Public Accounts Committee

Oral evidence: Sellafield recall, HC 1096

Wednesday 11 March 2015

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Members present: Margaret Hodge (Chair); Mr Richard Bacon, Guto Bebb, Mr David Burrowes, Stephen Hammond, Chris Heaton-Harris, Meg Hillier, Mr Stewart Jackson, Andrea Leadsom, Dame Anne McGuire, Austin Mitchell, Stephen Phillips, and Nick Smith.

Sir Amyas Morse, Comptroller and Auditor General, National Audit Office, Gabrielle Cohen, Assistant Auditor General, National Audit Office, Jill Goldsmith, Director, National Audit Office, and Richard Brown, Treasury Officer of Accounts, were in attendance.

Witnesses: Stephen Lovegrove, Permanent Secretary, Department of Energy and Climate Change, John Clarke, Chief Executive Officer, Nuclear Decommissioning Authority, Tom Bishop, former Chairman, Nuclear Management Partners, Tony Price, Chair of the Sellafield Board, and Paul Foster, Managing Director, Sellafield Ltd, gave evidence.

Q1 Chair: Sincere apologies for keeping you waiting. It's very rude. All I can say is that it is end of term.

Can I start with you, Mr Lovegrove, because you will remember? I cannot remember when the last session was. Was it 18 months or two years ago?

Stephen Lovegrove: It was at the beginning of 2014, I think.

Q2 Chair: So it was a year ago. At that time, we were quite critical of the decision to extend the contract with NMP. We could not see the point of it and why there was no alternative. We are delighted that you have come round to our view, and we welcome that. From the investigations that we have done, we think it is a good thing. What triggered the change of heart?

Stephen Lovegrove: In late 2013, the board of the NDA made the decision to extend into the second five-year period. At that time, on the basis of the information that the board had in front of them at the time, we believed and endorsed in the Department the decision to extend into the second five-year period. The view then was that the contract was not performing as well as everybody wanted, and the KPMG report made that very clear. That came out clearly in the hearing, but, at the time, there was no confidence that an alternative model had been sufficiently identified, articulated and assessed, which would have led us to definitely better outcomes. The board took the view that announcing a halt to the contract at that point, without having a better alternative, risked disruption to the commercial arrangements and, more importantly, the integrity of the site.

I think your report came out in February and our Treasury response came out in March. We said that we would be looking at viable alternatives to the existing model, so that is absolutely what happened during 2014. We, or rather the NDA, kicked off the process of looking at what the alternatives might be in April—no, March 2014. The first four months of that were taken up with field work and establishing the scope of the study. There were a lot of experts consulted. We went to the ONR. We also set up a slightly elaborate governance process to make sure that the decision was taken in good time. In the next two months, we shortlisted options and subjected those to scrutiny. In the next two months, we got through the Treasury and departmental approvals.

It was only at the end of 2014 that the NDA board recommended to the Secretary of State that there was a viable alternative that everybody had confidence was going to provide a better outcome, and on 13 January 2015 the Secretary of State approved that decision. It was really all about working up what we were going to, as opposed to the deficiencies of what we had at the time and the deficiencies of the model at the time. I have to say, the hearing we had at the beginning of 2014 was an important point in helping us to focus those inquiries.

Q3 Chair: We are pleased. It was just slightly, at the time, that I got the impression from you, John Clarke, that you were not happy with the decision and that it was somehow forced on you by DECC and our friends in the Treasury.

John Clarke: No, that was not the case.

Q4 Chair: We then get Ed Davey telling the House on 13 January, when he announced the change of heart, that "we had to endorse that recommendation. It was not a question of approving it; we endorsed it."

Stephen Lovegrove: That's right. The Secretary of State has no formal approval rights, apart from at the beginning of the contract and at the very end of the contract.

Q5 Chair: I see. So informally, you can natter about it?

Stephen Lovegrove: No. We obviously had discussions; there is no question about that. This was a very big discussion, but the decision to extend into the second five years and not for the second five years—that is an important distinction—is one for the NDA board. They recommended that we extend into another five years, but to look at alternatives, which we were happy to do.

Q6 Chair: So what made you change your mind, Mr Clarke?

John Clarke: It was not a case of changing my mind. When I was last in front of you, I was of the opinion that the arrangements we had were not delivering the performance on the site that we wanted or laying the appropriate groundwork to make the improvements of performance that we need. What I did not have at that time was a proper set of analysis and evidence to say what was not working, what was working and precisely what we would do in order to get a better outcome. We have done that through, as Mr Lovegrove says, detailed analysis in this last calendar year.

Q7 Chair: I hear that. It will be a general point coming out of today's hearing, but clearly that work ought to have been done before you extended. It is a bit crazy to extend—hopefully, it will be a sort of easy exit, with other people sitting next to you.

John Clarke: Could I respond to that?

Q8 Chair: But you should have done it before. We are amateurs in this, but when we came to look at it, it looked so obvious that this contract was not delivering. If you had had, as you said, the KPMG report, which was so damning of every aspect of the contract—it just seems odd. I think you should have done it before. I think you should never have got into extending it.

John Clarke: If I could just respond to that, NMP arrived at the very end of 2009. This is a large, complex site where the prime focus is to maintain safety and security and try to drive improved performance. We spent the first two years—NMP and Sellafield spent the first two years—putting in place a plan against which performance could properly be judged. That was not in place until 2011. So we have really only had from 2011 onwards to judge performance.

What we have done in the period through 2013—I did have concerns when we were last in front of you—and particularly through 2014, since we last met, is carry out a detailed analysis of what works and why, and how Sellafield compares with the rest of our estate. We have operated different parts of our estate under different models over the last 10 years, and we can now see where we get better success and where we get poorer performance. We have also done the analysis involving other sectors, both public and private, so it is a very extensive piece of work, and I genuinely do not think we could have done it—with fairness to giving Sellafield and NMP a chance under these contractual arrangements—any earlier.

Q9 Chair: Okay, I hear that. We will have to agree to disagree on that one. Three companies are in NMP: AMEC, AREVA, and this new company, AECOM. Is that right?

Tom Bishop: Correct.

Q10 Chair: How many of the contracts on the site—we will come back to running the site contract that is going to be renegotiated—are being run by those three companies or where you are a partner, both in terms of quantum and then in terms of percentage of currently let contracts?

Tom Bishop: First of all, Madam Chair, it is a pleasure to be here on behalf of NMP to share our improved performance over the last year. As for your question, the three companies are engaged in various roles at tier 3. I believe two of them are partners in tier 2 activities. I know of only two specific contracts—well, three—that these companies are engaged with. Perhaps Mr Price may have more detail.

Tony Price: I am the chairman of Sellafield Ltd. It differs between the three companies within the consortium. Of AMEC, AECOM and AREVA, AECOM and AMEC are both involved in the Design Services Alliance, and AREVA and AMEC are also engaged in two larger major projects at the site.

Q11 Chair: Quantum and percentage? Can you do that for me?

Tony Price: It is about 5% of the overall cost of the running of the site that they are involved in right now.

Q12 Chair: 5% of projects?

Tony Price: They are, yes.

Q13 Chair: And quantum? Money?

Tony Price: It differs, really. These projects are running right now, so, to forecast to the end of the year, for one consortium that the companies are involved in, I do not know the share that they will actually get out of that, but we are talking in the region of about £70 million.

