- Q52 **Mark Pawsey:** I would like to follow on with Mr Tromans please. Your organisation provides independent scrutiny and advice to the Government and has been involved in the process. Was the issue of making the national policy statement non-site specific with a separate community consent process a proposal that you put to Government or that came from elsewhere?

Stephen Tromans: No, that was essentially Government's idea, but we looked at it. We do not dissent from it. That does seem to us an appropriate way forward.

- Q53 **Mark Pawsey:** You think the Government are travelling in the right direction.

Stephen Tromans: Yes. The general framework is fine. It is the detail.

- Q54 **Mark Pawsey:** Could I also ask you about the geological disposal infrastructure? Is it your view that should apply to both legacy and new-build nuclear? One of the issues we know with regard to new nuclear is the Government are wanting to make certain that the costs of disposal are incorporated in the costs of electricity generation, which was not the case previously. Should these proposals apply equally to both new and legacy infrastructure?

Stephen Tromans: When CoRWM has given its advice previously, it has always been at pains to say what it does not have a view on is whether nuclear new build is a good thing or not. That is a matter for Government. Obviously if nuclear new build comes forward the waste is going to need to go somewhere eventually. Whether it goes into a repository with the existing legacy waste or into some future disposal facility is a matter to be determined.

- Q55 **Mark Pawsey:** Should the decision about future disposal be part and parcel of an application for new nuclear, because it has not been up until now?

Stephen Tromans: Yes, absolutely. That was certainly CoRWM's view, that if new nuclear was going to come forward there needed to be a fully and proper ethical debate as to what was going to happen to the waste from the new build. Unfortunately, that debate has not happened perhaps as CoRWM would like. What has happened is essentially a decision in favour of new build, taking on trust the fact that there will be a solution. The critical thing, as far as Working With Communities is concerned, is complete transparency and understanding on the part of the community as to what is going to go into the GDF they will be hosting. Their views may be very different as to dealing with and accepting legacy waste than new-build waste. The inventory that the communities are being asked to take as part of the Working With Communities process has to be absolutely crystal clear in that regard.



HOUSE OF COMMONS

Q56 **Mark Pawsey:** Bruce, if I may come to you, you spoke earlier about the need to show benefits to the community if they are willing to accept a proposal such as this. Is it not the case that the job is created, but the ones in construction tend to involve contractors coming from outside of an area, so there is little local benefit there, and once established there are not that many jobs managing the facilities? I suppose my question is what is the benefit to the community?

Bruce McKirdy: The aim would be to generate jobs that could be used within the community and to arrange procurement systems that set preferences towards local jobs, recognising that some places you go will not have all the skills to do those jobs immediately. Part of our role is to work with the community towards a vision of educating, putting in training systems, putting in facilities whereby you can get people from the community trained up to take advantage of the many skilled jobs that will be there for a period of over 100 years.

Q57 **Mark Pawsey:** But there are not that many jobs. Is that not the case, because once the facilities are constructed then there is management of the inventory and putting new material in, but that is not hugely labour-intensive.

Bruce McKirdy: There are up to 1,000 jobs for about 100 years, very roughly, and they are highly skilled jobs. Then there is a knock-on effect of the money coming into the community. In addition to that, as well as the direct benefits of the facility, there are the additional benefits set out in the White Paper, as yet unquantified, for the host community that eventually hosts the geological disposal facility.

Q58 **Mark Pawsey:** Is it your view that communities are more concerned about transport of material to the facility or the actual storage of the material once it is there?

Bruce McKirdy: We have heard both views. They are generally concerned about transport and immediate environmental effects and in particular what would happen with all of the spoil that would be removed from the underground workings is an issue that comes up when we speak to communities.

Q59 **Mark Pawsey:** Is there a ranking in the order of those concerns?

Bruce McKirdy: No. Transport and long-term safety are always up there, and retrievability sometimes and sometimes not. Some communities are very keen that when you put the stuff underground there is a way of getting it back out again, should you need to.

Could I just add something on the new-build bit that came up earlier? My view is also that you could put new nuclear build waste for the currently planned 16 to 18 gigawatt programme in with the legacy waste. To an extent it depends on the site and the availability of the site. On the issue of whether or not Government have consulted on that, when the Government did the new nuclear energy policy back in 2008 and then the



HOUSE OF COMMONS

national policy statement for there, there were consultations on the nuclear issue but also on the waste with it. They were very comprehensive and looked at all of those questions. We had to provide inputs to there as to whether or not the programme would settle those.

The other thing is that every new reactor design undergoes a generic design assessment. As part of that generic design assessment, the regulators come to us and ask us to check whether or not the wastes coming from a reactor would be disposable in a geological disposal facility.

- Q60 **Chair:** Can I follow up on those points, Bruce, and maybe with Stephen as well? Bruce, you are saying that you should be able to store the waste from the new generation of nuclear that is coming on line at the moment in this geological disposal facility that we are talking about today. How many more new power stations would you be able to build before that might become exhausted?

Bruce McKirdy: That depends on the site you end up with. Any site will have a finite capacity. Until we have a site, we do not know the finite capacity. It is feasible. Looking at the size of rock we would need, a 16 to 18 gigawatt programme would add about 10% to the volume of waste that we have already. Only 10% of the total legacy waste would be from a new-build programme of that size. Eventually, if we carried on with a new-build programme that grew to beyond that, you would probably have to find another site, but our preference would be for a single site to cover both new build and legacy.

- Q61 **Chair:** Roughly how many Hinkley Cs' waste would you be able to put in this geological disposal facility?

Bruce McKirdy: At the moment there are about three gigawatts per reactor, a 2% addition to the volume, but you cannot say, until you have the capacity of the site, when you will get to that capacity.

- Q62 **Chair:** I guess that is the worry, then, is it not? We are talking about building a disposal facility for the waste that already exists, and there is an awful lot of that, but then, at the same time, we are building new power stations: Hinkley C and one in Albert Owen's constituency, Wylfa. How many more will there be? I know you are saying we do not know until we have the storage facility, but, in a way, that begs loads more questions, I am afraid. You say, "We are not really sure how much there will be". Are we saying this facility that we are building might not be big enough to store the waste of all these different sites that some people are keen on building?

Bruce McKirdy: To put it in context, we are saying that only 10% of the volume of all the waste that we would have to dispose of, including legacy and new build, would come from new build, for a programme as envisaged at the moment of 16 to 18 gigawatts. It is a small proportion of that which we have to dispose of already. We cannot put a finite capacity on the thing until we have the site to test that capacity.



