

Public Accounts Committee

Oral evidence: The Nuclear Decommissioning Authority's management of the Magnox contract, HC 653

Monday 5 October 2020

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Members present: Meg Hillier (Chair); Gareth Bacon; Sir Geoffrey Clifton-Brown; Barry Gardiner; Peter Grant; James Wild.

Gareth Davies, Comptroller and Auditor General; Rob Prideaux, Director, National Audit Office; and Marius Gallaher, Alternate Treasury Officer of Accounts, HM Treasury, were in attendance.

Questions 1-95

Witnesses

I: David Peattie, Chief Executive and Accounting Officer, Nuclear Decommissioning Authority; Kate Ellis, Group Commercial Director, NDA; Sarah Munby, Permanent Secretary, Department for Business, Energy and Industrial Strategy.

Reports by the Comptroller and Auditor General

The Nuclear Decommissioning Authority's Magnox Contract
(HC 408)

The Nuclear Decommissioning Authority: progress with
reducing risk at Sellafield (HC 1126)

Managing infrastructure projects on nuclear-regulated sites
(HC 19)

Examination of witnesses

Witnesses: David Peattie, Kate Ellis and Sarah Munby.

Q1 Chair: Welcome to the Public Accounts Committee on Monday 5 October 2020. We are here today to look at the Nuclear Decommissioning Authority's management of the Magnox contract. Magnox power stations are being decommissioned, and the work to do that is a vital part of the safety of the nuclear industry. We are considering a National Audit Office Report on the termination of a contract that was entered into in 2014 by the Nuclear Decommissioning Authority to decommission 10 disused Magnox nuclear power sites. We will not revisit old pain, but we have looked at that in the past. It was a very tricky contract to get out of; it resulted in litigation and a lot of taxpayer money wasted. We reported on that in 2018, so we are now revisiting it as a result of the Report and the further work by the National Audit Office. The Nuclear Decommissioning Authority has taken the process of decommissioning Magnox on itself through a number of wholly owned subsidiary companies, so we will be asking the NDA how it is delivering on that and what the risks are ahead, and we will be challenging the Department for Business, Energy and Industrial Strategy, which is the sponsor Department, about how it is handling the plans for the future.

A very warm welcome to our witnesses, who are in the room with us today—I think it is only the second time since lockdown that this has happened. First of all, welcome to Sarah Munby, who is the new permanent secretary at the Department for Business, Energy and Industrial Strategy. Actually, she is not new, but she is new to us. When did you start, Sarah?

Sarah Munby: In July.

Chair: In July, so you are still quite new, but it is certainly the first time



HOUSE OF COMMONS

that Ms Munby has appeared in front of this Committee. We also have David Peattie, who has been here before as chief executive of the Nuclear Decommissioning Authority, and Kate Ellis, who is the commercial director at the Nuclear Decommissioning Authority. I emphasise “commercial”, because something this Committee has been very keen to see is more commercial understanding at the NDA. A warm welcome to you.

I will start by asking Peter Grant—he has a question not on the same subject of Magnox—to ask a wider question.

- Q2 **Peter Grant:** Thank you very much, Chair. There has been a bit of uncertainty around the new statutory instrument on the restriction of exit payments for public sector workers and whether that applies to workers on the Magnox site, who believe that, if they were covered by those restrictions, it would be a breach of promises made to them when the sites were privatised. Mr Peattie, what is your understanding of the application of those regulations to Magnox workers?

David Peattie: Like you, I am still seeking some clarity on the application of those terms to our existing workers. Any payments that have been made historically have been met within contractual obligations, but in terms of the detail on application, I need further advice, particularly from the Department, before we can make further progress. I am happy to investigate further and report back to this Committee.

- Q3 **Peter Grant:** Thank you. I would appreciate it if you could get back to us when you have a clear answer for that, because obviously it is not a good position for workers to be in if they do not know whether their eventual pension payments are likely to be affected by that.

I will move on to the main session. I want to start by looking at NDA’s existing capability and understanding of the sites that you are responsible for managing. Mr Peattie, how good an understanding do you currently have of exactly what you have in terms of sites—what is there, what potential risks it poses, and what needs to be done to make it safe?

David Peattie: May I thank the National Audit Office for the report? We have found it incredibly helpful in terms of the positive things it has had to say about how we managed the contract run-off, but also in terms of what it says about areas where we could have done better. I am accountable for 17 sites around the UK—the most complex industrial sites that we have, with some of the most hazardous material and difficult-to-get-at areas. I think it is that which is perhaps an area for further explanation. Of the 17 sites, the most important is Sellafield in west Cumbria, and I would be delighted if the Committee’s members could visit it in the next few months. It is quite an extraordinary place and you have to see it with your own eyes to appreciate its complexity. Twelve of the other 17 sites are sites in the Magnox family. Two of them are former research sites. One of those is at Harwell and it was begun in 1947, when nuclear development for civil nuclear power was really created by the UK, which is something we can be very proud of.



HOUSE OF COMMONS

However, 10 of the 12 sites are former power stations and I think that it is those sites that your question is really directed at: how can we improve our understanding of them? I think that we now have the best understanding of them that we have ever had. However, as the NAO Report notes, there is inherent uncertainty in these sites, because historically poor records were kept due to the hazardous nature of the material, and often when we send workers to those sites, they cannot spend very long in the radioactive hazardous areas.

So, they are complex sites. They are a bit like an archaeological dig, because until we start entering the rooms—start excavating—we cannot really get a handle on the nature of the hazard and what it will take to clean it up. However, it is my job to get the very best estimates that we can for the cost of clean-up, running out decades, and to do everything we can to reduce the cost to the taxpayer and to improve the efficiency of the clean-up. I hope that we will talk later about my plans for bringing the whole estate in-house, to allow us to share best practice in a more efficient way.

- Q4 **Peter Grant:** Mr Peattie, one important distinction between an archaeological dig and a redundant nuclear power station is that an archaeological dig does not usually contain what you described as some of the most hazardous substances in existence. At the moment, you do not actually know enough about the condition of the sites that you are now responsible for, do you?

David Peattie: We certainly do not know the full picture of the hazards that we face—that is correct. As I said, these sites go back 75 years in some cases. Next to each reactor is a thing called a vault. It is about the size of a double-decker bus and over the last 30 or 40 years material has been placed in it. The records kept were not good. And in order to protect our workers, who we must protect at all times, they cannot spend too long inside. When they examine a vault, we get a surprise; we find things that we did not expect. So, we pause, we develop a new plan and then we proceed on that basis.

So, you are absolutely right that we do not have a full understanding of the status of our sites. However, our understanding gets better with time and as we do the work and learn from each site, we can use that learning to improve how we work on our other sites. I have got some examples of that, but I do not want to give answers that are too long.

- Q5 **Peter Grant:** Before we come on to the implications that has for controlling the costs of the work, how can this Committee or anybody else be assured that public safety and employee safety is being properly managed when you do not actually understand what you are dealing with?

David Peattie: First, for me and my team, the health and safety of the staff is absolutely the No.1 priority. Our safety record is very good and we continue to emphasise that in all our discussions and all our meetings.



HOUSE OF COMMONS

Although we do not understand the scale and the detail of every hazard on every site, we have sufficient experience in this country, built up over 70 to 80 years, of managing complex nuclear material. We have the equipment to detect and measure the scale of any radioactive issue, and our staff have the knowledge and skills, and more importantly the experience, to be able to deal with it.

So I am confident that, while we do not know what is in every nook and cranny of every site, when we understand the nature of a particular problem, we have techniques that can deal with it. We are the world's leader in the management of nuclear materials; other countries come to us for advice and help on clean-up.

- Q6 **Peter Grant:** That is very reassuring to know, Mr Peattie, but it is not that reassuring if all that we know is that we are the least bad of a bad bunch of understandings of what you yourself have described as some of the most hazardous material that we know. Are you prioritising the sites, either in order of potential risk to the public or on some other basis, in order to decide what order you tackle them in?

David Peattie: Yes, we have a hierarchy of hazard and risk management. Of course, we are regulated by the Office for Nuclear Regulation, and we are also overseen, ultimately, by the international authorities that look after, under the non-proliferation treaty, the management of special nuclear materials. We obviously are focused on the highest hazards around the estate. They tend to be at Sellafield, which is where the work through the cold war was primarily devoted. That is where the highest hazards are, in our so-called legacy ponds and silos, and we continue to make good progress there. As for the other Magnox sites, I am pleased to say, for the first time for 60 years, all the Magnox reactors—we had 26 of them—have now been defueled, and all that fuel has been taken to Sellafield for safekeeping. That reduces over 95% of the radioactivity on the Magnox sites and is an important step in making and keeping these sites as safe as possible, not just for our workers but for the local communities and the natural environment.

- Q7 **Peter Grant:** One of the other significant hazards on a lot of these sites, of course, is the presence or potential presence of asbestos. Can you tell us what you can do just now to reassure the public and, again, to reassure your employees that there is no risk to their health through the presence of asbestos on the sites?