Q14 Chair: So it is not a huge sum?

Tony Price: It is not a huge amount, no.

Q15 Chair: The reason I am asking these questions is that, as we get to the new arrangement, this feels like a revolving-door world. The people in these three companies will pop up in new companies. You all go round and round the circle. As we get to the new arrangement—figure 11 in the Report—and you suddenly have these new people called strategic partners and programme partners, it is quite possible that, although Mr Bishop says the performance has improved, the companies that have failed, and so you are terminating the contract, will pop up again as strategic partners and programme partners.

Tony Price: Could I clarify something there, just so we are absolutely clear here? As Sellafield Ltd employees—I am the chairman of Sellafield Ltd, and Mr Foster is now the managing director. I have been the managing director over the past two years, and the chairman—we are very clear that we are the custodians of taxpayers' money here and we represent Sellafield Ltd, so it is Sellafield Ltd that actually awards the contracts to the supply chain. It is not Nuclear Management Partners that make those awards. To be awarded a contract, these companies have to go through the same rigid sanctioning process, and that needs to be agreed with the NDA. There are no favours at all.

Q16 Chair: I am not suggesting favours. I am sorry to say this, Mr Bishop, but you are getting out because it is a failed contract. It was failing to deliver, so you are looking at new arrangements to try to get better governance and better control of the site. That is why you are getting out. You have told us that only 5% of the current work is being done by these three people, or they are involved in consortia. Going forward, if you look at who could become strategic partners, they could come back in those roles. It would be after a fair and open competition, but there are not a lot of players in the field.

John Clarke: Perhaps I can comment on the reason for the change. The reason is not because NMP failed to deliver, but because the model within which NMP is operating is not the optimum model going forward, and is not going to deliver the basis upon which the improvements can be made. It is the case that we have some concerns.

Q17 Chair: What do you mean that the model has failed?

John Clarke: The model of having a parent body organisation where the prime interface between the public and private sector is immediately below the NDA. What we are doing in the new model is moving that public-private interface to one level down, below Sellafield Ltd as the licensed company. That will give greater alignment between the NDA and—

Chair: What's the great difference then?

Q18 Mr Bacon: Could you just finish your sentence? Greater alignment?

John Clarke: Alignment between the NDA and Sellafield Ltd; not operating through a public-private sector commercial barrier, if you like. What we found is that we are not able to transfer any risk to the private sector at an enterprise level. We had this discussion at the previous meeting. That has been absolutely confirmed and we have seen similar examples, DE&S for example, where we looked to do something that wasn't going to work and changed to do something rather different. We have seen different examples in the public and private sector.

We have concluded that you can't pass risk at an enterprise level with a degree of uncertainty and volatility of performance. Therefore, it is difficult to construct a sensible and value-adding contract at that enterprise level. Our view is that we should move that down a level, change the dynamic and for Sellafield Ltd to contract with the private sector in a more bespoke and targeted way.

It is perfectly plausible; in fact, it is absolutely certain, at least in the short term. AECOM, AMEC and AREVA will continue to operate at tiers 2,3,4, as they currently are for Sellafield. It may or may not be the case that they are able to operate in the future. The point is that we are not making the change because they have failed. We are making the change because the model is not the right one going forward.

Stephen Lovegrove: If I may build on that slightly. You asked what additional work we did in 2014. Really the work was as much as anything else to try to drill down on to that very question. Was it a question of the NMP consortium failing within a contract that should have worked, or was it that the contract model was the wrong one? That was what we spent most of the time talking about. You made the point at the previous hearing that Sellafield has not been able to transfer enough risk into the private sector. That is exactly the nexus and nest of problems that we are trying to deal with. In this, we spoke to the chairs of the ODA and of Crossrail and talked to them about how they do it. They have both done it in this kind of way.

Q19 Chair: So you cut up the contract smaller. Is that not in effect what you are doing? That gives you better control.

Stephen Lovegrove: There is certainly a degree of increased disaggregation in the various contracts that can then be let at a lower level.

Q20 Mr Bacon: You used the phrase very specifically and carefully. You are saying that you can’t transfer risk at the enterprise level. You are clear about that.

Stephen Lovegrove: Absolutely.

Q21 Mr Bacon: My first thought was, if that is the case, why not do the whole thing on the books as a public sector entity? You know there is work for decades to come. Hire in the right people and pay them on the books for decades to come, as civil servants or whatever you want to call them, and forget all this. Is your answer to that that you can transfer risk at a much lower level in a way that is still worth doing?

Stephen Lovegrove: Yes, that is right. It is absolutely the case that we believe that the private sector and a range of private sector players have an enormously important part to play in remediating this very difficult site.

Q22 Mr Bacon: It is one thing to say that they have got skills that you can use, but you could just hire those skills. I am interested in what other risks you believe you can transfer at a lower, more granular level, that are still worth transferring.

Stephen Lovegrove: I will hand over to John, as he is the expert on this.

John Clarke: It is identifying those areas of scope, where there is sufficient certainty to allow the private sector to bid, schedule and cost against clearly defined scope. If I compare and contrast the situation at Sellafield with Dounreay in the north of Scotland, for example, three years ago we let a target cost contract at enterprise level there. Because we were able to define the scope with a much greater degree of certainty, the private sector is able to think, "How do we bring in innovative approaches that allow us to deliver that scope on a shorter time scale and/or a lower cost?" That is delivering real value at Dounreay.

We expect to see the same at Magnox. We are in the very early stages of that but we expect, having let the contract last year, to see the same. As you break the scope down at Sellafield, experience has already shown and is operating now, you can get target costs—and in some instances fixed costs—contracts. One of the 14 projects looked at previously was a fixed price contract where the supply chain took the full risk on delivery. That is a project where it was delivered to cost. How much money the contractor made out of it is a separate point. In terms of Sellafield Ltd and ultimately the taxpayer, they paid exactly what the fixed price was.

Q23 Mr Bacon: Is the argument that, if you had gone for an all-singing, all-dancing public sector entity that did everything, paid everything and hired everything, there would inevitably be—eventually, but perhaps not immediately—some kind of slippage of the kind that used to be the familiar criticism of the nationalised industries in the 1970s, and that perhaps keeping, as it were, suppliers there, slightly on edge and knowing that at some point in the future they might not be doing the work and having the revenue, helps?

John Clarke: Absolutely. The real issue is that we want Sellafield Ltd to be really good at the things that Sellafield Ltd has to do. There is no reason for Sellafield Ltd to be really good at building new construction projects. There are people whose core business is building new construction projects, and you would expect Sellafield Ltd to contract with people like that to use the expertise that they honed building things all around the world.

Sellafield Ltd's expertise is in managing, running, controlling and looking after safety and security on very high-hazard facilities. Excellence in nuclear operations is Sellafield Ltd's core business. We have all benefited from the 11,000 professional staff who work diligently to ensure that that is the case.

Q24 Dame Anne McGuire: I am glad you mentioned Dounreay. I am going to quote from the *John O'Groat Journal*, which is not often quoted in this Committee, or in most areas of the House of Commons. The headline says, "Dounreay bosses stay silent over turmoil claims". I will read an extract: It seems that nothing really changes. Things go in cycles, then get sorted, then dip again. The truth is that the NDA model is not working. The partnership do not sing from the same hymn sheet. The NDA is running scared and has bitten off more than it can chew in Sellafield, which is detrimental to all other site licensed companies. The site is in turmoil and morale is currently at a low ebb.