HOUSE OF COMMONS

Q63 **Chair:** Should we not be making sure that we are building a disposal facility that is big enough to dispose of the waste that we are going to be creating? If we are not, should that possibly put a cap on the number of new sites we are agreeing? It seems a little odd to be agreeing new build of nuclear, which I would be in favour of, if we do not know whether we have a facility to store it in.

Bruce McKirdy: We do not have a facility at all, at the moment.

Chair: I know.

Bruce McKirdy: That is the issue. If we could not find a single site to take everything, we would have to find an additional site; we would have to find two sites.

Q64 **Chair:** In 2013, this process broke down because nobody wanted it.

Bruce McKirdy: Yes, it broke down. We only had one community involved at that time.

Q65 **Chair:** Yes, which rejected it, and that is the site that, at the moment, holds all the nuclear waste above surface. In a way, they concluded they would rather keep it in its current condition than burying it on the same site. A community that already has all this waste does not want to bury it there, and no one else has yet expressed interest. I guess my worry is that we are building up more problems for the future in building new sites when we do not know how we are going to dispose of the waste.

Bruce McKirdy: Do you mean building new nuclear sites?

Chair: Yes.

Bruce McKirdy: In my personal view, no, we are not, and nuclear is an essential part of the energy mix. From an organisational perspective, our job is to provide disposal facilities for the legacy and the new build that is planned. We need to go ahead and find those disposal facilities, which we would need to do regardless of new nuclear build.

Q66 **Chair:** Stephen Tromans, do you have anything to add on this?

Stephen Tromans: That exchange illustrated what may be the Achilles heel of this process. As I said earlier, the inventory needs to be absolutely crystal clear, to inform any discussions with the potential host community. A host community that was being asked to accept a facility of an indeterminate size, to take an indeterminate amount of waste, as opposed to the legacy waste, may have a very different approach.

The amount of waste you take in will also have a critical impact on the design and safety case of the facility. It may have an impact on the type of formation you put it in because, for instance, with hard rock you can create a potentially bigger cavity. There may be all sorts of knock-on effects. CoRWM's view is that this issue really needs to be fully understood and sorted out before this process gets much further down



HOUSE OF COMMONS

the line, because, to put it frankly, people need to be fully informed as to what it is they are going to be asked to take.

Q67 **Chair:** Are you saying that we need to have greater clarity on how big this disposal facility is going to be, before we go much further down the line?

Stephen Tromans: Yes. What will go into it, if anything, beyond the legacy waste that we know about?

Q68 **Chair:** A follow-up issue is that, when we sign off things like Hinkley C or Wylfa, in the strike price that is agreed we include the costs of disposal, but do we really, if we actually do not know how much it is going to cost to dispose of this? At the moment, we seem to be 15 or 20 years from even agreeing a site. We have not tested the conditions of the ground where the site might be located. Do we have any real estimates of the cost? Bruce, how much do you think it will cost to build this disposal facility?

Bruce McKirdy: We have a cost of £12 billion included in the NDA's annual report and accounts, which is for all the legacy waste only. It does not include new nuclear build. It is for one particular type of repository in a hard rock. We have benchmarked those costs with overseas costs, where they are building real facilities in hard rock. But those costs, at the moment, do not include optimism bias or uncertainty assessments, because they are all generic costings.

Q69 **Chair:** Are you saying that £12 billion is just to store the waste that already exists?

Bruce McKirdy: Yes.

Q70 **Chair:** Okay, so when we agree things like Hinkley C, how do the Government or, indeed, EDF estimate the cost of disposing of the waste they are going to be producing over the next however many years?

Bruce McKirdy: It is on the basis of that cost estimate, expanded to cover the additional volume that would be required for their wastes.

Q71 **Chair:** How much have the Government or EDF estimated as the cost of disposing of the waste?

Bruce McKirdy: We provide information to Government on the cost of disposal, and then a formula is applied by Government to ramp up those costs, to make a charge that includes contingencies.

Q72 **Chair:** What is that charge for Hinkley C?

Bruce McKirdy: I do not know, but my colleagues from BEIS who are speaking later would possibly know the answer to that.

Chair: Okay, and for the Wylfa power station?

Bruce McKirdy: Yes.



HOUSE OF COMMONS

Q73 Chair: We will ask those questions of the Minister. There is one final question from me, which follows up from Mark Pawsey's questions on the benefits to the community. Your exchange with Mark Pawsey was about jobs, and potentially 1,000 jobs for 100 years; I think that is right. Are there any other benefits that you might use to encourage communities to take this up? When you get new housing developments and things like that, in all of our constituencies, you would often have an agreement to build a new roundabout, a new school or a new playpark. Are there going to be other inducements, in addition to the jobs that might be created? All new developments have new jobs. What other inducements might there be?

Bruce McKirdy: In the 2014 White Paper, it allows for payments of £1 million a year to communities that enter the process. Communities that go as far as having boreholes drilled could qualify for up to £2.5 million a year. Beyond that, the one community that ends up hosting a GDF would get what is called a significant additional investment, which is not quantified, but there are examples given in the policy document. On a scale of bus shelters to universities, it is the university end of things. It makes a comparison with similar projects overseas, where these sorts of things have been provided.

Q74 Chair: Give me an example of that. It is important that we and communities understand that. Give us an example of an overseas development and what a community might have benefited from.

Bruce McKirdy: Sweden ended up with two communities in the end, which were competing to host the facility. They had an added-value package and the actual disposal facility itself. In the end, the community that did not get the GDF got most of the added-value package. It got additional infrastructure that was needed by Government and by Vattenfall, which is the owner of the repository company; it is a power generator in Sweden. They put those projects into the local community. They have also improved road infrastructure, rail infrastructure and ports. They have done local projects, which have come forward and qualified under an arrangement they have for working with SKB and the community.

Q75 Albert Owen: Briefly, when you talk about the quantity of nuclear waste, what percentage of it is non-civil nuclear that comes from the military? Has that been factored in? Going forward, decommissioning of nuclear weapons is part of this equation as well.

Bruce McKirdy: We have a contribution from the MoD to the NDA, to cover its share, which I think is between 5% and 8% of the running programme cost.

Q76 Albert Owen: That is the percentage of the volume of nuclear waste.

Bruce McKirdy: I do not know offhand the percentage of the volume, but we could provide that.



Q77 **Albert Owen:** Would any come from medical research?