David Peattie: Asbestos is a very important topic for us. For most industrial sites in the UK, if they have asbestos, asbestos is their most hazardous material. That is not the case on our sites. It is a very distinct set of skills to be able to clean up asbestos in a nuclear power station in a radiation-controlled area. We do have extensive experience, and I hope that some assurance can be brought by the fact that in Chapelcross in south-west Scotland, we have done the largest asbestos clean-up in Europe. Thousands of tonnes of asbestos were cleaned up across turbine halls, heat exchangers—the whole industrial complex. We have a lot of experience of it, but I do not want to sound over-confident or over-



HOUSE OF COMMONS

complacent. It is a very difficult thing to clean up asbestos anywhere, and it is a particularly difficult thing to do in a radioactive environment. I think we do it—obviously, we have some very capable people working for us in that regard.

- Q8 **Peter Grant:** This question might be better directed to Kate Ellis, because it involves working with contractors as well. Ms Ellis, where are you just now in having both the organisational understanding and the organisational capacity to be able to remove any asbestos that you find safely and legally? Would you be able to do that just now, or is there more work you need to do before you are ready for it?

Kate Ellis: Is the question around our ability to contract for the work around asbestos?

Peter Grant: It is around your understanding as to where you are now and what more you would need to do to be ready to deal with any asbestos that you find, and whether you are doing that yourself or bringing in contractors to deal with it.

Kate Ellis: Part of what we are doing, as part of improving our commercial capability across the whole estate, is to develop detailed supply chain strategies to ensure that we know that there is the capability in the market to deal with all the challenges that we are going to face; and dealing with asbestos would fall within one of those strategies. So one of the things that we do indeed need to do is to ensure that we have a good understanding of all the requirements across the service—all disciplines, if you like—what we are going to require from the market, and to ensure that we are working with the market to ensure that the capacity and capability are there.

- Q9 **Peter Grant:** Just to be clear, is that work that would need to be carried out by specialist asbestos contractors rather than by your own in-house workforce?

Kate Ellis: Where necessary, we would bring in specialist contractors; and yes, we would absolutely ensure that whoever we contracted the work out to was suitably qualified and had suitable capacity to do the work, were we required to take it to the market.

- Q10 **Peter Grant:** Can I come back to Mr Peattie? This is quite a wide question, but I hope you can give us a brief and concise answer. Why is it that the costs of decommissioning keep increasing?

David Peattie: That is obviously a question that we spend a lot of time wrestling with inside the NDA. At its heart is that we continue to discover more work that needs to be done, and that the cost of doing that work increases. When you put those two things together and stretch out a programme that covers 12 sites for Magnox—we have 17 in total, but just to focus on the Magnox sites—and extends over many decades to do the final clean-up, the inherent uncertainty means that as we improve our understanding, we think we can get better estimates.



HOUSE OF COMMONS

I think it is up to us to put forward our very best estimates of the costs. None of us wants to keep seeing figures going up and up and up, but we do feel an obligation to put forward the best estimates we can, because then we can make the better decisions and we can offer our sponsor Department and the Treasury the options around cleaning up these sites, either at a pace that is already agreed or by trying to do it a bit quicker if that would save some money—that is something that we have looked at as well.

- Q11 Chair:** Some of us have visited Sellafield, and we are hoping for the rest of the new Committee to do that again. We recognise the uncertainties at Sellafield, for all sorts of reasons, but surely there is a bit more consistency between some of the Magnox power stations. You said that the biggest uncertainty is at Sellafield. What are the uncertainties and difficulties, when you have been dealing with one power station site, in dealing with another? Are they all built differently?

David Peattie: They tend to all be different. Most of the 10 power stations had two reactors built on the site. As I mentioned earlier, they have vaults into which we are not certain what radioactive material has been put over the last few decades. There is also asbestos in all our sites; asbestos was a wonder product in the '70s before it was discovered that it was carcinogenic. There are different geographical sizes—

- Q12 Chair:** Asbestos is in nearly every industrial site from that era, so that is not particularly a nuclear issue, is it?

David Peattie: It is not particularly, but it does tend to slow down our ability to go on with the other material.

There is another perhaps important element, which you notice if you visit Dungeness, for instance, on the Kent coast: it is a marine environment, it is highly corrosive and the steel there is rusting. That is an example of a feature of our sites: they do tend to be in remote, often coastal locations, and the effect of the sea environment can be quite damaging. That adds another dimension.

Can I quickly touch on our two research sites—Harwell in Oxfordshire, which I have mentioned, and Winfrith in Dorset, where some of the very early test reactors were established? This was at a time when the UK was leading the exploration and the scientific and engineering development of nuclear fission reactors. We have a variety of types of reactors using different types of fuel, and they each present their own unique challenge. Again, at these research sites we do not have good records—remember that they date back to the second world war or the cold war.

- Q13 Peter Grant:** Are you able to tell us when you expect to have a firm and final figure for the cost of all this? Will the Public Accounts Committee be coming back in 15 or 20 years' time and grilling your successor, or possibly yourself, as to why the costs are still increasing? When will we be able to put a final price tag on this that will not increase any more?



David Peattie: Regrettably, I would love to give a fixed and final figure, but that would not be wise, it would not be credible, and it is not something that I would believe in. As I said earlier, we have the best figure that we have ever had and the best understanding of our sites, but there is always uncertainty. It will continue to evolve. We will do everything we can to reduce the costs and improve the efficiency on our sites, but frankly it is impossible to give now either a fixed figure for today or a date in the future—unless, obviously, it is when we have done all the work, but that is not particularly helpful. It would be difficult before then to give a single-point number of what it will cost to clean up all the sites.

- Q14 **Peter Grant:** I remember when nuclear power stations were being built. One of the arguments against building all these nuclear power stations was that nobody really knew exactly how to decommission them and make the sites completely safe again. That was about 30 or 40 years ago. We still do not know exactly how we are going to make the sites safe, do we?

David Peattie: The sites are currently all safe and secure. I can assure you and the Committee of that. We have a very skilled workforce. We have protection where it is needed beyond that on our key sites, and we know how to keep those sites safe and secure. We are heavily regulated and we meet our regulations. As I say, we do everything we can to keep improving the value for money case for the taxpayer.

- Q15 **Peter Grant:** Do you have a timeline that tells you when you expect to complete the work on each of the sites, particularly the succession of power stations that you keep mentioning? Are you able to tell us now, or are you able to write to us later, and tell us the order in which you plan to do each of these sites and when you expect each of them to be completely finished?

David Peattie: If I could paint a picture now, just briefly, when I was last before this Committee a couple of years ago, we talked about moving all our Magnox sites, the 10 former power stations, to something called care and maintenance: a safe, contained position for each of the 10 power stations. That will take between 12 and 15 years from now, so until about the mid-2030s. Then our plan was to have a period of quiescence to allow some natural radioactive decay to occur and to come back in about 30 or 40 years and do the final demolishing and decommissioning of the 10 power stations. That would take, as I say, another couple of decades. In our strategy 4 document that is currently out for consultation, the date for final clear-out of our Magnox sites is 2105, so 85 years from now. That has been our position.

However, also in our strategy document, we are seeing if we can do better than that, and better than that means a more bespoke approach to each of the 10 Magnox stations. For some of them it makes more sense from a value for money and safety perspective to try and proceed a little bit quicker than leaving them for many decades. For instance, we have highlighted Trawsfynydd in Wales as a site where perhaps we can make quicker progress in the demolition of it. On others, such as Bradwell in



HOUSE OF COMMONS

Essex, which is the only station so far that has gone into its quiescent state, we are learning from that as we bring the other ones forward. It is bespoke for each station. Our published documents include something on each of them, but I am happy to write to the Committee laying out our plans for each of the stations.

- Q16 **Peter Grant:** One final question from me. Given the uncertainty around the costs as they are just now, and given that you cannot even tell us when you will know what the final costs are, how do you go about producing a credible estimate for the provision for future liabilities in the accounts?

David Peattie: We look at the totality of our estate, the 17 sites, the major hazards that we have to deal with and the scale, and our current understanding of what it will take. This is a provision that extends out now 120 years. It is an eye-wateringly high figure; we all recognise that. It is subject to change from discount rates and changes in cost estimates. Again, it is the best figure that we can put. As an engineer myself, I would prefer estimates of ranges, which we tend to use in industry, but I understand that in accounting terms it is important to have single-point numbers. We tend to work on ranges of possible outcomes, and then try and take a balanced risk judgment of a single-point figure within that range. Again, I would be the first to admit that these are forecasts and estimates, and these are in our best judgment that we have at the time. I think they are improving, but they are difficult to pin down, and we will keep year on year trying to do a better job of getting better numbers.

- Q17 **Peter Grant:** I think your last published accounts estimated the figure at just under £135 billion, so I think we would all agree with describing it as eye-watering. Is that still your best estimate? Have you updated that estimate since then, or do you update it only when you produce your annual accounts?

David Peattie: The figure currently is £132 billion undiscounted—we prefer that measure because the discount rate can change year on year, and we are guided by Treasury on that, obviously. Again, £132 billion is our current best estimate, and let me emphasise—I hope we will talk about some of the changes I am making in our organisation—that I am absolutely personally dedicated, and I know my team is, to doing everything we can to bring technology to bear and to bring learning from best practice to bear, whether internationally or nationally, to do everything we can to improve the efficiency of that spend and lower the cost to the taxpayer.