How does that chime with what you have just told us about what is happening in Dounreay? You were very positive about it. I will be interested to hear your comments.

John Clarke: First, I do not believe everything I read in the press.

Q25 Dame Anne McGuire: No, neither do I.

John Clarke: Whoever wrote it is of course entitled to their opinion. Our experience at Dounreay is that the new contractor has brought in a very aggressive programme of work that is scheduled to deliver significant savings to the UK taxpayer. Of course there are challenges there. There always are. These are difficult and challenging sites. In making changes, there is no doubt that there have been some feathers ruffled in the Caithness region.

Q26 Dame Anne McGuire: What kind of feathers are being ruffled in the Caithness region?

John Clarke: As you are making changes, you are accelerating plans to close the site. That obviously has implications for the region. I think they are trying to handle it as best they can.

Q27 Dame Anne McGuire: But it is a long-term plan. It is not as though it is going to shut down tomorrow. Feathers do not need to get ruffled too early.

John Clarke: It is another decade, but there is no doubt that they are on the gradual path of running down. I would not wish to sit here and say that everything in Dounreay is perfect, but I think that that paints a particularly gloomy picture.

Q28 Dame Anne McGuire: Had you seen this before I mentioned it?

John Clarke: I have seen it. Yes, absolutely.

Q29 Dame Anne McGuire: So do you think that the story is based on a false premise?

John Clarke: I do not agree with the position that is taken in that story.

Q30 Dame Anne McGuire: Is that slightly different from answering, “Do you think that the story is based on a false premise”? Not agreeing and saying that it is a false premise are two slightly different things, although I am not a lawyer.

John Clarke: I need to be careful because I got into trouble with a lawywer at the last of these meetings. What I am saying is that I disagree with some of the statements made about the fact that this is in disarray and that we have bitten off more than we can chew. I fundamentally disagree with those. I respect the fact that people are entitled to have their opinion, and I certainly accept that there are people at Dounreay who do not share the views that we have about how things are going. I repeat what I said earlier: it is not that everything is perfect in Dounreay, but I absolutely do not recognise and do not agree with the overall sentiment of that story.

Q31 Nick Smith: You said that the changes being made there were aggressive. What did you mean by that?

John Clarke: Aggressive in terms of bringing forward time scales by a considerable margin. The original date for the closure of Dounreay was, from memory, 2038, and it was brought forward by more than 15 years. That is an aggressive approach to delivering value for the taxpayer by bringing schedules forward.

Q32 Dame Anne McGuire: Is that why the contract price was raised? Wasn't the contract price at Dounreay raised?

John Clarke: The target cost at Dounreay has been raised, but it was raised because we have introduced considerable new scope that was not priced as part of the competition. When the competition was run, we were aware that there was the potential for us to ask for some extra work to be done, particularly associated with moving some materials from Dounreay to Sellafield. It was not certain that that work was going to be done at the time of the competition; therefore it was not priced. That policy decision has now been taken, and we have allowed it to be priced in, so it has resulted in an increase in cost.

Q33 Dame Anne McGuire: Roughly, what was the additional price, give or take a few million?

John Clarke: From memory, about £400 million, I think, but I would ask—

Q34 Dame Anne McGuire: You are near enough—£500 million, or 25% of the contract. You let the contract and then it had to be increased by 25%.

John Clarke: No, no. We let a contract for a defined scope of work. That scope of work is being delivered for the price that we let it for. We have then asked for £500 million of additional work to be done, and, quite understandably, the contractor would expect to be paid for that additional work. There are two separate things. The price is not going up, but the amount of work is going up, and therefore the total cost of the work is going up.

Q35 Chair: I want to go back to the new contract. It is interesting, because we had a session only last week on defence procurement, and I think that a lot of the stuff you do is not dissimilar to the defence procurement world. I just want to get the new model out of the way. First, have you now appointed a non-executive chair to take things forward? It says that you should have a non-executive chair by March. Have you got one?

Stephen Lovegrove: No, we haven't got a non-executive chair for—

John Clarke: March 2016.

Q36 Chair: It is 2015.

John Clarke: No, it is March 2016.

Q37 Chair: Blimey. So you haven't got anywhere along the new model there?

John Clarke: We need to be clear that the contract requires a 12-month termination period. There is a reason for that. It is because there is a whole raft of changes that need to be made to make sure we maintain stability on the site, maintain the focus on safety and security, maintain the progress that is being made and have an evolutionary change, rather than a revolutionary change. The new arrangements will need to be in place by 31 March 2016. We will be formally serving notice to terminate at the end of this calendar month, and that starts 12 months.

Q38 Chair: How are you going to measure that it is better value for money, especially given that there is a new element of payment by results in that approach? How are you going to measure it? I want to come back to Tony Price and his assertion that he looks after taxpayers' money, because it doesn't feel a lot like that, when you look at it from our end. How are you going to measure it? How do you know that this is going to be better? How are we going to know? How are we going to test you on whether it is better?

John Clarke: We have done some analysis, and we have come up with an estimate of the improvement in value.

Q39 Chair: I understand that. How are you going to measure it?

John Clarke: And within that, we are developing what is called a benefits realisation plan, which identifies the specific benefits that we expect to accrue, and we will measure against those specific benefits. At the highest level, we expect to be able to see improved performance in projects, and we expect to be able to see a lower overall transactional cost between ourselves and the private sector. But there will be a detailed benefits realisation plan with specific measurement milestones.

Q40 Chair: So you are going to measure it against your plan. How many plans are we up to? You started in 2005 with a plan. What are we on now? You are about to write the fifth plan. Am I right?

John Clarke: The first coherent plan that we had was performance plan '11.

Q41 Chair: Well, you had one in 2005 and 2007. Take me through them. You have had plans.

John Clarke: True. There have been plans for a long period of time, but in 2007, which was the plan that NMP inherited, all parties accepted that that plan had been produced against a specific set of requirements, some of which conflicted, and that the plan was not a strategically coherent plan, so 2011 was the first time we had, with regulatory agreement, policy agreement, NDA agreement and, most importantly, site licence agreement—

Q42 Chair: Why are you rewriting it again?

John Clarke: Because circumstances have demonstrated that the plan was somewhat overoptimistic. We discussed optimism bias last time. In rewriting performance plan '14, which updated performance plan '11, a requirement at the end of the first contract term, we have taken out some of that optimism bias.

Q43 Nick Smith: You said that the plan will happen. When is everybody that you talked about going to be able to sign up to this new one? When is everyone going to say, "Yes, this is where we want to go"?

John Clarke: In terms of the performance plan for Sellafield, that is now an accepted plan that is forming the basis of performance management at the site. In terms of the further improvements we intend to make through the model we are introducing, we expect to have a benefits realisation plan in place by June this year. We will measure performance against that, and it will be reviewed by the Major Projects Authority under the Government's major projects portfolio as we take it forward through the transition period and into delivery beyond March 2016.

Q44 Nick Smith: That is June this year?

John Clarke: In June this year, we will have the benefits realisation and the detailed transition plan in place. We have only been in dialogue with Sellafield Ltd and NMP for the past two months on this. Until the Secretary of State announced the change, all the planning was being done by the NDA and in discussion with Government, but not with those who are directly accountable for delivering on the site, which is Sellafield Ltd.