Bruce McKirdy: Medical research is a very small percentage. We could provide a breakdown of those percentages by volume.

Albert Owen: It would be useful. Thank you.

Q78 **Vernon Coaker:** Professor Blowers, can I direct a couple of questions to you? You are co-chair of the NGO Forum. What is your view and the NGO Forum's view about what changes need to be made to the national policy statement?

Professor Blowers: Can I just say this in opening? I have listened to this discussion and the nub of the question has been raised several times, but perhaps has been skirted around. I was on the first CoRWM committee, which drafted the policy that is being followed through and, to some extent, has been articulated already this morning, just to make that point.

The forum has varied perspectives, and there are some on the forum who would not have a GDF at any price, at this stage. It is fair to say that most people on the forum, including me, feel that the process is far too precipitative at the moment. Although, in the CoRWM recommendations, deep disposal was put forward as the preferred strategy, if you look at it, it was hedged around with a number of conditions. The feeling is that these have not been fully followed through, partly because the Government have hijacked the GDF process, to try to justify a new-build programme. The Chair has already made the points about this.

If one looks at the new-build programme, it is a completely different thing from trying to deal with the existing legacy waste that we know about, and so on. A new-build programme gives us an indeterminate amount of waste, and it is far, far further in the future. The thing that needs to be stressed about the whole question of radioactive waste management is the timescale in which we are involved. However you look at it, however fast a GDF comes about—and personally I think it will be a lot slower than is being suggested—it will not be in a position to take new-build wastes, even on the figures we get in the papers, until about the third or fourth decade of the next century. There is no way it could conclude that programme until towards the end of the next century.

Think about this. This is an intergenerational issue of the highest order. We have no way of knowing what the conditions are likely to be, socially or physically. What is going to happen to that waste in the meantime? The proposal is for it to be stored onsite, at the sites of the new power stations. Now, as you can see from this, I represent one of the power stations. By that time, the whole question of managing what is happening on those sites, which will be deteriorating, could well be impossible. There has been very little thought about the consequences of a new-build programme, which we do not need to have.



HOUSE OF COMMONS

Indeed, the idea that it is only 10% of a repository is looking at it in volumetric terms, but you have to look at it in terms of the radioactivity. The more of these power stations we have, the higher the amount of radioactivity, and that itself requires a bigger footprint. In front of, you have a relatively modest proposal for a possible GDF, sometime in the future, at an indeterminate point, to deal with the legacy waste. To couple that up with a new-build programme to try to justify it, to my mind, is frankly madness, especially when we do not need that new-build programme.

Q79 **Vernon Coaker:** That is interesting. To paraphrase that, as far as you are concerned, there is not an adequate justification as to the need for geological disposal. If that is the case, what alternatives should be included in the NPS?

Professor Blowers: Hang on; I have not quite said that. I have said that, at this particular point, a GDF is a potential way forward for managing the existing legacy waste at some time in the future.

Vernon Coaker: Fair enough, sorry.

Professor Blowers: The fact is that, whatever happens, we have to deal with the waste, in an intergenerational sense, on the surface. We should be bending all our sinews to make sure we do that successfully.

Q80 **Vernon Coaker:** Can you expand a little on what you mean? What are the alternatives for that?

Professor Blowers: The alternative policy for the foreseeable future happens to be surface storage. I do not see that there is any way out of that. Of course, there is a problem for the far future, because we are asking them to take a burden of cost, risk and effort on behalf of this generation, because there may not be nuclear energy in future generations. That is, indeed, a very, very difficult problem, and one has to recognise that we are in a serious situation, even with the legacy wastes. It may well be that this magical repository arrives in pristine order in 2040, but then that is supposed to be taking the waste that we have, and there is lots of other waste that still has to be dealt with at the surface.

That seems to me an almost unimaginably difficult problem, if you think about it in terms of the hurdles that have to be encountered before that. To add to that a burden of new-build waste, which extends further into the future, is sheer madness. Any rational person looking at this in terms of logistics, societal change, ethics and the physical situation would say it is a non-starter, but there we are.

Q81 **Vernon Coaker:** That is, as I say, very interesting. If there were to be new nuclear build, what would your proposals, views and thoughts be? If there were to be new nuclear build, what would your thoughts be on the disposal of that waste? Would you accept a geological disposal facility in that case, or are you opposed in principle to a geological disposal facility?



Professor Blowers: I have not said I am opposed, but I am trying to get you to understand that geological disposal is not here and now tomorrow, and all going to happen just like that. The difficulty is that it is a long way in the future and it is not going to deal with the whole problem anyway. To add to that problem is foolish. To come to what I would do with new build, you ought to ask what Government and the state itself would do, because you are consigning a number of communities, possibly eight, certainly six, in this country, on vulnerable coastlines, to take the burden of the spent fuel and so on.

In addition to Sellafield, we are going to have major nuclear waste facilities dotted around our coast, certainly until well into the next century and towards the end of the next century. That is the problem. We are not even asking those communities, "By your leave". We are asking these notional communities, "Would you like a GDF? We will pile on the money and all the compensation". We are saying all that sort of thing to them. What thought is going into how we are going to deal with radioactive waste facilities that are dumped on communities purely because they have a nuclear power station?

One has to realise that the proliferation problem is massive. Communities are not being consulted. These communities are going to be bearing the burden anyway. There is no consultation: "Do you want it", and so on. There is very little thought, if I may say so, on the part of Government, RWM and so on as to what they are going to do in the longer term with these wastes. The siting issue is crucial. Attempts are being made by Government to rush the siting policy, to bend a lot of rules. There is this whole question of IROPI—that is, imperative reasons of overriding public interest—whereby the idea is that we so badly need nuclear energy that it overrides any other consideration. That is an appalling way forward.

One final point is that we are talking about a new-build programme, but there has been no definition of how big this programme should be, where it fits in, and they are talking about 18 gigawatts, which is something like two power stations on six sites, including Bradwell, where the Chinese reactors could ultimately be built. That is a huge programme. At what point does it stop? I know there is a lot of argument about the foolishness of the financial side of things, but what also have to be recognised are the dangers and the problems of where these are and the waste problem that follows. It is irresponsible, in my view, to future generations, let alone present generations, to do this.

Q82 **Vernon Coaker:** Finally from me, that is a different view from what we have had, which makes it very interesting. Given all that, there must be some changes or improvements that you could suggest or would want to see to the NPS.