Peter Grant: On the positive note that it is not £135 billion but only £132 billion, I will hand back to you, Chair.

Chair: Thank you very much. I will pass over to Sir Geoffrey Clifton-Brown.

- Q18 **Sir Geoffrey Clifton-Brown:** Good afternoon. As one of the very few people in the world to have stood in the centre of the reactor in Chernobyl with the then Environment Select Committee, I have a lot of



HOUSE OF COMMONS

sympathy with what you say about how long your employees can stay in these heavily contaminated sites. I had a Geiger counter on me at the time and knew how heavily contaminated that was—at that time, the Russians did not have much regard for safety. First, is it possible to use AI and robots to do some of this very dangerous work?

David Peattie: Absolutely it is, and thank you for the question. Again, that is one of the areas of technology that we think will offer us some great opportunities for improving the pace at which we clean up our sites while, as you rightly point out, avoiding the need to put humans into areas of radioactive exposure. A small example: there is a business called LaserSnake, which is a little bit like it sounds—it can cut steel remotely without the need for humans to go close to the cutting edge—developed by a UK-based SME in the north-west of England. It is a fantastic example of innovation. But absolutely, artificial intelligence and robotics—we have got a competition out at the minute among the industry on one of the grand challenges we have set ourselves of not putting humans as close to this material as we have done previously.

Q19 **Sir Geoffrey Clifton-Brown:** So this could be some groundbreaking work that you could export to the rest of the world.

David Peattie: It is indeed. Fukushima, which I visited last year, has been very interested in adopting some of this technology, again using UK-based technology.

Q20 **Sir Geoffrey Clifton-Brown:** You were present when we had our previous inquiry, and our previous report said the NDA had “a staggeringly inaccurate understanding of the state of its sites” and “disregard for the need to independently assure itself of the state of the sites”. How has your knowledge of the condition of the sites improved since then?

David Peattie: I think it has improved because we have changed the contractual basis of overseeing the sites—that is the first thing. Secondly, we have increased the capability of the NDA central team—the 200 or 300 people who report directly to me. And the operating companies—the site-licensed entities which manage the sites on behalf of me and the taxpayer—have too improved their capability in terms of project management and commercial—and legal in some cases. So, as each year goes by and as we do more and more work, learn and transfer that learning around the estate, we are able to improve our understanding.

Q21 **Sir Geoffrey Clifton-Brown:** I take that optimistic answer, but in one of your earlier answers to my colleague Peter Grant, you said—I paraphrase—that you keep finding more and more problems, which is costing more and putting up the price. If you don’t know what you don’t know, how do you know what the condition of these sites is?

David Peattie: We have the best understanding we have ever had because we are continuing to find things, but we cannot give a full description of the state of every one of our sites. Take Harwell, for example, where I was about six weeks ago. We are excavating land and



HOUSE OF COMMONS

have already given back 50 acres—it is where the vaccine manufacturing centre is for covid, so we have been able to hand that land back—but there is still land that we are literally digging into. It is a former RAF site from the 1940s, and we are finding drains with radioactive material, so we have to pause and figure out a new way of handling it. It is a journey of discovery, pause and re-planning at all our sites. Some are obviously worse. To go back to the Chair's earlier question, some are better understood than others, but we do not have a complete understanding of the hazards on all our sites.

- Q22 Sir Geoffrey Clifton-Brown:** I understand that. We do not want to dwell too much on the past and on what went wrong with the previous contract, but nevertheless it has now finished. If you do not know precisely what the state of the sites is—I am not blaming you for that, because it is very complex—how do you know that the payment you made to the previous contractor of £2.72 billion was correct, given that paragraph 2.16 of the Report says, "Some £195 million of budgeted work was not finished, equivalent to 7% of the total work plan"? How do you know that that figure is correct? How do you know that there is was not a lot more that was not completed?

David Peattie: There was a huge amount of work not completed, and some that was left running beyond the end of the contract. We can be confident that the work that was done, which we paid for on behalf of the taxpayer, was indeed done, and there was a very thorough assurance process around that. The cost estimates, way back when the contract was placed, were based on the estimates at the time, which was some years back. I am confident that the work that was done was paid for in the right way.

- Q23 Sir Geoffrey Clifton-Brown:** Okay, well that is reassuring. Given your reluctance to give a total estimated cost—although the Report does go into estimated costs, and I want to come to that in a minute—and a timetable, can we confirm that you have a hierarchy of which of those 10 Magnox nuclear power stations you want to get into care and maintenance first? You have one so far, so that leaves another nine. Do you have a list for the order in which you want to get them into care and maintenance?

David Peattie: We do have a list, and perhaps I can put that in my written response to you, rather than take you through the league table now. We do have a list.

Sir Geoffrey Clifton-Brown: That would be helpful.

- Q24 Chair:** Is that list public?

David Peattie: I think you could find it if you had the time and the energy. We are happy to lay it out—

Chair: That is fine.

- Q25 Sir Geoffrey Clifton-Brown:** That answer leads me nicely into the next question. If you have a list, you must have at least an estimate of the



HOUSE OF COMMONS

timescale for each of those power stations to go into care and maintenance.

David Peattie: Yes, we do.

Q26 **Sir Geoffrey Clifton-Brown:** Could you put that in your reply to us?

David Peattie: Yes, I can. Broadly, it is all of them into care and maintenance in the next 12 to 15 years, at different times—Winfrith, for instance, and Trawsfynydd, depending on how quickly we go. There is Dungeness and Hinkley A—each one has its own specific challenges.

Q27 **Sir Geoffrey Clifton-Brown:** That is helpful. Where do the two research stations fit into that list? Are they at the end? Where are they?

David Peattie: Winfrith could be towards the front of the queue, so over the next few years if we make good progress on one of the test reactors that we built there. Harwell, I think, will take quite some time. There was a lot of experimental work done there in the '40s and '50s that will need quite some time to clean up.

Q28 **Sir Geoffrey Clifton-Brown:** So we have a list and a timetable. Surely we can begin to get to a little more of an accurate idea of the total estimated cost, can't we? The Report talks about £6.5 billion to £8.7 billion, with a best estimate from you of £7.5 billion. How accurate do we think those numbers are, given that Unite said in evidence to this Committee that the figure is nearer £1 billion per power station, which would be a considerable increase in that number. Where do you think the number is?

David Peattie: Our current range is up to £8.7 billion—£8.7 billion was the top end of our range, and we did quote the £7.5 billion. The new team in place that is overseeing Magnox is, again, re-looking at the total cost. I think we are, hopefully, reaching some asymptote now to get a tighter handle on it. We are getting closer and closer to what will be the ultimate cost. I cannot give a specific figure now. We are continuing to assess it and get a better and better understanding of it.

Q29 **Sir Geoffrey Clifton-Brown:** Can we go into the strategy for nuclear decommissioning? I may bring Sarah Munby in here. In their evidence, Unite said to us that it was probably inevitable that Wylfa had to be decommissioned, putting the aluminium smelting plant on the Isle of Anglesey out of business, so two massive employers suddenly went out of business. We know that you are coming on to look at the AGR reactors, so what is the nuclear decommissioning strategy of the NDA? Will you be taking on the AGR reactors? If so, will you be doing them concurrently with at least the tail-end of the Magnox power stations? Perhaps Sarah Munby would like to answer that question.

Sarah Munby: Let me start with a few facts on where we stand on the AGRs: there are 15 AGRs currently operating, run by EDF Energy. They will shut between 2022 and 2030. Like many of these things, they are on a stepwise cycle. We have been in close discussions about the right decommissioning approach for those stations, and in 2019 we signed a



HOUSE OF COMMONS

non-binding statement of principles with EDF Energy about how to approach that. That statement of principle states that, subject to final commercial agreement, the intent is that EDF Energy will be responsible for the first phase, which is defueling the reactors. The reason for that is that defueling has a lot in common with the kind of refuelling that they carry out as a matter of course, as part of running the stations.

After that defueling, the intention is—exactly as described by David—that David would take over because at that point the decommissioning has much more in common with the kind of work done by the NDA. Indeed, on several of the sites the two are next door, as it were. We are feeling good about where we are in that negotiation. We will need to sign off the final commercial details, but I have spoken with the CEO of EDF Energy and we see the principles of that agreement very much in the same light, and we look forward to involving David in due course.

- Q30 Sir Geoffrey Clifton-Brown:** I am sure the Chair will give me a bit of latitude on this as it is not strictly the subject of this inquiry. On the decommissioning of those AGR power stations: you are about to sign off a deal. Who has paid for it? I am aware that when you sold them off in 2009 a sum was included for decommissioning. Does that sum pay for the whole lot, or will there be further taxpayer input into the decommissioning?

Sarah Munby: The decommissioning of the AGR specifically is funded through the Nuclear Liabilities Fund, which is reported in our accounts. Earlier this year, that balance stood at £9.5 billion. Recently, we topped it up with an additional £5.07 billion.

- Q31 Sir Geoffrey Clifton-Brown:** That is topped up from taxpayers' money?