Q45 Chair: Let's go into the costs, and then we will come to where we are now. In 2013-14, costs went up by £6 billion—tell me if I have read my figures wrong. In 2014-15, they are going up by another £5 billion. In a cool two years, we have an £11 billion increase in costs on the site, from goodness knows where you were in 2005 when you first set it up. You say that you are preserving value for money. This is mega-mega bucks. It is a huge amount of money, and it just seems that every time we look at it—this is now the third time we have reviewed this—it is not just hundreds of millions but billions added to it.

Every time, the completion dates for every single element of the clearing up of the site are delayed yet again. If you look at the delays, they are worse this time. Most of the delays—let's just get this out there: there has been a 143-month delay of projects still in planning and design, of which 86 occurred since September 2013. So over half have occurred in this past year. There has been a 271-month delay in construction, of which 100 occurred since 2013. Costs are up by £11 billion and delays have been really appalling in the last year. I don't know whether Mr Bishop, Mr Price or Mr Lovegrove want to answer that.

Stephen Lovegrove: Perhaps I can try to set a bit of a framework for this discussion. What has gone up is the provision. That, in overwhelming part, does not reflect cost slippage; it reflects a version of what John was just describing a moment ago about a better cost estimate and an improved understanding of the technical challenge on the site. That comes out well in the NAO Report in paragraph 2.11.

In a sense, it reflects—to use the terminology—a process of moving from unknown unknowns to known knowns. There are plenty of precedents across the NDA estate where, as the scope of work has been better understood, estimates rise. When the scope has finally been properly understood, it plateaus. Then, when cost control can come in because everyone knows what they are doing and how long it will take, costs begin to come down. Sellafield is by several—

Q46 Chair: Show me one where costs have come down, Mr Lovegrove, with respect. They plateau; I accept that there is a point at which they plateau—when you are halfway through a contract, you do see a bit of a plateau—but I do not have any evidence that it is like that all the time.

Stephen Lovegrove: Dounreay is an example of where costs have come down.

Q47 Chair: Okay. I have been looking at Sellafield. We are talking about Sellafield.

Stephen Lovegrove: Sellafield is several orders of magnitude more complex than any of the other sites on the NDA estate. We very much hope that the provision does not go up again, and we have worked hard with the NDA to get it as stable as possible, but it is important to get on the record that there is no guarantee that it cannot. We still do not know, by any stretch of the imagination, all of the technical challenges on the site.

An example of that—or two examples, perhaps—is that in the NDA accounts, the undiscounted point estimate for the provision in 2013-14 was £110 billion, but that is of limited utility and relevance. What is probably more helpful is that the range, which is also stated in the 2013-14 accounts, is from £88 billion to £218 billion. That is a huge range and reflects the huge nature of uncertainty in the most complex-engineering, highest-hazard site in western Europe. That, unfortunately, is the reality of what lies behind these big increases in the provision.

Q48 Chair: In a pragmatic way I can understand all that, but we have been at it for years and years and every time we come back to it here, we get the same explanation: it is incredibly complex and we do not really know. You have been in existence since 2005—

John Clarke: The NDA has been in existence since 2005—I am rather older than that.

Chair: So you have had 10 years at it and we have seen no evidence that you are in any sort of better control of the costs or technology or anything. What evidence of change we do see is always in the wrong direction.

Stephen Lovegrove: One has to recognise that this is 120 years-worth of programme here.

Q49 Chair: How do you calculate that? Do you mean if you tot up and accumulate each project—

Stephen Lovegrove: No, the business plan for Sellafield—when the final nail is put in the final coffin, as it were, is 120 years from now.

John Clarke: There are estimates over more than a century. Therefore, they are bound to have a degree of uncertainty.

Tom Bishop: If I may, I mentioned that our performance has improved considerably this year. We have a number of examples of where projects are coming in at, around or below the range that Mr Lovegrove talked about.

Q50 Nick Smith: Which range? There is a 120-year difference.

Tom Bishop: Okay. If we take the NAO Report that just came out, they quote the mid-range in most cases. Two of the examples this year were completed projects. One was the encapsulation product storage plant that had a target of £105 million and it was completed for £105 million.

Q51 Chair: When was that target set?

Tom Bishop: It was before the last time we appeared before your Committee.

Chair: Yes, but the target always moves up and then there comes a point when you get—

Tom Bishop: Part of that is the definition that Mr Lovegrove spoke of. When we know what is needed to execute those projects, it becomes clear what they would cost. The second example is the buffer sludge packaging plant, which had an underlying budget of £240 million. It was completed in November and the December record of spend was £236 million, so it came in at 1.7% below that number.

Q52 Chair: Let me put this back to you. It is £11 billion since 2013. What hit me was the silo direct encapsulation plant—tell me what it does—which has gone up by £1.4 billion since September 2013.

Tom Bishop: It is of great concern to us. Mr Price can elaborate on that, but just the short story on that plant is, it has had considerable growth in scope on the enabling structures. It was—

Q53 Chair: What does that mean? Explain it to me, as a lay person.

Tom Bishop: To make the system work, what it contemplates is taking magnesium and aluminium contaminated with plutonium and uranium from the silo to a plant that can handle it basically all robotically, mix it with a grout and put it in boxes so that it can be sealed, prepared, handled and taken care of carefully.

Q54 Chair: What has changed in the last year to put £1.3 billion on it?

Tom Bishop: Several things. Again, I will let Mr Price add to it, but we had vetting by the supply chain as to what it would cost and how long it would take. We had independent reviews by the NDA, the Major Projects Authority, DECC and then Treasury, because none of us wanted to allow an extra pound to be spent that did not need to be.

On a completely separate path, we are looking at whether that problem can be handled in a less expensive technological way. That study is not done yet. But, before I go too far, let me let Mr Price add anything.

Tony Price: It is worth remembering that at the last Committee hearing, you asked us about performance and we did recognise the fact that, over the early years, we had problems with performance—we had successes—and we apologise for that[1]. We—Tom Zarges, who was chair of NMP at the time and myself as a managing director—committed to improving performance. I am pleased and proud for the people of Sellafield that over the past year there has been a significant improvement in our performance—in operations, projects and costs. That is on the record. That is a fact.

Q55 Chair: It may be on the record, but our Report says that there has been £11 billion in extra costs and fantastic delays. Maybe the safety or something like that is better than it was. There were problems around safety in the site and I hope that has improved because that was scary when we looked at it last year. You cannot say that when the overarching big story is more money and longer time.

Tony Price: No, these are the facts. I am pleased that you recognise safety because safety and environmental performance is the best that it has ever been at the site. Operation

[11] Note from witness: Tony Price would like to rephrase this sentence for clarification to read "…over the early years, while we had successes, we also had problems with performance, and we apologise for that."

and project performance this past year is not included. A small part is in the NAO's Report but it doesn't go as far as this past year. We have done everything in our powers to improve performance and we certainly respect the decision that has been made by the NDA and the Government to change the model. That is their right. We respect that. We will do everything in our power to ensure that there is a smooth transition to get to that model. However, our main focus at the site has been on performance—getting control. It has been recognised by the regulators and the NDA. I was pleased that the Secretary of State, in his statement, mentioned that he was pleased to see an improvement in performance.

Q56 Nick Smith: How much is the provision likely to go up by next year, given it has gone up by £6 billion and £5 billion in the past two years?