Professor Blowers: What I would like to see with the NPS is absolutely categorical: that it is not intended for new build. That would throw some problems in front of Government to deal with; I recognise that. You



HOUSE OF COMMONS

might say to me, "Well, you have said that, so what do we do?" The point is that, if we do not do that, we are going to have a much bigger problem building up. We are almost certainly going to have Hinkley Point, and that has over three gigawatts and a load of nuclear waste onsite. There is already spent fuel being stored at Sizewell, so this problem is already there.

If you look at those sites—and I do think that the Government never think about this—they are incredibly fragile sites. The Sizewell site is virtually on a cliff above a beach. Hinkley Point I do not know so well, I must admit, but I understand that that is a difficult site, if you are thinking about continuing to store stuff towards the end of the next century. Nuclear waste is the looming problem. It is coming up there. People have not been thinking about it.

Quite seriously, on questions of permissions, what are we going to say to the inspector and so on, on these sites: "Let it go"? The nuclear industry will tell you they can do it; they can mound it up, float it off, build an island or something like that, but I personally think that problem is just not being seriously thought about.

Q83 Chair: I have one thing to follow up with you, Andrew Blowers. You were formerly a member of the Committee on Radioactive Waste Management. Does the draft national policy statement accurately reflect the recommendations made by the first and second committees?

Professor Blowers: No. I actually wrote quite a bit of the policy originally, which was adopted. The thing is, it seems to me, that there is a deviation from the CoRWM recommendations. The fundamentals are kept, one of which is that, in terms of implementation, we are pursuing a policy of voluntarism and partnership. There are a lot of confusions there, but we do not need to go into that today.

The other thing is that it is notionally pursuing the policy. The problem is that CoRWM, as my colleague here has said, quite clearly stated that the recommendations were innocent of a new-build programme. There has been a distortion since, because the Government are pursuing the line that a new-build programme is necessary. The statement they make is that the Government are—I do not know whether they are quite convinced—persuaded that effective means will be found to manage new-build waste and waste from the new-build programme.

That cannot be a statement with any validity at all. We simply cannot know. How can they say that is a way of legitimating a new-build programme, when we know its big Achilles heel is the waste problem it generates?

Q84 Albert Owen: I have a couple of questions for you, Professor Blowers. You accept, though, that nuclear waste is already stored onsite safely and has been for the last 40 years. I live close to a nuclear power station, and that is the case, so today it is stored there safely until it is moved to



HOUSE OF COMMONS

an interim. Are you suggesting that we continue with the interim storage at places like Sellafield, then move it to near surface somewhere else? I need to follow the logic of what you are saying is the alternative.

Professor Blowers: No, not at all. It has been stored safely. I have some reservations on that. I mean, it has not been entirely safe. There have been incidents at a number of sites, including Sellafield. We know that the problem of storing it safely at Sellafield is, what, a £70 billion problem.

Q85 **Albert Owen:** No, I am saying it is stored on the site where it is produced for some time.

Professor Blowers: Yes, that is what is going to happen.

Q86 **Albert Owen:** That happens now and has happened for 40 years, safely.

Professor Blowers: It happens now, but hang on a minute. We are talking about spent fuel here. Remember, there is a lot of other waste stored onsite: intermediate-level waste and so on. To my knowledge, spent fuel is stored at one or two of the AGRs. In terms of the PWR, it is being stored at Sizewell. My contention is that it will take heroic justification to suggest that you can store spent fuel, highly radioactive materials, safely on a site like, for example, Bradwell, where the conditions predicted, even with modest changes in sea level, are of a high degree of vulnerability. It is like putting it into a bathtub. That does not seem to be a very satisfactory situation.

Q87 **Albert Owen:** I just want to follow the logic. You answered the question that you favour an alternative to the GDF. Do you have any sites in mind for where these would be? Would they be in close proximity to the nuclear power stations?

Professor Blowers: Right, we are now getting into a strategy that may be—

Q88 **Albert Owen:** Well, that is the question that was asked of you.

Professor Blowers: I understand the Scottish position too. As I keep stressing, I have not said I do not favour a GDF. I have simply said that a GDF is not around the corner and it cannot deal with all the waste. Therefore, we have to think about how to deal with a new-build programme.

Q89 **Albert Owen:** For clarity, for the legacy waste, you do favour a GDF.

Professor Blowers: Ultimately, at the moment. But we really have to deal with the problem we have now and for the next two or three generations. That means safe storage, not storing it in very unsafe locations, and certainly not storing it in unsafe locations without asking a “by your leave” of the local communities. They see a power station come in and put their hands up for all the jobs, et cetera. At the same time, they are getting a radioactive waste store going on in perpetuity, and that is hardly mentioned.



HOUSE OF COMMONS

Q90 **Albert Owen:** Sixty years has been mentioned. It has been mentioned, and communities do get to know about it.

Professor Blowers: Well, it is 60 years while the power station is operating, and it will not be starting until the 2030s. That takes it to the end of the century. It will be at least 50 years after that, before that waste can be moved from those sites. It is well into the next century.

Q91 **Albert Owen:** But local communities are told about it. You had indicated that they did not know anything about it. They do know.

Professor Blowers: I did not say that. Local communities know; if they get a power station, they are told there is a radioactive waste store. But that is almost a subplot. You do not hear much about that.

Q92 **Peter Kyle:** To quickly follow up on that, the thing we are struggling with is that you are in favour of geological disposal for existing waste, yet we know pretty much how much waste is going to come out and be produced by Hinkley Point C, and it is happening. We know it is absolutely happening. It is being built. We visited it. If that means just expanding the underground storage, the geological storage, by 3% or so, it is difficult for us to understand why you support it for existing waste, but not finding a site—because we are in the process of finding such a site—that could cope with future waste as well.

Professor Blowers: Yes, but hang on; there are two points to make. One is that I have seen a calculation, for Hinkley Point C alone, that by the year 2200 the amount of waste, in terms of radioactivity, would be 80% of the existing legacy waste. We are not talking about modest amounts here; I would like to emphasise that. Dealing with these wastes is an altogether different dimension of problems. Obviously, I would not be agreeing with my colleague.

The other point is the length of time. I may well be in favour of a repository. You say, "Okay, fine. You have your repository. It can take new-build waste". First of all, I am not sure it can, physically. Secondly, when can it do it?

Q93 **Peter Kyle:** You say you are not sure it can, but we have not identified a site yet. How can you say you are not sure it can, when we have not identified a site? Should we not be looking for a site that can?

Professor Blowers: Yes, of course. That is not the point.