Sarah Munby: Yes. The expectation is that that will fund the cost of decommissioning. That is where the money comes from. That money was originally taxpayer money way back. At this point it is worth saying that under the Energy Act 2008 any future nuclear power stations must, before construction even begins, have full arrangements made for the costs of decommissioning over their lifetime, so we do not in any sense expect this to be a recurring challenge because it is now all built upfront.

- Q32 Sir Geoffrey Clifton-Brown:** So can we be quite clear: Hinkley Point C and any of the others coming along—Bradwell and so on—will contain that provision?

Sarah Munby: Yes.

- Q33 Sir Geoffrey Clifton-Brown:** Coming back to Mr Peattie's answer on shortening the original timescale for totally decommissioning these Magnox sites: originally it was going to be 80 years and we are now bringing it back to 40 to 45 years. That is going to have considerable resource implications for the taxpayer, isn't it?

David Peattie: We would hope that, by accelerating some of the sites—I do not think we will be able to do this for all of them—we should actually reduce some of the cost to the taxpayer. Why is that? For your average



HOUSE OF COMMONS

Magnox station, about 40% of the annual cost is keeping the place safe and secure and keeping the lights on—a regime that allows project activity to be undertaken. If we can shorten that time, we can reduce the overall cost to the taxpayer. This is still going to take many decades to do finally, but I think some of the work can be brought forward, so that maintenance cost, if you like—the cost of keeping the sites bright and warm—will be less, because the footprint should be smaller and we will have less to—

- Q34 **Chair:** Can I chip in, if I may, Sir Geoffrey? You talk about a pecking order of sites. Is the cost of keeping them safe now part of the reason why sites are higher or lower on the list? Are you taking that into account?

David Peattie: Affordability, yes, but we obviously take hazard and risk—

Chair: Safety would obviously be up there.

David Peattie: Safety and hazard reduction are first and second, then affordability. In discussion with the Department and the Treasury, we try to optimise our plans, but as I said, our new strategy is not to simply put all our sites into care and maintenance and then wait a few decades and then come back to them. We think there might be a better way for some of our sites.

- Q35 **Sir Geoffrey Clifton-Brown:** Can I just probe that? Given that answer and your previous answer about 40% of the costs being the safeguarding of the sites, it is a combination of allowing the radiation to run off over 80 years, and therefore making decommissioning cheaper, because it is not so radioactive, and paying for 80 years' worth of care and maintenance. Is that sort of calculation that you do?

David Peattie: That is exactly right. For some of our sites, some of the buildings are deteriorating faster than we thought. I mentioned Dungeness earlier, because of the marine environment. The two huge concrete buildings that we have at Trawsfynydd in Wales could also be looked at for demolition sooner than we thought. They are not among those higher hazard, higher radioactive buildings. Further optimisation is how I would characterise the replanning that we are doing.

- Q36 **Sir Geoffrey Clifton-Brown:** Nevertheless, I come back to my previous question: isn't there a resource implication in this? You will need to find money quicker than you otherwise would have needed to if you are going to do the decommissioning quicker.

David Peattie: If we were given more money to spend, I think we could find a way to do that.

Sir Geoffrey Clifton-Brown: We can always do that.

David Peattie: But within our budgeted envelope, we will make some choices to accelerate some of the sites' decommissioning and perhaps place on hold or keep to the original plan for some others. We obviously want to keep within our threshold, but to do it overall in a better way.

- Q37 **Sir Geoffrey Clifton-Brown:** The taxpayer has already spent £2.72



HOUSE OF COMMONS

billion on the first phase. You confirmed to the Committee today—I would like to just get this absolutely clear, because the Report is not saying this 100%—that all the fuel has been removed from all 10 Magnox power stations. Is that correct?

David Peattie: Correct. The UK built 26 Magnox reactors over the past 60 years, and in the last 12 months we have defueled all 26 reactors, and all that spent fuel has now been taken and safely stored at Sellafield.

Q38 **Sir Geoffrey Clifton-Brown:** Perhaps this is a slightly naive question—I do not fully understand the nuclear industry—but I would have thought that that was the most difficult and expensive bit of the operation, so why do we still have this huge estimated cost? You state a best cost of £7.5 billion, which implies that the remainder is going to cost more than taking the rods out, if you like.

David Peattie: You are absolutely right: taking the rods out is the most critical piece. It is the part that the regulator requires us to do first, quite rightly. More than 95% of the radioactivity is in the rods, so we must do that first. In itself, it is a complex operation, and Wylfa, which was the last one to be defueled, took longer than we planned. We managed to finish it off just about a year ago and move all that fuel to Sellafield.

However, that left us with the reactor cores; the turbine halls; the heat exchangers; the support buildings; the labs; the vaults that I talked about earlier, which had residue and material placed into them over decades; and the roads and infrastructure around all these sites. These are significantly complex industrial sites where, beyond the defueling, which it is absolutely right to do first, there is then a hell of a lot of other stuff to get on with.

Q39 **Sir Geoffrey Clifton-Brown:** Okay. I understand that. As the Chair has made clear, we are hoping to visit Sellafield in the relatively near future, but I have this horrible vision in my head of all these rods ending up at Sellafield and exacerbating the problem there. Is the lack of a deep storage facility a significant impairment in decommissioning these sites? What is the timetable for establishing that specifically? Maybe Ms Munby wants to come in on that.

David Peattie: If I may comment quickly first, at Sellafield we have the UK's leading storage and safe protection regime for all the spent fuel. We are continuing to reprocess material there. The Thorp reprocessing plant closed last year, and we are trying to restart the Magnox one there, so there is still some work to be done.

Beyond that we have safe stores, where we have the ability at Sellafield to protect and keep the material safe. You are absolutely right that in due course the ultimate plan would be for the highly active waste to be deposited in something called a geological disposal facility. Part of the NDA's mission is to work with communities and find the right place for that.



Q40 Sir Geoffrey Clifton-Brown: That was a smart answer, Mr Peattie. You didn't actually answer my question, which was: is it a limiting factor, not having a deep storage facility?

David Peattie: It is not a limiting factor because we could, in theory, continue to store the material at surface at Sellafield in perpetuity. Certainly, the current international scientific advice is that the best thing to do with this type of waste is to store it underground. That is what other countries are doing, and that is current Government policy. We are working through that with our sponsor Department, with the regulators and with interested communities.

Sarah Munby: The process for finding a location for the geological facility is, in a sense, the current critical path decision. Why don't we have a location right now? Because we are following a consent-based process. That, by its nature, means that we are waiting for the moment where we have a community that is giving consent. We launched a process in December 2018 in England and Northern Ireland,¹ and in January 2019 in Wales. We have one formally interested borough council. We are hopeful that that process will work.

It is worth saying that most countries around the world are following a consent-based process. Obviously, there is a point at which, if one thought it was ultimately not possible to run a consent-based process, then there are alternatives available to us, but it is our clear preference to go down that path and to give it every chance of success, as a first priority.

Q41 Sir Geoffrey Clifton-Brown: Are you able, Ms Munby, to give the Committee even a guesstimate of when you might identify a site?

Sarah Munby: I would prefer not to commit to a specific timeline. The reason I say that is that it is a matter of negotiation with specific councils. We can write to you with further details, but I am not sure that a deadline is going to help us in reaching the right outcome.

Sir Geoffrey Clifton-Brown: I appreciate that.

Q42 Chair: We have been around this block before. There was some support in west Cumbria, but it was not supported in other parts of Cumbria. I think that is a fair summary of it. The danger is that if you go on too long, you will always get somebody elected or a community saying no, having had an agreement.

¹ CORRECTION: BEIS has since informed the Committee that although the UK Government and Northern Ireland Administration consulted jointly on the process for identifying a suitable location for a GDF, it has only been taken forward in England (and Wales). There are no plans to site a GDF in Northern Ireland.



HOUSE OF COMMONS

Sarah Munby: Absolutely. With the process this time, we have learned lessons from last time and there is, speaking frankly, more support and funding available for local communities. We are hopeful that that will make a difference.

- Q43 **Chair:** So can you give us a range of time when you think you might have resolved this? I know that at Sellafield they are building other storage facilities for other nuclear waste. These are 100-year facilities. It is all more cost, isn't it?

Sarah Munby: I would prefer to come back on that in writing, if I may.

Chair: Yes, that is fine.

- Q44 **Sir Geoffrey Clifton-Brown:** Mr Peattie, can I change the subject completely? You will be aware that when we last had a hearing, our report was very critical of the skills that you had within your organisation, since when you have appointed two further senior directors. Of course, all the business about defect notices, correcting notices and everything else, as the Report mentions, presumably stems from not having the correct skills at the time of managing the CFP contract. Are you confident, now you have got the whole Magnox subsidiary within your ownership, that you have the correct skills to be able to manage this huge task going forward?

David Peattie: Thank you for the question. I have spent a lot of time on this since I joined the NDA just over three years ago. The first thing I did after settling with the previous claimants—but that was subject to our earlier discussions. The next thing I did was to bolster the executive team, so Kate Ellis joined as commercial director; I brought in a general counsel, an operations director and a risk and assurance director. In the central NDA team, where we set the strategy and do much of the oversight, we have got a much stronger executive team. We have gone further than that as well, because when we did the two-year exit arrangements with the former contractor—the subject of the Report—in parallel with that, we recruited a new executive team to run Magnox Ltd as a subsidiary of the NDA.