Tony Price: It is very much dependent—the provision, as Mr Lovegrove outlined, has gone up this last time again because there is new work. New scope has gone into the plan so when you get asked to do more work, that will cost more money. Some mitigating scope has come into the plan so, again, the costs will rise. The key thing is that now, we actually have a plan with a far better degree of understanding in it. We have a strategy for the site—a strategic framework—and performance is now improving. We are starting to see improved performance.

Nick Smith: What is the answer to my question?

Stephen Lovegrove: It is impossible to know that. In general, we would prefer a soundly based estimate of remediation on the site to an artificially low one. As the NDA and Sellafield work on the site, constantly on some of these facilities—particularly on the silos and the ponds—they are discovering difficulties that are pretty much unprecedented in civil and nuclear engineering terms. That is the reason why it sometimes goes up. I hope it will not go up. I hope we are getting nearer to the place at which the NDA and Sellafield have a 100% good grip on the all the problems on the site and on how much it will cost to remediate them. Do I have any great confidence in that? The answer to that is probably no.

This is quite interesting: in preparation for this session, I asked the NDA for some figures on the levels of confidence they had in some of the projects they are undertaking at the moment. Some 65% of all projects at Sellafield, which make up that £53 billion discounted number, are held—John can talk about this in greater detail—at low or very low levels of confidence in terms of how good the grip on the exact scope is. In terms of the decommissioning parts, which are fully 50% of that £53 billion, pretty much all of that is at a low or a very low level of confidence. That gives you a sense of how difficult people are finding it to scope this work. Perhaps John can help on that.

John Clarke: If you look at the £11 billion increase that we spoke about, there are two main drivers for that. One is the removal of what we call optimism bias, which we discussed previously, where we believe that an unduly optimistic view has been taken of what these long-term, and to some extent unknown, projects might be. The second one is the inclusion of much more appropriate levels of contingency. We have seen very large increases in the contingency—more in accordance with Treasury Green Book guidance for unique, one-off projects. The point that Mr Lovegrove is making is that with some of those projects we are trying to put a future cost on plants that we think will be needed, but we can't yet even begin to scope precisely what they will be doing.

That might sound an outlandish position but it is recognising that we know there are issues that will have to be dealt with in future. We don't yet know exactly how they will be dealt with but we are obliged to put forward our best estimate of what those might cost over the next 120 years. Inevitably, there are significant uncertainties. Our experience with the NAO has shown that it is very difficult to find other analogous organisations that are looking over that sort of time scale with those sorts of unknowns of that sort of size. That was a topic we discussed at our audit and risk committee just a couple of weeks ago.

Q57 Chair: I have Amyas, then Austin and Anne.

Sir Amyas Morse: I am listening to what you say with great interest and I am not trying to disagree with it. You do see that saying that nearly all of the decontamination work and 55% of the book of major projects that you have are low confidence, or perhaps I should say—

John Clarke: Low maturity.

Sir Amyas Morse: Confidence was a word—

John Clarke: It was but it is actually low maturity.

Sir Amyas Morse: Oh, that's what it is, maturity not confidence. Can I check? If I use a different word—uncertainty—how many of these projects are one way; there is material uncertainty about what the project will actually entail at the end of the day? Do you understand what I am saying? In other words, you don't know which intervention precisely will work.

John Clarke: Correct.

Sir Amyas Morse: If we just take it that that is a large proportion—I am not trying to make any more of it than that—and you have an enormous time scale and enormous scope, the cost of which you are not confident about, the problem for anyone looking in on that is to know whether you are making appropriate progress or not. It must be a problem for you, too, honestly. I would really like to understand how you see that working.

If we were sitting here—God help us—in 120 years' time trying to work out whether you had reached where you ought to be, how would we know? Normal project management is to eliminate uncertainty and then you can start managing against the costs of the task—right?

Tony Price: Yes.

Sir Amyas Morse: That's normal. I can accept that there are some things you are doing at Sellafield that are like that now, where you can enhance your performance. For the large part of the book that we are talking about, where the major costs lie, I don't understand how you are going to measure where you are up to.

John Clarke: You make a really important point. For me, the issue is that the nuclear provision itself is seen in some areas as a measure of success or failure. The provision has gone up and, therefore, we have failed.

Sir Amyas Morse: No, we are not saying that.

John Clarke: I think it is seen in some areas as that. It is unfortunate that the provision has quite the focus that it does when, as Mr Lovegrove said, we have now posted a very significant range to reflect the fact that there are enormous uncertainties as we go forward. The real issue is whether we are getting to grips with those projects that are in the design and definition phase and then are moving into the delivery phase, and whether we are seeing them narrowing down the gap. There are some examples where that is working well but, regrettably, there are still some difficult areas.

Sir Amyas Morse: I will stop in a moment but to take a leaf out of Mr Phillips's book, can you just answer my question? I accept your qualification to be managers; I am not arguing about that. All of the management sitting here, how do you know whether you are doing a good job? I don't understand that. With the uncertainty you are talking about, is it just a question of, "We'll just keep trying and if it works, that's great"? Or is it more precise than that? I am seeking to be a bit more enlightened.

Tom Bishop: There are techniques for managing that in the engineering world. The plan that was approved last year covers between now and 2119, and about half the increase occurs in the next 10 years. That has much better definition than the second half of the increase that occurs from 2026 to 2119, the next 94 years. For those that are in the short range we have a fairly good understanding of the interlinking of the various projects, of the supporting projects and of the market testing of the projects, of the supply chain's capability to respond to that. In even shorter frame, for the current year, there are measurements that the NDA put upon us to perform. We actually did quite well this year. With the exception of the SDP project that we just talked about, all other projects in design are within 2% of the number that appeared when we were before you last time.

Q58 Chair: Well, explain £11 billion to me then. If they are all within 2%—I talked about £1.7 billion on that one.

Tony Price: Mr Bishop is taking about in-year performance, Madam Chair. But just to answer the question and to give some confidence on where we are—there are uncertainties in these projects; we understand that. A lot of that is to do with the characteristics of the waste material we are dealing with here.

A good, live example that will give us confidence that we are making progress is that for the first time in decades, we are going to start moving sludges—radioactive material—out of one of the major legacy pond and silo facilities within the next two days. What that will do for us is that we will be practically handling this waste and will get a better understanding of it characteristics. It will give us better confidence in whether we have we got the plans right. Is it going to take as long as we thought? Is it going to cost as much or is it going to cost less?

As Mr Lovegrove says, we hope that the provision will not go up. The more experience we get—I think that over the next four years, which will be a key period for the Sellafield site, we are going to make more and more progress in the intrusion into these facilities. We are going to learn more about the characteristics, and that will give us far more confidence in the provision that we determine. Making more progress and getting performance where it needs to be has been our focus this past year. I think we have made a good job of that.

For in-year performance, we were served with 63 milestones. We are hoping to achieve 62 of those. What really emanated from the last Committee hearing was Madam Chair asking for a suite of criteria that we would be judged against. I am pleased to say that we are achieving 26 out of the 27. That is how we measure our performance in year, but these are key milestones for us in determining how accurate we are in our estimates when we start to deal practically with the material. That starts in earnest within the next couple of days.