Q94 **Peter Kyle:** We are running out of time and I can feel the Chair breathing down my neck. I have a couple of questions to wrap up. Stephen, we have talked about a lot of challenges; these are going to be very long-term challenges. Is it your view at the moment that the NPS covers the range of challenges that it faces, into the long term?

Stephen Tromans: Yes, I believe so. You have to bear in mind, of course, that the development consent order process, which is within the framework of the NPS, is one part of meeting those challenges. There is



HOUSE OF COMMONS

also the safety case that has to be made to the Office for Nuclear Regulation for the nuclear site licences needed and, indeed, the environmental safety case to the Environment Agency or its Welsh equivalent with for the environmental permit. You have to take all of that together. The NPS will not do all of that; the NPS will deal with the development consent aspects of it, but there are other safeguards that will come in through those other permitting processes.

Q95 Peter Kyle: Bearing in mind that the previous attempt to do this has failed, should we be working on some kind of contingency programme, should this programme fail again?

Stephen Tromans: CoRWM, in its report, stated that there is no guarantee that this process is going to work. It is a volunteer process. It may not work, or it may take a lot longer. The contingency is proper care and investment for the wastes in the interim, wherever they are stored, whether that be at Sellafield or at the site of the power station. There has to be a complete and unconditional commitment to do what it takes to store them safely there. That is the fallback. If voluntarism does not yield a site, there will have to be a very, very major rethink. It will be back to the drawing board.

Q96 Peter Kyle: Yes, or a different approach from Government.

Stephen Tromans: Yes.

Q97 Peter Kyle: You might have heard my cheeky question to the previous panel about the cost and about this being kicked down the line by previous generations. Do you have a ballpark figure of how much it is additionally costing this generation, simply because the previous generation did not tackle this problem?

Stephen Tromans: It is a very different question, to try to assess what it would have cost to build something for interim storage. I am afraid I do not, but it would be a lot.

Q98 Peter Kyle: Is it safe to say it would be in the billions?

Stephen Tromans: I suspect so.

Chair: Thank you very much, all three of you, for giving evidence this morning. It is very helpful. We will move now to the session with the Minister.

Examination of witnesses

Witnesses: Richard Harrington MP, Stephen Speed and Umran Nazir.

Chair: Thank you very much, Minister, and to your two civil servants, for coming along this morning. We have had two very useful sessions, and I



HOUSE OF COMMONS

think Stephen and Umran have been sitting in for those. We are following up now on some issues around the national policy statement for geological waste disposal. We have a lot of questions to get through; we have already lost some members, and I know that others need to get to justice questions, so we will kick off straightaway.

Q99 Mark Pawsey: Welcome, Minister. Back in July 2006, the Committee on Radioactive Waste Management recommended a process to identify a site for geological disposal. We went through that process, but it did not lead to a successful outcome. Minister, why do you think the process was unsuccessful, and what lessons have been learnt from it?

Richard Harrington: It was unsuccessful because it was Government behaving in what is fashionably called a top-down manner, which is basically Government deciding. That was not the first time. There were proposals, for example, for Billingham in the early 80s, and a list of Nirex sites was put forward. There were different systems involved. The whole purpose of the system we are here to talk about today is that we are working with willing communities, through a very complex and quite expensive process, to find out which communities really want to have this in their area. Obviously it is all underpinned by the geological site, because otherwise it could be any community, anywhere.

I feel that is the right way to go and, when it was first explained to me, it seemed very rational that that was a lesson, rather than Government trying to impose it just through policy and logic or rationale on paper. It is much better to start off with the community and then work backwards, or forwards, depending on which way you look at it.

Q100 Mark Pawsey: Leaving aside community engagement, are there any other ways in which this national policy statement reflects the lessons that are learnt? Was it exclusively community engagement or were there other parts of the process that needed improvement and have been improved under the new procedure?

Richard Harrington: Perhaps I can ask you to answer that, Stephen.

Stephen Speed: The main lessons learned are being set out in the Working With Communities policy, which we consulted on in the spring, at the same time as the statement. The purpose of this statement is to designate a nationally significant infrastructure project, so in a sense, as Pauleen was explaining earlier, this is a standard approach to a particular type of infrastructure project.

If you go back to 2013—this is the decision by Cumbria County Council—I was struck, when I read the debates that took place in the cabinet that day, that the council members found it a very difficult and painful decision, but a lot of them were motivated by the fact that they felt they were being asked to make a decision before they really had enough information to make that decision. They were not necessarily for or against the proposition; they just felt they did not understand it.



HOUSE OF COMMONS

In the Working With Communities policy, which is a separate issue from this, we have tried to give communities much longer to come to a view, much better information, supplied by RWM, and a sense of partnership, in that we want to work with them until they understand what it is that they would be taking on.

Q101 Mark Pawsey: Minister, we heard that in an earlier evidence session, when we heard that communities need to know exactly what the inventory that they may be expected to receive would be. The expression we were given was “crystal clear”. Minister, are you satisfied that this new procedure would enable communities to be crystal clear about what they would be asked to accept, if they were to come forward?

Richard Harrington: It is a very complex matter. This is always the problem with these things. It is rather like even just a conventional planning application. There is tonnes and tonnes of detail but, when you are consulting a community, that means people who actually live in an area, not experts or even elected representatives, and they need time to get down to the detail. It has to be presented in a way that those people who do not want to or cannot go into the full detail can quite easily understand.

Q102 Mark Pawsey: Do you think ordinary people will be able to understand the implications of what is being asked of them?

Richard Harrington: I sincerely hope so, Mr Pawsey. That is why I was saying a lot of it is in the way it is presented. Of course, the Government is funding communities’ representatives. I am convinced that these experts—let us call them that, not to abuse the word “experts”, as it has been in other contexts—will be able to take the full, informed view and present it to laypeople. I count myself in that category because, before I started looking into this, a lot of the terminology I was not very familiar with. That is why we have to learn that, and I have people to teach me that. I hope this can be presented in a way that everyone in a community can really understand. That is the trick, and I accept that that is almost as important as the technical side of it.

Q103 Mark Pawsey: We know that there is an existing problem, and a problem that is increasing as we go to nuclear new build. What happens if the communities say, “This is too risky. We do not fully understand it. We do not want to do it”, and no community comes forward under this procedure?

Richard Harrington: I do not believe that will happen.

Q104 Mark Pawsey: If it were to happen, what would then happen?