I am delighted that we were able to secure Gwen Parry-Jones, who is the chief executive of Magnox Ltd—the first woman to run a nuclear power station in the UK and the first woman to lead one of our big subsidiaries. Gwen, with my support and Kate's support, has also built her own executive team to lead the further work on the 12 sites. She has brought in an operations director, her own commercial director and her own legal adviser, and we have been building out in that way.

One of the features of this new model of ours is that we have really good joined-up thinking of, for instance, the legal function and the commercial function from the centre, right across all our sites. This was not possible under the other model where we really outsourced the management of the sites to the private sector, and they earned a fee by doing that. Bringing all the sites in-house breaks down those barriers and allows us to be more efficient and standardised. There is always more to do, of course. I think



HOUSE OF COMMONS

we still need some further capability in some key areas. Kate can talk about what she has done in her commercial area. In our basic project management, for instance, there is always a shortage of those skills, given the scale of infrastructure projects in the UK at the moment. I think we are doing okay, but I would like to do even more in a few key areas.

- Q45 **Sir Geoffrey Clifton-Brown:** I am going to bring Ms Ellis into this. Your final bit of that answer was exactly where I want to go next—whether we have sufficient skills in the UK. You, NDA, are fishing in one pond, EDF are fishing in another pond and a third pond is being fished in with the construction of Hinkley C, and so on and so forth. Are we bringing on sufficient skills in the UK, or is there a case that we need to really pay attention to training more people to fulfil these tasks?

David Peattie: I absolutely agree. I think we do need to pay more attention to that. We have brought in something called the nucleargraduates scheme, which has had over 200 graduates join. We have got the biggest cohort we have ever had, this year, of 40 graduates joining the scheme. They have placements around the industry. There is much more to be done in encouraging so-called STEM subject students, particularly girls, to come into our industry. Our last year's cohort had 46% women in our graduate recruitment, which is the highest we have ever had; but I couldn't agree with you more. We, as a nation, need to further develop our technical pipeline—whether that is engineering or science—so we can continue to lead the world in some of these really important areas.

- Q46 **Chair:** Can I chip in? Liz Saville Roberts is the MP for one of the sites.

David Peattie: Trawsfynydd.

Chair: You can perhaps pronounce it better than me, and you have saved my blushes with the Welsh-speaking population of the UK. She is thinking that it is likely to be the first Magnox site—perhaps you could confirm that—to get the green light for continued decommissioning; but she also believes that it is likely to be a lead and learn site for the rest of the fleet, and is hoping that engineers will go there to learn skills and go out elsewhere. Is that the case?

David Peattie: Yes.

- Q47 **Chair:** And do you have a longer-term plan about how you will keep piggybacking off each site to develop the skills that Sir Geoffrey has highlighted?

David Peattie: Yes. The heart of our revision to our strategy for the Magnox site is to lead and learn. Bradwell is the first one that has come into care and maintenance, and we can learn a lot from that. Trawsfynydd is the next one that we think we can make real progress on. It would be great if we can bring engineers—men and women—to Traws in north Wales and have them learn there. The NDA has invested in the college at Coleg Menai, for instance. We support education in all our sites as best we can. We can then take that learning and develop it. Under our new umbrella term of One NDA, where we have brought all the sites back



HOUSE OF COMMONS

under public ownership, we are now able to move people around much more easily than we could when we had siloes managed by different consortia of the private sector.

- Q48 Sir Geoffrey Clifton-Brown:** Ms Munby, given the really important nature of some of the skills that Mr Peattie has just been talking about, and very much in line with the Prime Minister's desire for there to be the best possible chance in life and learning, what more can your Department do to help with skills in some of those key areas—engineering, project management, and so on—that Mr Peattie referred to?

Sarah Munby: It is perhaps worth just highlighting the nuclear sector deal in 2018, in which the industry and Government made quite significant commitments around skills. I would agree that the importance of this is only going up, and it is critical that we continue working closely, particularly with DFE, on what this looks like in the future. For us here, supporting the actions of the NDA, in terms of the new One NDA strategy—and it is also important to emphasise and be pleased with the work that the NDA is already doing with its communities in line with its statutory obligations. The NDA is a critical player in bringing on skills in many of those locations.

It struck me—following some of your earlier questions about the potential ending of some of the sites, which, of course, will eventually come—that it is useful to see how much thought the NDA is giving to making sure that sites do not become excessively dependent on the NDA. That is, of course, the flipside of what we are discussing. I think that that is well reflected in the NDA's strategies.

- Q49 Sir Geoffrey Clifton-Brown:** It strikes me that we are building up a bank of really good knowledge on how to decommission nuclear power stations. We were at the forefront of building them in the '50s and '60s; we could now be at the forefront of learning how to decommission them, and there could be some really good exportable skills there. Is that something that your Department is looking at?

Sarah Munby: Yes, absolutely. David, it looked like you wanted to come in.

David Peattie: Yes, absolutely. As I have said, Fukushima have come to us for technical advice about dealing with their unique problems. We also have a new MOU with Ukraine around Chernobyl. Our other allies around the world who have similar challenges—the US, Canada, France—come to the UK. As you rightly said, we led the world in the development of civil nuclear, and I think we are leading the world in the decommissioning of civil nuclear.

Sir Geoffrey Clifton-Brown: That is a fantastic answer. I want to come to the real meat of this session: the future.

Chair: Before you ask about that, I want to bring in Mr Barry Gardiner to pick up on some of those points.



Q50 Barry Gardiner: Thank you, Chair. Mr Peattie, you have been extremely helpful in setting out the costs for us. The £3.8 billion of the original contract doubled to a best estimate of £7.5 billion, and the overall package for future decommissioning activity provisioned the accounts for £132 billion, £20 billion of which is for Magnox. Our function as a Committee is to look not only at the cost, but at the value. Bearing that in mind, I want to turn to the permanent secretary. When these costs are added into the calculation of the cost of electricity produced over the lifetime of each facility, can you tell us what the final revised cost of that electricity then becomes per megawatt-hour; how that final cost per megawatt-hour compares with the original retail cost; and what the anticipated percentage uplift is in each case? The public can pay either through their tax or through their bills, but essentially it is the same people who are paying.

Sarah Munby: I think I might have to reserve the right, if I may, to come back in writing on those specific numbers, but I think it is worth saying that, really, that question pertains to looking ahead. The costs, going back, we could choose to ultimately fund through different methods, but the number will not change. Looking ahead, as we think about financing new sources of energy, I referred earlier to the obligations around incorporating decommissioning costs into new nuclear. That is the critical point: you would make a decision at the start of a programme about whether to include that in the strike price, for example, or make it part of the overall financing.

It is very much on our mind for the future. For the past, if you want to see that calculation, I think we would have to go away and do the numbers for you.

Q51 Barry Gardiner: Thank you very much; that would be extremely helpful. If we are looking, as you say, to project forward in future, obviously here we have a situation, looking backwards, where we should be much clearer about what we have got and the challenge of decommissioning. In the future—I will not say that it is guesswork, but it is much more difficult to project what the decommissioning costs are going to be. If you could set out for the Committee the criteria by which you are projecting those future costs, that would be extremely helpful. Thank you.

Could I move back to the questions that my colleague Peter put earlier about management, oversight and responsibility? In section 6.34 of the interim Magnox report, on future work, Steven Holliday said that he wanted to investigate failures of management, oversight, transparency and governance by civil servants. In section 7.9, he said that he would pursue “whether the actions of individuals within the NDA...and ministers...were consistent with the standards expected of them, including relevant codes of conduct.” When will the final Magnox report be published? Has any current or past Minister been referred to the Standards Commissioner as a result?

Finally—I quote from the report—“The court found that the NDA ended up not following its own scoring rules in order to avoid disqualifying”



HOUSE OF COMMONS

Cavendish Fluor from the procurement process. That “in order to” stipulates that this was not just an error, but a manipulation—that is a word that the court used—of the contract outcome, fraudulent and illegal. Has anyone faced any charges as a result of that? When John Clarke and Stephen Henwood, the previous chief executive and chair, left the NDA and went on to bring the injunction, did they or any other of the former officers who brought the injunction receive any golden handshakes or pay-offs from it?

Sarah Munby: Perhaps I might take the easiest part of that question first: when can we expect the Magnox inquiry to be published? Imminently is the answer—very imminently. The reason for the delay is relatively straightforward: the various legal challenges that have been ongoing. We have absolutely accepted all the conclusions of the interim report. Indeed, I think the NDA in particular and also the Department have already taken a pretty significant number of actions to respond.

I think we will have to see, in the final report from the inquiry, what the conclusion is on some of the points you are making about whether any specific individual needs further action taken. To my knowledge, so far there has been no referral of any Minister, or so on, under any code. Clearly, if that is recommended in the final conclusions of the inquiry, that is something that we would do.

On the question of pay-offs and so on, the answer is, not to my knowledge—I do not know whether David would add anything—and I am very happy to formally confirm that in writing.

Barry Gardiner: Thank you very much. If you could confirm it, that would be very helpful.

Chair: Mr Peattie, is there anything you want to add?