Stephen Lovegrove: Madam Chair, may I make two very quick comments in response to Sir Amyas? This is an uncomfortable thing to have to say, but in a sense, every territory that has had to deal with the remediation and treatment of very hazardous waste that has effectively been generated as a result of the cold war has faced this problem: how do you get a handle on this stuff? There is an example in America, where the Hanford waste treatment and immobilisation plant started off at $6.7 billion. The sums have gone up to $13 billion and will probably go up an awful lot more, and they haven't even started taking anything out yet. It does not quite come with the territory, but it is a feature of this industry.

The second thing—how do you get a better sense of this?—really goes to the point we were making earlier about the change in the model. For sure, with the model at Sellafield, which as we have said is a very complex plant and an order of magnitude more difficult, we decided that it is impossible to measure success and to pass risk at that enterprise level in the way that you are talking about. The best way to do it is to change the model and see if you can parcel up the work packages and the risk in a way that allows you as the auditor, us as the Department and the NDA as the non-departmental public body—everyone involved—to measure progress on a more practical basis. That, in a sense, is what we have been trying to do.

Q59 Austin Mitchell: I want to take this wider point a little further. When we went round this—was it in 2009? Anyway, it was early on, but I don't think John Clarke suffered from any optimism at that stage. I thought he gave us a very honest account of what was happening. I was impressed by management's efforts to cope, but I was even more impressed by the mess it was and the difficulties that you faced. That is really the question. You mentioned experience overseas. What is experience overseas? They have decommissioned things. If it was not going to be an endless, limitless meal ticket for the nuclear decommissioning industry, they must have tackled it too. Is Sellafield—or Windscale, or whatever you call it—worse, because it was a pioneering thing? Is it more complex? Is it a bigger mess than most? How does it compare with the experience overseas of controlling costs?

Stephen Lovegrove: There are experts much more expert than me around me.

Paul Foster: The measure for Sellafield is about getting rid of the risks and the hazards in the most value-for-money way possible and as quickly as possible. With regard to our highest hazard material, only the French have equivalent material of that nature. We have learned from and worked with the French, which is why our vitrification facilities are performing better than they have ever performed, so that is going well.

When it comes to how to generate the first round of plutonium or the first round of reprocessing, we are fairly unique in how we stored and dealt with that material. We took the option of storing it in single silos covered in water. As such, we have facilities that are orders of magnitude worse than anything equivalent in the States. That is the challenge we have here. We are seeing challenges with the ponds, but we have now got a lot of the risk on those ponds behind us, which is why the performance is coming in at a more confined level. The risk in front of us is our biggest challenge, and we don't need to be reminded of the challenge there. Not getting it out is time at risk, so we have got to get it out as soon as we can for the good of everybody.

There are several reactors-worth of inventory just in a single facility—no doubt, in some of the ones that you saw—and for those we have no parallel. The issue for those facilities—this is why you saw the distressing number in regard to the SDP facility—is that they have to deal with every bit of the inventory coming out of the silo. Until such time as we have characterised it, the range of what we want that facility to be is huge. More than that, once you start these things, you cannot stop. When you start, you have got to be convinced.

We will be retrieving from those silos for decades, so we have got to look after the welfare of the people, the community and the industry as a whole, because getting any of that wrong will have far-reaching consequences. I do not wish to play the scaremonger card at all, but the real measure of performance is getting rid of the hazard and risk of the site. I am pleased that, as Mr Price outlined, in one of the ponds the uranic sludges have been moved. That is a big success. We dealt with some of the historical material, which this forum does not allow me to talk about, with great success, which is good. The risk in front of us that gives us the most concern, and which we need to work on, is to do with the legacy silos. That is where the bulk of the uncertainty resides.

Q60 Chair: Photos have been circulating that show cracks, weeds and what have you coming out of the storage ponds. What does that tell us? Who is going to take that?

Tom Bishop: They are very old facilities. They need to be handled very carefully, and we need to have back-up systems.

Q61 Chair: Is it a public danger?

Tom Bishop: It is a very high hazard, which is why we have focused on reducing that hazard as quickly as possible. In this current fiscal year, we have removed more than 100 tonnes of radioactive material from one pond.

Q62 Chair: Because of the cracks?

Tom Bishop: The intention is to remove everything from both ponds and the silos. We are very proud of having removed 100 tonnes this year. We have done that safely. We have had no significant safety issues whatever. On the other pond, which Mr Foster is talking about, one of the projects that we completed last November is now enabling us to use a super-vacuum system. By the way, Mr Mitchell, we are getting the benefit of robotics and other things that are used in some of the US projects, as we are getting the benefit of the French and their vitrification. All that is coming through our nuclear management partners to the site.

We will start moving out the radioactive sludge, which is really degraded nuclear fuel, that was collected in the ponds over decades. It is uranium, plutonium and the cladding. The fuel was supposedly carefully set in the pond, but some of the containers tipped, so they are on the floor. Dust and open debris has come into the ponds. They have to characterise all that. They have to figure out how to get it out safely, and then they have to get it to a treatment area. They have made great progress this year in doing that and I am very proud of them and the team at Sellafield.

Q63 Austin Mitchell: Thank you for that. I was surprised by that myself when we went round, but what bearing does that have on the costing of commissioning new nuclear power stations? We have just come to an agreement with EDF, who will be enormously overpaid for generating nuclear power, yet on top of that there will be the apparently unpredictable costs of decommissioning the plant when it is all finished.

Paul Foster: The uncertainty with which we are dealing here stems from the first generation of reprocessing and the first generation of separating the plutonium from the fuel. Nearly all of the material we receive now is dealt with in a closed cycle. So all the material coming in from the AGR fleet at the moment is received, reprocessed and stored appropriately in situ. There are no buffers created; it is put through to an end position and, in the case of foreign material, it is returned back to the place of origin.

So all the waste and all the issues being generated from the current generation of reactors are being dealt with in real time, and when it comes to decommissioning those facilities—we have seen this ourselves in the decommissioning of our MOX facility—they are designed to be decommissioned. These original facilities were not designed to be decommissioned, but the modern ones are. So I have less concern about decommissioning the future generations; I am more concerned about the first generation.

Q64 Austin Mitchell: So in a sense, we are paying the cost of the cold war.

Stephen Lovegrove: Correct. If I may come in on your observations about the costs of decommissioning and dealing with the waste for the new nuclear programme, the arrangements which are being put in place for that include something called the funded decommissioning costs. There is an advisory body called the Nuclear Liabilities Financing Assurance Board, which is designed to ensure that those costs are borne by the operators, so we do not find ourselves in the situation that we have as a result of the old fleet.

Q65 Dame Anne McGuire: In the course of today's evidence we heard a couple of phrases that struck me. One was from Mr Lovegrove, who said that you did not want contracts or bids that were artificially low.

Stephen Lovegrove: What I said was that I did not think it served anybody if the nuclear provision—the costs over the next 120 years[2] of cleaning this stuff up—was artificially low.

Q66 Dame Anne McGuire: Okay, thanks for that clarification. Mr Clarke said that you wanted to factor out the optimism bias; and I cannot remember who it was who said that we should be learning as well. So my question is perhaps to Mr Lovegrove and the NDA representatives. Given what we have heard today about the significant increase in Sellafield and the albeit explained increase in the Dounreay contract, as I understand it we have another situation developing where Babcock Cavendish are coming in six months after a contract has been let for a significant additional sum of money, which if I believe everything I read in the paper—I do not believe everything I read, I should say—is about £700 million. Where is the learning in this? How are you factoring out the optimism bias? Is it just that you do not know how to assess the validity and credibility of some of these contracts? If it is true that Babcock is coming back for significantly more funding, that is quite concerning because I understand that that was signed off only six or seven months ago.