Richard Harrington: We would have to look at the policy again, but I do not believe it will happen. In any case, in the democratic process that we have, there has to be full transparency. We would be very negligent in our duty if we did not operate in this position of finding willing communities and making the selection from them. In the end, it is



reasonable to say, “We need to have a facility like this”, for reasons I am happy to go into, but I do not know if they have been mentioned before by other people giving evidence. Given that we need something like this, it is Government’s job to make sure it is provided. We would much, much, much rather do it with communities, in those communities that want it.

I know members of this Committee have been to Sellafield. Having been there—and I have been to Hinkley Point as well, and have seen the same thing—I can say it is so popular in local communities, or at least the side of it that exists now is, because of the prosperity and well-paid jobs, hopefully a lot better paid jobs, with a lot more women doing them and a lot of the other things that we all know about: skills, et cetera. I can see now how some communities want that sort of thing, whereas others might decide that it is just not for them.

Q105 Peter Kyle: Thank you for coming back before us again, Minister. Can you just explain why the NPS, in this case, excludes community engagement, whereas the NPS for airports included it?

Richard Harrington: Stephen, would you like to have a go at that?

Stephen Speed: Certainly, thank you, Minister. We are trying to achieve two different purposes. First of all, through the NPS, we are trying to set out, alongside other NPSs and in a way that does not set precedents for the NPS process, a way to guide developers, planners, communities that want to get involved in the development consent order process, and so on, to think about the siting of what will probably be a unique facility, but as we heard earlier may not be; there may need to be others. The Working With Communities process is designed to do something else, which is to inform and build the confidence of communities that show an interest in this, to the point where they feel ready to make some form of commitment, as we have set out in that policy. Only when they are ready to do that, as we heard from some of the earlier evidence, would the DCO process begin.

Q106 Peter Kyle: What was the difference with Heathrow?

Richard Harrington: Heathrow is a one-off site.

Q107 Peter Kyle: There was no choice over the site; that is the difference, is it?

Richard Harrington: Yes. That entire process was specifically for that site. We have tried, in having two things, to separate the planning policy, which could be anywhere—it is not site-specific or anything like that; nor is it meant to be—from the second thing, to do with the communities, which is getting more specific and more relevant to a particular area. I think it is the right thing. When I first read about it, my instinct was to ask, “Why are we doing two?”, but the two things are completely separate, and I think it is the right strategy.



HOUSE OF COMMONS

Q108 **Peter Kyle:** Can I suggest, then, that you are gambling the whole business of being able to get a geological solution to this on finding a willing community?

Richard Harrington: I would not say “gambling”.

Q109 **Peter Kyle:** Well, it is a gamble, because if you do not find a willing community you do not have a strategy.

Richard Harrington: You can say anything is a gamble like that. I know exactly what you mean, but I do not think “gambling” is the right word

Q110 **Peter Kyle:** What about “banking on”?

Richard Harrington: We are working on the current assumption, with current policy, that there will be willing communities.

Q111 **Peter Kyle:** If there is not one, there is no strategy.

Richard Harrington: I have already been asked that question. Are you asking whether there is a plan B?

Q112 **Peter Kyle:** Well, is there a plan B?

Richard Harrington: If, after this process went through, there were no willing communities there, the Government would have to consider alternatives. That will not happen. I do not believe it will, because I have seen the way that communities I have visited in the existing nuclear world, let alone in other ones, have benefited so much.

Q113 **Peter Kyle:** Umran, I can tell from your body language that you want to come in.

Umran Nazir: This consent-based process follows on from the learnings of a couple of decades, starting from the late 70s and ending in the late 90s, of a top-down, imposed process, which did not work. Two decades of learning have taught us that it is far better to go with a consent-based process. Indeed, the international experience is that that works. To say at this stage that we should have a plan B that is anything other than consent-based would undermine our consent-based process.

Q114 **Peter Kyle:** I understand that. My doctorate is in community development and these are things I care about very deeply. But, in terms of resting the entire strategy on finding a willing community, we would not have HS2 going on the line, as we have right now, if we had the same process for HS2. It is arguable that disposing of almost 130 tonnes of highly radioactive waste is even more contentious for a community than having a rail line going through it. I am saying that having a bottom-up approach might well land us into having no solution whatsoever.

Richard Harrington: I know that some political parties are in favour of highly centralised, dictatorial ways of doing things, but we do not think that is the right way. We think the community approach is the right one.



HOUSE OF COMMONS

I am very pleased that you agree, for most things, with having a community approach upwards. You ask what happens if nobody wants to do this. I do not think that will happen in any way. Based on my limited experience of visiting only two nuclear communities—actually three, if you include north Wales, where we did the launch of the sector deal, and I hope to visit others—there is a lot of popularity because people have seen the prosperity it brings, and the safety and everything that is involved with it.

Q115 Peter Kyle: Minister, one of the communities that you are referring to rejected it last time.

Richard Harrington: That is because it was imposed on them or attempted to be imposed on them.

Q116 Peter Kyle: So you ask the question differently and they are going to give you a different answer.

Richard Harrington: Well, we shall see.

Umran Nazir: That same community also had quite a bit of local opposition to the previous process that ended in 1997, which was an imposed process. When we tried to do a rock characterisation facility back in the 90s, which ended in 1997, it was an imposed process.

Q117 Chair: Peter Kyle is thinking about the processes that were done in 2013, so subsequently.

Umran Nazir: But it is the same community that rejected it and we had to stop that process, because it was an imposed process. As for the suggestion that we can do this a different way, the nature of this scheme and the long gestation period, with 20 years simply in the planning process, make it very dissimilar to HS2, which has a far shorter gestation period, even though it is quite long. It is intergenerational, just in that planning process.

Q118 Peter Kyle: This is my final question. How are you going to have a process that listens to the entire community, rather than just the ones who come forward with a voice? How are you going to listen to everybody in a community? If you are going to go truly bottom-up, how are you going to hear all the voices and the true voice of a community, when in fact a community has many different voices, and some of them will feel stronger and be more motivated than others to express their voice?

Umran Nazir: That is absolutely the challenge we will have: to maintain a community partnership and some sort of vehicle that allows us to get full representation of all the communities involved in this, in whatever area decides to take this forward, over a sustained period. It is quite a unique challenge. The reason it is beneficial to disassociate the Working With Communities process from the NPS process is that having that whole Working With Communities process allows the community to



HOUSE OF COMMONS

provide consent for a site to go ahead; then the DCO, development consent order, application allows a second bite of the cherry, in saying to the community, "Well, okay, that now you have given your consent, here are the plans for the facility".