David Peattie: Nothing to add.

Q52 **Chair:** I was just going to say that, on the timescale, as Mr Gardiner pointed out, this has now been going on for some time. The chance of anyone still in post being in post when all this is resolved is getting slimmer and slimmer, isn't it?

Sarah Munby: We would obviously have much preferred the Magnox inquiry to be published a lot sooner. I think the fact that we have seen the interim conclusions means that the most important forward-looking actions that the Department and the NDA have needed to take have been taken. On the point around backward-looking, as it were, disciplinary action, you are right: it is made weaker.

Chair: Forgive us if we are weary. We do not call for people's heads all the time, but on something this significant, as Mr Gardiner has rightly highlighted, and we touched on it a lot in our last hearing, big mistakes were made and yet nobody is ever held responsible. All failure is an orphan, I fear, repeatedly, but that is a long-standing problem for this Committee and for Government.



HOUSE OF COMMONS

Mr Gardiner, did you have any other points that you wanted to raise quickly?

Barry Gardiner: No, that that has been very helpful, and I look forward to receiving those notes from the permanent secretary.

Chair: Certainly there will be decades in which we can keep an eye on this project, if we live long enough.

- Q53 **Sir Geoffrey Clifton-Brown:** Ms Munby, given that this Committee is quite used to things being delayed so that people can avoid responsibility—we had one outstanding example of that on HS2—one does wonder why the chief executive took a judicial review to try to prevent this report from being published, but that is another story.

When specifically do you expect to publish the Holliday review? When the Secretary of State launched it—in 2018, I think—he made it fairly clear that he was expecting it to be published as soon as it was finished. He published the terms of reference and said, “The Inquiry shall set out lessons to be learned, including about appropriate structures for governance and assurance of future complex, high-risk procurements”. It is quite important that we get that report. Can you give us an estimate?

Sarah Munby: Very imminently—I would expect in a matter of weeks. I believe final drafts are in final circulation, so it is genuinely imminently.

Chair: Fantastic.

- Q54 **Sir Geoffrey Clifton-Brown:** Coupled with that, we are in the middle of the tailored review. Can you give us any information on that?

Sarah Munby: Yes. It is worth perhaps doing just one minute on the delays to the tailored review, which I take pretty seriously. The tailored review was originally meant to be timed to come after the Magnox inquiry, so that it could build on it. Because of the delays to the Magnox inquiry, the tailored review then got delayed. I think that if we had known at the time how long the Magnox inquiry would be delayed for, we wouldn’t have delayed the tailored review, if that makes sense.

The tailored review began in May this year, I think, and it is making good progress. We expect it to report by the end of the year. The only potential fly in that particular ointment is that the Cabinet Office has replaced the structure of tailored reviews and is now coming out with what the replacement for tailored reviews will look like. We are making sure that we do not delay any progress on the review, so we are currently taking it forward in the form of a departmental review, and we will then kind of nest it into whatever necessary Cabinet Office processes there are, as those are developed. It is my confident hope and expectation that we won’t allow any of that to delay publication of that review this year.

- Q55 **Sir Geoffrey Clifton-Brown:** I now want to come on to a really important bit of this inquiry, which is the future and whether your Department has sufficient governance and oversight as to what NDA is actually up to. It is even more important, now that they have got the whole thing as a subsidiary—Magnox Ltd—that you are constantly able to



HOUSE OF COMMONS

keep on top of what they are doing, so that the taxpayer is getting value for money for this huge amount of money: an enormous sum of money has been put into decommissioning these sites. Do you really feel that you have sufficient oversight and governance arrangements in place to oversee what they are doing?

Sarah Munby: I do, and if you will indulge me, I would actually like to talk that through in a little bit of depth, because I think it is really critical and important. It is worth saying that since the events of the original Magnox contract, I think the relationship between the Department and the NDA has been genuinely transformed, in terms of the level of scrutiny and partnership.

To take that piece by piece, the first part, and a really important part, of the governance and scrutiny here is, of course, the NDA's own board. Since 2017, we have a UKGI member of that board who reports to me as principal accounting officer and thereby has much more embedded oversight. It's not just seeing things later; it is part of the process as it happens.

Q56 **Sir Geoffrey Clifton-Brown:** Can I just stop you? Do you see all the minutes and appendices from every board meeting that the NDA has?

Sarah Munby: Yes.

Sir Geoffrey Clifton-Brown: You personally?

Sarah Munby: I have access to them.

Sir Geoffrey Clifton-Brown: Do you personally see them?

Sarah Munby: I don't personally read all the board minutes and appendices every time, because I have a very experienced board member from UKGI doing that on my behalf.

Q57 **Sir Geoffrey Clifton-Brown:** I get that. Does he give you a summary?

Sarah Munby: Yes.

Sir Geoffrey Clifton-Brown: Thank you. Sorry, I interrupted you.

Sarah Munby: It is exactly that: we have somebody right there who is able to see if something is happening and report back immediately to the Department, so there is no layer or extra delay. That is important.

The board has also been strengthened on its own account, so as a matter of structure there is a nuclear non-exec on that board. I know that was a matter of some discussion at previous PAC hearings with my predecessor. In addition to that, there is also the board's projects and programmes sub-committee, which scrutinises these big programmes in more detail. You have a significantly strengthened board, which I have a direct line of sight to, even if, as I say, I wait for people to help me know when to intervene or get interested.



HOUSE OF COMMONS

The second thing is our formal governance. Since 2016, we have had a dedicated team in BEIS looking at the NDA. That team has grown over the period, but perhaps more importantly the way it interacts with the NDA has been strengthened and improved. That includes splitting the quarterly meetings, which used to be an integrated set of discussions and could get diverted into policy matters, into two. We discuss strategy and policy at one and really focus on programmes and projects at the other. That makes it harder to miss some of the issues, as—speaking frankly—I think happened in Magnox.

We have also done more bespoke programme governance. Particularly in the case of the Sellafield PPP contract, which David can doubtless talk about in much more depth, we had a dedicated oversight committee chaired by the CEO of the IPA, specifically to look at that because of its importance. If something like that had existed at the time of the original Magnox contract, we would not have gone down the path that we did.

As well as the board, formal governance processes, and quarterly and monthly reviews, I see David formally every quarter and informally whenever either of us feels the need. We have also embedded—

Q58 **Sir Geoffrey Clifton-Brown:** Can I just stop you there? You see Mr Peattie formally once a quarter?

Sarah Munby: Yes, that is right.

Q59 **Sir Geoffrey Clifton-Brown:** Do you review the milestones that have been set out—for example, progress towards the list we talked about earlier and how each one of those decommissioning projects is going?

Sarah Munby: We receive a quarterly performance report—I have a copy of it, if you would like to see it—which goes into some detail across all the major group targets.

Sir Geoffrey Clifton-Brown: I think we would like to see it.

Sarah Munby: We can see what is green, what is amber and what are the challenges. It contains quite a lot of narrative and reporting about what is really happening at the NDA. It is also important to say that it is not just about some of the things we have talked about in depth in this session; it also covers topics like how the NDS is progressing against its diversity and equality strategy, for example. It is quite a comprehensive and detailed assessment of what is happening. It gives us a good chance of being able to pick up what is going awry and where we need to do more, as opposed to trying to go into everything at the same level of detail.

Q60 **Sir Geoffrey Clifton-Brown:** I am not saying it necessarily should be, but is it a published document or is it not, for commercial reasons?

Sarah Munby: It is an internal NDA document.

David Peattie: It is internal, yes.



HOUSE OF COMMONS

Sir Geoffrey Clifton-Brown: If we could see the last one, that would be really helpful, if possible. You say that you have one.

- Q61 **Chair:** Certainly, this Committee has seen papers before that are not in the public domain. We have never leaked a document, but we reserve the right to talk about them.

David Peattie: Very happy to provide that.

- Q62 **Sir Geoffrey Clifton-Brown:** Thank you very much. In common with setting a timescale against objectives, there is also the money. Your Department presumably gets a bill from Mr Peattie, Ms Ellis or somebody from the NDA. When you get that bill, how do you certify that they have actually done the work that they say they have done and are billing you for?

Sarah Munby: One element of that general reporting is financial reporting. However, the NDA ultimately has its own spend envelope set as part of the spending review. We do not hand out, pound by pound, to the NDA. We focus our scrutiny on the major business cases. For example, when the decision was made to terminate the Magnox contract, we looked in depth at that decision, rather than kind of funding a monthly budget, as it were.

- Q63 **Sir Geoffrey Clifton-Brown:** Okay, I get that. When is that financial structure set in each year, and for how long? Is it set on a year-by-year basis, over three years—how is it set?

Sarah Munby: David, do you want to come in there?

Chair: While you are at it, perhaps you can tell us whether you have any news on the spending review.

David Peattie: As an arm's length body, we publish our annual accounts. They are audited by our colleagues from the National Audit Office—the audit team, as opposed to the investigations team. We produce monthly accounts. They are shared with the control team in BEIS and the Treasury. We manage our accounts very much like a private sector company, with monthly accounts, a very tight control system and an annually audited set of accounts. I hope that helps.