John Clarke: September. I think what you are referring to there is the—

Q67 Dame Anne McGuire: What I am trying to work out is: is there a pattern, and is that systemic? For example, are NDA perhaps not assessing the contracts credibly?

John Clarke: I do not think there is a pattern that suggests a systemic problem at all. I think you are referring to the Magnox and research reactor sites. The Cavendish Fluor Partnership were the successful bidder for that and their contract was awarded in September 2014.

The phase we are going through now is called consolidation, which is exactly what we went through at Dounreay. It takes account of the fact that, when the four bidders were putting their bids together, the NDA gave them the condition of the site upon which they should base their bids. Two years then elapse before the competition is completed and they move to being the owners of the site. The consolidation phase is an opportunity to look at what has happened in that two-year period, and what has changed from that which they bid against and what they find on the ground when they arrive.

For example, Wylfa on Anglesey, the one operational nuclear power station remaining in the NDA, was due to close by the end of 2014. That was the basis on which Cavendish Fluor Partnership, and indeed the other three bidders, made their bids. As a result of innovative approaches, there is now a good likelihood that that reactor will be able to operate until the end of calendar year 2015, generating a significant amount of income. However, that does increase the cost of operating the Wylfa site, and therefore we will quite

[2] Note from witness: Stephen Lovegrove meant to say "…the estimate of the costs over the next 120 years…"

legitimately have to move the target cost to cater for that. I would say that is a good news story; we will get income generated, and although there is a cost associated with that, the income is greater than the cost. However, the target cost that was bid will have to increase, and that would have been the case for anybody, whoever had won that competition.

The Bradwell site in Essex is another example. The original plan, on which all bidders placed their target cost, was that the site would be closed by the end of 2015. There have been some performance issues, and that closure will now be somewhat later. Again, it is perfectly understandable that Cavendish Fluor Partnership, and indeed anybody else who had won, would wish to see the target moved to cater for the fact they have bid against a set of conditions that were slightly different.

There will be some differences. I have seen the speculation about numbers, but we do not yet have a number from Cavendish Fluor Partnership, and they are working through what they believe the changes to be. We will, of course, scrutinise those changes, and we will accept legitimate changes and not those that we consider to be illegitimate.

Q68 Dame Anne McGuire: When you let the contracts, would it not be helpful to say that those are based on an estimated price rather than that the impression is created that a contract is let and then within a few months or a couple of years, significant demands or requests are made? I appreciate the technological reasons for such demands, and that safety is paramount, but you are effectively letting contracts on a price that might not be finite. I just wonder whether you are creating a stick with which to hit yourself over the head. There are also questions for taxpayers as to why the price keeps on going up.

John Clarke: I accept that there is a presentational challenge—

Dame Anne McGuire: Frankly, I think it is slightly more than that.

John Clarke: When you run a competition that lasts so long, it is inevitable that the situation on the ground when a new contractor arrives will be different from the one they bid against.

Dame Anne McGuire: I fully understand that.

John Clarke: Indeed. My point is that there will be changes. We still expect that the savings that we have publicly spoken about will be delivered. We have not declared the specific price that was bid because we knew that we would go through a consolidation phase, and that there were likely to be some changes. However, we declared an anticipated saving, which allows for some price movement, and we are still confident that we will live within that.

There is speculation about what the price was and what the price increases may be, but that is all speculation. In the fullness of time, we will get clarity on the target cost at the end of the consolidation phase, and we will progress against that in a controlled and proper manner.

Q69 Chair: I am left wondering whether you let the right sort of contract. It goes back to defence procurement and all that sort of stuff. If you are letting a contract—you are not telling us the figure today, but I understand it to be about £7 billion—and then you say immediately, "Actually, you can change it the moment you're on site", it means that the successful bidder can revise the business plan after assessing the state of the plant. I think they are thinking, "Why on earth do we get a contract before they have understood what the states of the plants are, so that we can put a sensible figure on it?" Why do you let that sort of contract?

John Clarke: I think it is a perfectly rational contract to let. To repeat what I said, we ask them to bid on the basis of the defined condition of the plant, the sites, at the time the competition starts.

Chair: Yes, they are bound to come in and say that it is worse.

John Clarke: They can come and say whatever they want, but they have to make a compelling case that we are prepared to accept. The onus is on them to demonstrate that there is a rational, genuine difference between that which they bid against and what they find.

Q70 Chair: Mr Clarke, has it ever gone down? You put in a contract that says, "Of course, if there is any variation when you understand what you are dealing with better, you can vary the contract." Have you ever had a variation going in our favour or is it always the wrong way?

John Clarke: We have only done two of these so far.

Q71 Chair: Has it gone down in either of those?

John Clarke: Dounreay didn't move. Magnox—we don't yet know. There is speculation about the increase. Magnox is likely to increase for some of the reasons that I explained. I don't know how much it is going to increase by yet. It is just a matter of the phase of differentiating between what they bid against and what the case actually is. You couldn't expect someone to bid a firm price against something and then find that, in the two years between the bid and them coming into place, the situation is fundamentally different. That is not reasonable. We will not get someone to bid on that basis.

Q72 Dame Anne McGuire: Would you normally expect the bidder to come back six months later, potentially, and say, "Actually, this is not what we thought"? Does the Department—do you—work on the basis that the NDA is letting contracts that are effectively on a provisional price and not on a definite price? We are not talking about rises for inflation here. We are talking about significant sums of money—sometimes really quite a high proportion of the total contract. Do you work that into your calculations?

Stephen Lovegrove: We endorse the contract-letting process that the NDA has. The Energy Act 2004—

Q73 Dame Anne McGuire: I remember it well.

Stephen Lovegrove: —is very clear that we need to set up an expert NDPB in the form of the NDA, which is expert not only at nuclear remediation, but in the letting of contracts. That is an absolutely core skill of the NDA. We have a number of governance mechanisms that assure us, over a period of time, that that continues to be a skill that is kept up to date and conforms to best practice.

We have made increasingly good use of the Major Projects Authority. They have chosen not to look at many of the projects on Sellafield, although they have looked at the contract change that is happening now at Sellafield. They have also been involved and checked over most or all of the contracts that John has been describing. There are many checks. We are satisfied that the approach that the NDA is taking is robust but I accept that it can lead to some of these uncomfortable outcomes.

Q74 Dame Anne McGuire: Part of the difficulty that we all struggle with is that you guys are the experts. You understand nuclear technology. We are not second-guessing your technical expertise but it seems a strange situation when contracts appear to be let but then come back within a few months or a few years. Who advises the Department to say that while the process might be fine, the technology arguments need to be challenged? Who advises you? Don't tell me it is the NDA because it deals with the contracts.

Stephen Lovegrove: The NDA is set up to—

Q75 Dame Anne McGuire: They advise you.

Stephen Lovegrove: They do advise us but we have a variety of different advisers looking at this as well. We sometimes have technical advisers. Our chief scientific adviser in the Department looks at some of these things. There are people who the NDA get in to check some of the technical issues as well. Going back to what John said, there are two examples of this. One has not moved and we do not know at the moment what is going to happen with the other. Probably, that is not too terrible a record.