That will include the inventory, because the inventory, depending on the nature of it, will dictate the layout and design of the facility itself. They will then have a full appreciation of that and will be statutory consultees to that process. It allows an additional protection for them in that sense.

Richard Harrington: Mr Kyle has brought up a very good point. With any form of representative democracy or public consultation, it is very easy just to listen to the ones who make the noises. It is our job to try to make sure that is not the case. It is difficult, particularly on subjects like this, where people have very divided views, but it is much better than not consulting at all. It is a complex process. We are providing the funds to do it properly, and we will just have to make the best attempt at it that we can. There is no perfect solution; I would agree.

Q119 **Chair:** Although we do not have a site and we do not know how big the site will be until we have done the exploratory work, at the same time we are building new nuclear power stations. How do we know that the site will be able to accommodate the waste, not just the legacy waste but from the new power stations that are being built?

Richard Harrington: Because there is such a big time lag in the system before permission is given for new power stations to be built, there will be time enough for that to be taken into consideration. It is very hard for us to estimate now how much capacity will be needed, because we do not know which permissions will be coming in for different types of new nuclear.

Q120 **Chair:** Are we going to build a facility that will be big enough to accommodate the waste from all the new power stations we are going to build over the next 20 years?

Richard Harrington: That is very much the idea, yes.

Q121 **Chair:** Is that the idea or is that the commitment that the Government are making?

Richard Harrington: That is what we are doing, but we have to estimate at the moment, because we do not know exactly what new power stations will be coming on stream. It would be very negligent if we did not consider a working number for that. This is a 100-year capacity project, this type of thing. It is scalable and extendable, but we just could not consider doing it without making a provision for the new nuclear waste. It is one of the reasons for doing it, or one of two reasons for doing it, the first being the existing waste.

Q122 **Chair:** I am pleased you said that, Minister, because in the previous evidence session we were not given that reassurance that the new waste



HOUSE OF COMMONS

disposal facility would be able to accommodate the waste from the new power stations. In terms of what you are planning to build, can you tell me how many new Hinkley Cs, as well as the legacy waste, you would be able to accommodate? What is the plan for this new waste disposal facility?

Stephen Speed: I think the answer to that question is that we do not have a blueprint for a specific GDF. We are going to spend time—

Q123 **Chair:** How can you know that it will be able to accommodate the waste from all the new power stations, as the Minister just said it would, over the next 20 years? How can you give that assurance to us?

Stephen Speed: We can give the assurance that the GDF that will be designed and built, following the community engagement and the rock characterisation work that then has to follow, will be big enough to do that, because it has to be. The Minister used the words “scalable” and “extendable”. A GDF is a highly engineered location that is capable of being developed in different places underground. The point is that you create capacity. You might not use all the capacity, for example, by just putting the legacy waste in, in the first instance. You create redundant capacity, which can take future legacy waste, if you like, from new power stations as you go along.

Q124 **Chair:** When you are signing off new power stations, you have an assumption in there about the cost of disposing of the waste. For Hinkley C, how much do you cost that at?

Stephen Speed: I cannot give you that number today, but we have built in—

Q125 **Chair:** If you do not have that number, can you get back to me with what estimates you have, for both that power station and the one in north Wales, which has recently been signed off?

Richard Harrington: We will write to you.

Chair: That is great.

Stephen Speed: For each power station that comes forward for the future, there is a funded development programme as part of the sign-off for that. We are not in a position to describe the position for Wylfa, because we are still negotiating with Wylfa, but we should be able to say that for Hinkley.

Q126 **Chair:** It is just difficult to know how much this is going to cost until you have chosen a site and done the geological work that would give you an idea of the cost, so I would be very interested to know what estimate you have made for Hinkley C and how you have come to that estimate.

Stephen Speed: I will provide that. The intention of each FDP is that it will make its proper contribution to future storage.



HOUSE OF COMMONS

Chair: That is absolutely right. The issue is just how you come to that proper contribution.

Richard Harrington: Because of the disasters in the past, when this was not taken into consideration, the taxpayer now has to pay for all the legacy work, which you have seen at Sellafield. You are right to ask.

Q127 **Chair:** I agree, which is why I want to know, about the new power stations, that we are not building up the same problems for the future, or that we are not building a waste disposal facility that is not big enough to accommodate the waste, which was my worry from the evidence session earlier this morning.

We have taken evidence this morning to suggest that areas of outstanding national beauty and national parks should be excluded from the national policy statement as potential areas for this waste disposal facility. Is this something you would consider including or amending the national policy statement to include?

Richard Harrington: I do not agree with that assumption at all. We have to look at all possible sites where communities want it. For example, the potash proposal near Whitby in North Yorkshire is in a national park, but the people who are proposing the site have shown a way of doing it where the actual buildings that are left will leave very little blot on the landscape of the national park. I am not saying we should have them on national parks, but it would be very wrong to exclude them at the moment in this big policy statement.

Q128 **Chair:** Fracking is quite a different proposition, but we know that, for this geological waste disposal facility, you will need a one-square-kilometre area above ground, before you even go into all the detail of what going on below ground. It is different, because if it was on a national park you would have one square kilometre that would be industrialised. Is that not different from fracking?

Richard Harrington: I did not mention fracking. I was talking about the potash production.

Chair: Sorry.

Richard Harrington: But you are right, because it is the same.

Q129 **Chair:** There is still the same issue. You are talking about one square kilometre.

Richard Harrington: That could well be, and it may not be suitable.

Q130 **Chair:** Would you be willing to sign off a site that involved one square kilometre of a national park?

Richard Harrington: It depends. For example, we went to the launch of the nuclear sector deal in north Wales, at Trawsfynydd—sorry, my Welsh does not have very good pronunciation—which is, if not actually in a national park, in an area of natural beauty. We saw the types of building



HOUSE OF COMMONS

that were built, and were shown one where the planning had asked for it to be built with Welsh slate. It was acceptable to locals. I do not want to prejudge the situation. If it was huge, one-kilometre-wide industrial building in the middle of a national park, of course that would not be suitable.

Q131 **Chair:** Presumably, if it was about local community consent, you would not get it anyway.

Richard Harrington: Exactly.

Q132 **Chair:** If it is not Sellafield where the waste is ultimately stored, you would then have to move the waste that is already there to another site. Have you looked at all at the cost and the risk associated with that movement?