- Q64 **Sir Geoffrey Clifton-Brown:** That does help. It seems to me that the thing most likely to go wrong, Ms Munby—I am not necessarily ascribing this to Mr Peattie, but this could go wrong—is that you are not told about problems looming in one of those power stations. What is the open and transparent reporting mechanism to make sure that you are told about everything?

Sarah Munby: That was actually the third element that I was going to discuss of that three-part model, where we have the board and we have formal governance. The other important difference from how things were is that we are much more embedded in the NDA's own internal processes. For example, for the quarterly performance reviews that the NDA carries out with all its site licence companies, we now have BEIS and UKGI



HOUSE OF COMMONS

officials in the room as that is happening, so that we see that exchange of views from both sides and understand what is happening on the ground.

- Q65 **Chair:** How fast are officials at that level turning over? That has been another challenge, especially in nuclear, where there are such long timescales.

Sarah Munby: We work very hard to try to minimise turnover of officials, and we have some wonderful and long-standing colleagues in that team. Clearly, ultimately, they can leave, and we would—

- Q66 **Chair:** This is one of our bugbears on this Committee. Do they get rewarded for that long service, because that longevity and understanding is particularly critical in this area? It gives Mr Peattie a run for his money—well, hopefully a bit—in that the danger is that the expertise will always be in the NDA and not so much in the Department.

Sarah Munby: You will know, probably as well as or better than me, that we face some constraints and challenges in rewarding and retaining that long service. In this particular case, to date we have, touch wood, been quite successful. It is also now a reasonably substantial number of people, so we are not dependent on any one individual if we do face turnover.

- Q67 **Chair:** I will just press this for a moment, and then I will go back to Sir Geoffrey. Presumably those staff are paid considerably less than NDA executives because of the nature of the public sector pay.

Sarah Munby: Yes, that is of course true.

- Q68 **Chair:** But so far that has not led to their leaving in large numbers. You have managed to retain people with experience.

Sarah Munby: Yes.

- Q69 **Chair:** What is the secret? Is it because they are passionate about the subject? This is a big problem across Whitehall, which is partly why I am asking.

Sarah Munby: Perhaps because this is such a critical mission for the country. I think the team that we have working on this deeply believe in the work that they are doing. I think that is the same driver that keeps many of us in post and focused on what we do.

Chair: Thank you. Sir Geoffrey?

Sarah Munby: Sir Geoffrey, may I just add one more point to the answer I was giving? I think it is relevant. I talked about the QPRs, but there is also something that Kate runs called the enhanced commercial assurance process—I think I've got the name right—which looks, at an early stage, at commercial decisions that are coming down the track, so to speak. BEIS is also embedded directly into that process. Again, that goes to whether we are hearing about things at a stage where we can still escalate, get involved and influence, rather than being purely a kind of approval gate at the end, which is important but not enough, to try to avoid some of the risks we have had in the past.



HOUSE OF COMMONS

- Q70 Sir Geoffrey Clifton-Brown:** Given that there still seems to be considerable uncertainty about the total cost of decommissioning these sites, what is the process for your agreeing with Mr Peattie's organisation, the NDA, what his budget should be in the next expenditure round for his organisation? How does that process work?

Sarah Munby: In an SR—spending review—format, much like what we would do with any other part of Government. David is at the sharp end of this, so it might be better to talk about how it works in practice.

- Q71 Chair:** What discussions are you having with the Treasury right now?

David Peattie: As you rightly say, Chair, they are live discussions. We have worked very closely with our sponsor Department, with Treasury officials, who also know the NDA well, and with the regulator of course. The ONR and the Environment Agency are very closely bound into the working group that goes through the hierarchy of issues that we have to deal with and then makes a value judgment site by site, and then a top-down view is taken of what a plausible number is.

We have not touched on this, but as well as the expenditure of taxpayers' money, we do earn £800 million a year for the taxpayer, largely in export revenues, because of the skills and experience we have. And I think that in the future there is potential for us to do even more of that, not least internationally. But we are working through, as other Departments do—we put in our spending bid, if you like. We work with our Department, who then fold that into their numbers. And then we discuss and debate it with Treasury officials. We are now waiting for the outcome of those discussions, and I hope that in a few weeks' time we will know what our funding is. It tends to be set annually, but with a two or three-year outlook.

- Q72 Sir Geoffrey Clifton-Brown:** Will this come, as the Chair says, within the comprehensive spending review? Presumably it will.

David Peattie: Yes.

- Q73 Chair:** It is critical. We have been pushing other Departments on this, but what will be the impact if the spending review does not happen and is delayed any further—for you, in particular, Mr Peattie, for the NDA?

David Peattie: There would have to be some interim funding provided, just given the critical nature of the work that we do, because we would be in breach of the law, particularly on the high-hazard work that we have to do; we would obviously be prosecuted for not getting on with it.

- Q74 Sir Geoffrey Clifton-Brown:** You are doing a consultation on the length of time that it takes to decommission these sites. When do you expect to conclude that? That will have an implication for expenditure, so presumably the two are linked.

David Peattie: That is an excellent question indeed. The consultation that we are out in public with ends in mid-November, and when we have got that back, we will be, as we are in parallel, looking at the impact on the



HOUSE OF COMMONS

spend profile. Interestingly, in the years of the current spending review that we are looking at, the actual impact in those years is not that great, because the work that we will be doing in the early years is largely the same. There is a shift from some sites where we will do a little bit less to some where we may do a little bit more; Trawsfynydd is the one that we have highlighted. The changes, I think, come in the out years, beyond the current spending review, when there may be bigger moves. At that point, we would either have to ask Government for more money or cut our cloth elsewhere and rephase different expenditures.

- Q75 Sir Geoffrey Clifton-Brown:** Mixed in with all that is the question of the future use of these sites, and I suppose that depends on how much you are able to decommission.

David Peattie: Indeed. Some of the sites will continue and will need to be fenced off for quite some time, but others—

- Q76 Chair:** You say, “quite some time”. Can you just give us a timescale?

David Peattie: Centuries.

Chair: That is why I wanted to get it on the record!

David Peattie: Yes, just to be clear. With others, however, we can start to release land. I mentioned earlier Harwell—50 acres now. It is great that the vaccine centre is being built there. Chapelcross in Scotland is a very extensive site. We are in discussion with the local community there about use of our land for a solar farm, for instance, and there are other sites in local communities. At Berkeley in Gloucestershire, for instance, we have built a technology centre on our site, which is great; we are training technicians and engineers for the future. So it is a variety of potential future uses.

- Q77 Chair:** Do you, Ms Munby, consider the use of these sites, where there are lots of job losses—there are opportunities where they have been the hub of an energy supply and have lots of logistical support around them. What is the Department’s strategy for making sure that these sites, where possible, can be reused or elements of them can be reused before the century’s decontamination period is up? Have you got a plan in the Department?

Sarah Munby: Each of those sites is part of an area. You need to look at the local industrial strategy—I use that with a small “l”, a small “i” and a small “s”, but also with a capital. You need to look at the strategy for the area—what is best put in that? As part of the work that we do with all parts of the country in thinking about local industrial strategies, absolutely this is one of the critical things that we would look at, but we would not seek to look at it completely in isolation from the broader plans developed, particularly by the local community.

- Q78 Chair:** For example, if a local MP or a local councillor came to see you and said, “What’s happening?”, there would be some sort of idea in BEIS about what plans—



HOUSE OF COMMONS

Sarah Munby: Absolutely, so our cities and local growth unit, which has teams based around the UK working on exactly these issues—what are the high-potential sites?

Chair: So it is the cities and local growth unit. That is quite important to know. Thank you.

- Q79 **Sir Geoffrey Clifton-Brown:** Mr Peattie, I have had this wonderful vision of the NDA shifting from nuclear power generation to green power generation of solar panels and windmills. Is this a pipe dream, or is it a reality?

David Peattie: On that specific example I gave, it is a real option that we are discussing with the local community in Dumfries, but there are other opportunities too. In and around Sellafield, for instance, you will know of consortia that would like to build hydrogen plants—making hydrogen from electrolysis. We still have vast tracts of land around the UK that have been or currently are nuclear licence sites, so they are potentially available for future nuclear activity—large reactors and smaller ones—in line with current Government policy. Our job is about clean-up, obviously, but we will support the Government where needed. Then there can be other uses as well for our sites.

- Q80 **Sir Geoffrey Clifton-Brown:** Often, the solar generation windmills have a problem with grid connection. Presumably because of your previous infrastructure, we would not have that problem.

David Peattie: We would not have that problem, indeed. Most of our sites are very close to—

- Q81 **Sir Geoffrey Clifton-Brown:** Can I ask you something? My colleague, who is the Member of Parliament for Bridgwater and West Somerset, has asked me to ask you a few specific questions about Hinkley A. He says: "What is the new MO for NDA?" What is the answer to that question? Is there a new memorandum of understanding between yourselves to decommission Hinkley A?

Chair: It has been a bit rocky, hasn't it? The relationships locally have not always gone as smoothly as we would have liked.

David Peattie: There are three reactor sites at Hinkley. There's Hinkley A, which is ours and is now well on the way to being demolished; Hinkley B, which is a live nuclear station; and obviously Hinkley C, the biggest construction site in Europe. But I am not aware of any specific—

- Q82 **Chair:** Would you undertake to meet Mr Liddell-Grainger?