Stephen Speed: We certainly have it in mind, and it is one of the things we would want to engage on local communities with. But the fact is that we regularly move nuclear waste and materials round the country perfectly safely, by various different means of public transport. It is one of the things we happen to be very good at in this country.

Q133 **Chair:** More than 75% of the waste that is ultimately going to be stored underground is currently at Sellafield. This is much more waste than has ever been moved before.

Stephen Speed: That is true.

Richard Harrington: The Chair's assertion is correct. It is not for us to select the site, but one of the advantages in Sellafield would be that a lot of the waste is already there. That is just a fact, but that does not mean there are not other factors. For example, as was mentioned before in the questioning, the local community might not want it. It might be that, taking all the costs, the geology and everything else into consideration, notwithstanding the expensive transportation costs, another area is better. We cannot, at this stage, rule out any site that the local community are willing to have.

Q134 **Chair:** If you had two communities that were willing to host it, one of the issues you would take into consideration would be the risk and cost of transporting the nuclear waste.

Richard Harrington: Without a doubt, yes.

Q135 **Albert Owen:** Good morning. How does the national policy statement fit in with the industrial strategy, particularly on the regional focus?

Richard Harrington: It is an important part of it, and the two are linked together. The industrial strategy, particular the sector deal part of it that was announced last week, an hour and a half from Anglesey in the middle of north Wales, sets out the Government's view—well, not the Government's view actually, but their view in partnership with the industry's view—on the way that the industry will develop. Many of those



HOUSE OF COMMONS

things are relevant to this facility that we are discussing today, for example reduction in cost, skills, women, et cetera.

Q136 **Albert Owen:** Can I come to the sector deal specifically in a second, but just ask you more generally about the regional strategy for growth that you have in the industrial strategy? There has been some concern from local authorities that there is not enough emphasis in the national policy statement on the jobs for the host community. Whatever it is, the host community will want to be part of it, with the high skills and so forth in the industrial strategy. Have you fitted that in? Is there joined-up thinking here?

Richard Harrington: That would not be a fair criticism of the industrial strategy. It is very much devolutionary and regionally based. What we are talking about today with this GDF site would fit very much within that. It is not at all incompatible; it is an important part of the industrial strategy and the development of the nuclear industry in this country.

Q137 **Albert Owen:** The criticism from the local authority is that there is not enough emphasis on skills and on regional issues.

Richard Harrington: I do not think they are right in this respect.

Q138 **Albert Owen:** Could you tell me what is in there that would help them, which they may have missed?

Richard Harrington: They are seeing it just from their point of view, as you know. It is their job to do that. Places, for example, is very much part of the industrial strategy. It would not be relevant to this particular case in the middle of London or the south-east anyway, but generally the whole purpose is to get away from those existing centres of development to places, which is one of our big points. That is why the nuclear industry sector deal generally, but the GDF specifically, fits very well into that.

Q139 **Albert Owen:** If an area is identified and the community agrees with it, there will be jobs and skills following it. Will there be skills centres built up there for upskilling, or will it be the case, as with many big projects in the past, that a lot of the labour comes into the area and leaves it? What is in the policy statement?

Richard Harrington: It was mentioned to me—I do not think by you, but at one of these committee appearances—that at Hinkley Point all that would be left for the local community would be a few catering vans and everything outside. When I went there, I asked specific questions about every single contractor, how local they were and the local content. I was extremely impressed by it. I am sure this GDF would be exactly the same. It is very much part of our industrial strategy policy to make sure that happens.

Q140 **Albert Owen:** There will be local industrial strategies that follow.

Richard Harrington: It may well fit within a local industrial strategy, as a wrapper for it, but we have to get the GDF and everything through first,



HOUSE OF COMMONS

then the site, and everything will flow from that. This is not the sort of thing where people will just be helicoptered in to do a job and then leave. It cannot be, because it is a 100-year project; it is not just "built it and leave it". HS2, for example, is "build it and leave it", because it is a different kind of operation altogether.

Q141 Albert Owen: Moving on to the nuclear sector deal and decommissioning costs, how does this national policy statement fit into the sector deal? You began to explain that. Would it include the sector deal commitment to decrease decommissioning costs by 20%? In the previous panels, we were talking about projecting how many nuclear power stations would come in the future. In the new-build policy, you are suggesting that decommissioning costs will be included, yes?

Richard Harrington: Definitely.

Q142 Albert Owen: They will be reduced. What about transportation costs to the disposal? Are they factored in as well?

Stephen Speed: There is a lot to be learned about decommissioning. We are starting, in this country, to get good at it, after many years of trying. We have been working with the industry, to challenge the industry to cut costs. We met with them yesterday. They have accepted that we should be aiming to bring down the cost of decommissioning of old nuclear sites and other nuclear power sites by about 20% by the end of the next decade.

Q143 Albert Owen: Who will be building this new infrastructure that will be built? It will be the taxpayer. They will get a better deal, because the companies building the new build will be contributing towards it. Is that what you are saying?

Stephen Speed: We have to make sure that they pay their full economic cost; that the business cases for the construction of a GDF are as solid as they can be and take account of all the uncertainty and risk; and that they are delivered as cost effectively as possible.

Richard Harrington: Essentially, the construction and the ongoing costs and revenue for this will come from two sources. For the legacy stuff, it will be the Government, effectively, which is the current system. More and more of it will come from future nuclear development, if things go as well as we hope for Hinkley Point and beyond. That means that, as a percentage, the cost to the current taxpayer from what happened in the past will go down.

Q144 Albert Owen: I know we do not have figures and details about what size the GDF will be, where it will be located, et cetera, but one figure we were given was that new build would contribute about 10%, putting it in context, of the nuclear waste that the GDF will be hosting. Is that a figure that you recognise? Are we saying that 10% of the overall cost would come from new-build sites?



HOUSE OF COMMONS

Stephen Speed: It is fair to say that the new-build sites have to pay a proportionate cost. To the extent that they make the GDF bigger and more complicated, they have to pay that share.

Q145 **Albert Owen:** Legacy versus new is about 90/10.

Stephen Speed: No, it will not be. The new waste will have to be stored in a bigger footprint, because it is hot, so it is likely to be higher than that.

Q146 **Chair:** Maybe you could get back to us with more details on that breakdown.

Stephen Speed: Yes.

Chair: Thank you. Thank you very much, Minister, and to Stephen and Umran, for coming to give evidence to our Committee this morning. We have to respond quite quickly to the national policy statement, so you will be getting our response shortly.