David Peattie: Of course.

- Q83 **Sir Geoffrey Clifton-Brown:** He is saying that he is not sure whether they have the right team in place and even a new team. There is too much unknown and uncertainty at the moment, and it seems to me that that sort of meeting would clear up a lot of that uncertainty. That would be helpful.



HOUSE OF COMMONS

David Peattie: I have met Mr Liddell-Grainger. I am very happy to meet him again, listen to his concerns and deal with them.

Chair: That is very helpful. Thank you.

- Q84 **Sir Geoffrey Clifton-Brown:** Given what has gone on in the past, how are you seeking to improve your public image? At the moment, the public are pretty uncertain about nuclear power, particularly given the decommissioning aspect of it and the difficulties of decommissioning. How are you seeking to overcome this problem?

David Peattie: If you will indulge me, I will answer this in two parts. The most important thing we have to do is to do our job well—to keep our staff safe, to manage the natural environment, to look after our local communities and, frankly, to do what we say we are going to do and do it for the best possible value. Within that, there are some great examples of work that we have done. We touched on a couple of them earlier. If I may, I would like to highlight another one.

We shipped some highly enriched uranium—700 kg—from Dounreay in Scotland to the United States of America under a protocol agreed by our Prime Minister and the then President over the last five years. This was an extraordinary achievement. Under international treaties we are required to bring back an equivalent amount of radioactive material, so we brought back radioisotopes that are used for cancer diagnosis and treatment. With one project we helped to keep the world a safer place and we saved lives. It is examples like that that we can be very proud of what we are doing. I think we could do a better job of publicising them.

Often we cannot talk about some of the work that we do because of national security concerns. Perhaps I can write to you privately, but the work that we have been doing has been incredibly helpful in other areas. Making a bit more of this publicly will help boost our reputation. The most important thing is not messing up, but doing a good job, and secondly, perhaps telling our story a little better.

I personally spend a lot of time with our stakeholders: trade union colleagues, local stakeholder groups, Members of Parliament, our board, and the general public where necessary. We have a lot more work to do on that. It is something I enjoy doing, it is part of my job, and it is all part of building the reputation back after the last three years, which I absolutely understand was not in a good place before I took over.

- Q85 **Sir Geoffrey Clifton-Brown:** I have a final question to all three of you. If we have a similar inquiry in two years' time, what are the milestones that we can hold you to account for—specifically, in detail—to see whether you have actually lived up to what you have been saying you are doing today?

Sarah Munby: I will go for two very straightforward near-term and important ones first. We need to get the Holliday inquiry and the tailored review published. There is clearly a lot more to do, but those are very concrete, and I would absolutely expect to be held to them.



HOUSE OF COMMONS

- Q86 **Sir Geoffrey Clifton-Brown:** Can I follow up on that question, Ms Munby? They are very important reports, as you say. What process will you, the Department and the NDA go through to try and make sure you maximise the lessons learnt from those two reports?

Sarah Munby: Good question. Clearly, the publication is merely the first step. We have an outstanding action from this Committee to write within six months of the inquiry being published on exactly how we are doing on implementing all of the recommendations of the inquiry, so I hope you will hold us to account in that way. As with any of these things, after we receive both of those documents, we will need to put together the plan and work through it systematically, and your scrutiny will be an important part of making sure we do that.

- Q87 **Sir Geoffrey Clifton-Brown:** But, Mr Peattie, in relation to the actual decommissioning process of these 10 sites: in two years' time, what will we hold you specifically responsible for? What do you expect to have achieved in two years' time?

David Peattie: It is a great question. If I may broaden it—

- Q88 **Sir Geoffrey Clifton-Brown:** Actually, let's say two, five and 10 until the end of the programme. What are the milestones of dealing with this job of decommissioning?

Chair: Start with two.

David Peattie: The two I would choose right now are incredibly important to me personally. No. 1, bring all the major sites in-house and move away from—

- Q89 **Sir Geoffrey Clifton-Brown:** I thought you had done that.

David Peattie: We have announced it; we have not yet completed it. There is roughly a 12-month run-off period, much like we do with Magnox for Dounreay in Scotland and the Low Level Waste Repository in west Cumbria, near where I live. We must complete that and have a successful run-off. We will be learning very much from the experience of the Magnox run-off period, and there is lots of good in there that we can learn from. There are things we can do better, obviously.

The first thing is to close out all of those contracts, get everything back in-house, and have the whole team, the One NDA team, working in the interests of the taxpayer, together, as a collective. That is a big step forward so that we are not running the sites through a private sector consortium, where they maybe have different economic incentives to do things slightly differently. Reinforcing the need for transparency and openness, and operating the whole estate as a group of businesses, a family of businesses if you like, or a federation of businesses, will make a huge difference to how the sites go forward in the future.

The second one I would pick: just within two years, the end of reprocessing at Sellafield. We have already ended it at Thorp, but in the next two years, we will end the Magnox reprocessing. At that point—I



HOUSE OF COMMONS

hope you will be able to see this when you visit—the nature of the Sellafield site itself will shift, for the first time in its history, from one that does a lot of chemical and physical reprocessing, with live plant doing stuff 24/7, to one that is much more focused on the safe storage of special nuclear materials, and then the broad-front decommissioning. You should be able to hold me to both of those—

Chair: That is two years.

David Peattie: Within two years.

Q90 **Sir Geoffrey Clifton-Brown:** And in five years.

David Peattie: In five years, you should be able to hold us to account on exploring in some detail the continuous decommissioning of the Magnox suite, so you should at least be able to say, “Well, how did it go? Were you able to proceed at Trawsfynydd? Did it work and did you learn the lessons?” I hope that we would have some demonstrative lessons where we can say, “Look, we tried it and it didn’t work, so we went back to the old plan,” or, “We tried it and we can say, ‘This is great and we will do more of it.’” That is something for within the next five years.

Also within five years, we will have taken our One NDA approach even further. We will have simplified our organisation into smaller, bigger chunks where we can really show the value add of managing these sites as a collective.

Q91 **Sir Geoffrey Clifton-Brown:** Are you on track to meet your target date for completing this task?

David Peattie: Yes, we are. The first thing I touched on was the timing of the last two sites to come in house. They are set for April next year for Dounreay, and July for the Low Level Waste Repository. At that point, we will be able to streamline the executive team. I intend to have the executives from all the sites around the top table in the NDA so that there is greater cohesion, more peer review, greater challenge of the plans, and a greater sense that we are all in this together as we move forward.

Q92 **Sir Geoffrey Clifton-Brown:** So finally, for the record, when are we going to complete this task?

David Peattie: Well, it depends what you mean by “this task”.

Sir Geoffrey Clifton-Brown: The full decommissioning of all the Magnox sites.

David Peattie: The full decommissioning of all the Magnox sites: 2105—85 years from now—is our current view.

Q93 **Sir Geoffrey Clifton-Brown:** No, I understand that; I meant to get to care and maintenance so that they are safe and, as it were, put to bed for the time being.

David Peattie: Bradwell in Essex is the only one that is currently at that status. The current plan for the next 12 to 15 years—by the mid-2030s—is



HOUSE OF COMMONS

that we can have the other nine sites, plus the two research sites, in a similar state. Of course, that is with the caveat that if we can go a bit quicker on some, we will, potentially avoiding the need to go into care and maintenance—in other words, missing out that step and just going straight to a complete decommissioning.

Sir Geoffrey Clifton-Brown: Thank you—although it is not my job to thank you—as that is all the questions I have.

- Q94 **Chair:** Thank you, Sir Geoffrey. The 85 years is a sobering number because there is not a single person in this room, virtually or physically, who will be around at that time. That underlines why we all need to be very firm about keeping an eye on things.

Just a couple of final quick questions from me. One to you, Ms Munby—Mr Peattie might want to come in on this—about the skills base. We have talked quite a bit about this. When we talk to your colleagues in defence nuclear, there is equally an issue of skills there. As Sir Geoffrey hinted at, there are lots of places where these skills are needed. Are you working with your colleagues in Whitehall to see if there is any cross-fertilisation so that when nuclear engineers are trained, they can cross from one sector to another?

Sarah Munby: We work regularly with the MoD. We meet formally, quarterly, on exactly this topic of how we work better together. I would have to come back to you in writing on the specific question of the discussions we have had about skills in that context.

- Q95 **Chair:** Please do, because it is something that we are concerned about, because obviously without skills, Mr Peattie and co cannot do their job, and it is down to them partly, but not just them.

Finally, you mentioned the final Magnox inquiry and the fact that it will be published shortly. Could we request a copy of that under embargo before publication so that we can include it, if necessary, in our Report?

Sarah Munby: Yes.

Chair: Thank you very much.

Thank you for your time and your candour. Ms Munby, we will welcome that candour in the future, and I hope your colleagues are as positive about it as we are—sorry; that is an in joke for the Public Accounts Committee.

Thank you, Mr Peattie and Ms Ellis. We look forward to seeing you in the next few weeks, we hope, at Sellafield and, hopefully, to visiting some of the other sites as well. Thank you very much indeed for your time.