John Clarke: The contract structure is such that the first 12 months is what is called consolidation. That is the period when they look to see what the difference is between what they thought the case would be and what the case is, and whether they can make a justification for change. If they are legitimate changes, we will accept them.

Chair: I will just put to you: why do you not have a separate contract that allows them to look at the site and then put a bid in? Then you have a competition over the bid—over what they actually pay.

Dame Anne McGuire: I actually do understand it: until they open up the site, there might be things. I just feel that you create an environment, which doesn't do you any good anyway, of letting out contracts—there might potentially be more—and a few weeks or months later, the taxpayer thinks, "There they go again. It's just more money getting thrown to the nuclear industry." That is my point, and I am happy that I have pursued it.

Q76 Mr Burrowes: Everyone here accepts the complexity of designing a plant to retrieve, treat and immobilise waste. Obviously, this is the third attempt to do so. I accept the nature of that. But can you convince me or taxpayers that, as far as Sellafield is concerned, there is an incentive to ensure that the project is on time and on budget? I will first ask Sellafield and then Mr Clarke. Where is that incentive?

Tony Price: As I said at the start, we understand that we are custodians of taxpayers' money. The sanctioning process that we go through is very rigid. I just took the example of the SDP, which is a Sellafield direct encapsulation plant and where there has been a large increase in the estimate. This is an extremely challenging project. It is a one-off project. It is essential, and it is the only underpinned solution we have right now, to enable us to empty the silos. That is the highest hazard.

Q77 Mr Burrowes: I accept all that. There are lots of projects in different areas that are complex—perhaps not so many that are quite as complex as your project. But where, particularly for this year, is that incentive for you? Given all the complexities, what is the incentive to ensure that it is on time and on budget?

Tom Bishop: First, to give confidence in the rigidity of the governance—from the Sellafield Ltd board, we have committees that oversee the Sellafield executive. They have meetings with their own project management teams, and they have a suite and a hierarchy of programme control boards to ensure that the programme is on target. The way that we are incentivised—

Q78 Mr Burrowes: Those controls—what is the consequence of you not delivering on time and on budget this year?

Paul Foster: The No. 1 incentive in this for us is that the project is on a critical path to emptying the silo we talked about. It is the biggest hazard that we possess as a business and one of the biggest hazards in the country, and this facility is the critical path to getting it out. From the pure ethos of what Sellafield Ltd is there to do, that is the No. 1 priority in terms of delivery.

Q79 Mr Burrowes: But from a taxpayer's point of view—that is an in-built incentive; it has to happen. But is there any particular contractual incentive?

Paul Foster: Moving on—sorry, I will get there—that is an inherent driver. Then, in terms of in-year incentives from the NDA, the NDA weight their incentives towards the area of best benefit of both delivery and financial. This is one of the areas where there is the most incentivisation. We cascade that incentive on to the contracting company, in terms of incentivising them to come in earlier and cheaper than they have outlined. There is then the overall bundle of schedule performance index and cost performance index against which we are measured collectively. This contributes highly to that as well. There is also the overall one that if we fail to hit the criteria that the NDA establish for us, we can have our contract severed.

Q80 Mr Burrowes: Mr Bishop, did NMP lose fees from the increase in costs?

Tom Bishop: We lose fees when we do not meet targets.

Q81 Mr Burrowes: So in terms of the SDP's escalation in costs, did you lose any fees?

Tony Price: Yes, we have.

Q82 Mr Burrowes: How much?

John Clarke: It is modest in comparison with the rise.

Q83 Mr Burrowes: Exactly how much?

John Clarke: I don't know. We could certainly provide a note about that. We are perfectly happy to do that.

Q84 Mr Burrowes: Does that provide a sufficient incentive, from your point of view, for Sellafield to deliver?

John Clarke: That is one of the reasons we are making the contract model change. There are two aspects. First, the contract is heavily focused on in-year performance. We are talking about a construction project that will last for more than a decade. What we are really interested in is the end date and the final cost, rather than in-year performance. We have struggled, to be honest, with the contract to try to get that balance between in-year and long-term focus. That is one of the reasons we are making the change.

We do have direct incentivisations, but in a contract where there is no risk transfer, the only thing at risk to the parent body organisation is a loss of fee. There is no real skin in the game in a true target cost or fixed price basis, because nobody would take that—NMP or anybody else.

Q85 Mr Burrowes: So you are satisfied that it is on a firm footing?

Stephen Lovegrove: We absolutely accept, as we did a year and a bit ago in this Committee, that the contract performance was mixed. Components of the contract performance, which we have just discussed, are part of the less satisfactory bits of the contract. There is no question about that. That is what we have been wrestling with in the past year. I am confident that the model that we are moving towards gives us a much better chance of being able to incentivise partners and transfer risk in a way that is going to address some of the issues that you raise. Am I absolutely confident that there will not be bumps in the road? I am not, I'm afraid.

Q86 Mr Burrowes: You have all the necessary assurances that the project is now on a firm footing. You have all the necessary assurance that you want on behalf of taxpayers that the project is now on a firm footing?

Stephen Lovegrove: On the specific encapsulation project? On SDP? Yes, I do. We are still at the planning phase.

Q87 Mr Burrowes: And the other projects on the ground?

Stephen Lovegrove: There are many, many projects on the ground.

Q88 Chair: Let me take the one that is the reprocessing. Reprocessing is different. You would have thought that we should be making money out of it and you should be getting better at that. Right? There should be an incentive there for us, Mr Lovegrove, as taxpayers.

Tom Bishop: There is incentive for us as well on that.

Q89 Chair: Okay. So if you look at the active liquor vitrification project, it achieved only half its target in 2013-14. What do you then do? You considerably lower the target for 2014-15 and—hey presto—it is getting a bit closer. That is not very brilliant.

Paul Foster: Performance on those facilities has been nothing short of brilliant, by the workers and their efforts. I will describe why. In 2013-14, you are quite right that the target was only half achieved. We had a power failure; a design fault on installation on one of the sub-stations created a power failure. That facility is designed to protect the environment and closing the ventilation contaminates the inside of the facility.

Therefore, that facility had to be cleaned up. We had more than 30,000 entries into that facility, which spans seven football pitches for the workers, without a single contamination event. We restarted that facility within two weeks of the base estimate of achieving it. Since restarting—it is not about making the target easier because there is less time in which to work—that facility will have achieved. It is already achieving today the excellent level of performance in that facility. It has been a steady increase in performance for that facility year on year.

Q90 Chair: Okay. I understand that you missed the target because the power went wrong—I don't know whose fault that was—but why did you lower the target for 2014-15?

Paul Foster: Simply because there was less time in which to work.

John Clarke: We lowered the target.

Q91 Chair: Why, if there was a particular thing that went wrong that you were able to put right and it is now great?

John Clarke: It took a year to put right. By the time it was put right we were well into this financial year. So to set a target at the level we set last year would have been to set ourselves up for failure before we started. The plant that was closed down could not operate for a large part of the year. Taking that into account, we have set a target that is sufficiently stretching but realistic. That is the essence of a target; you want it to be achievable but stretching. We think we have hit that balance and it looks like it has just been achieved this year.

Paul Foster: Yes, it is on today. We have three vitrification lines, and the other two lines have been working either in or in scheduled outage through that time to offset that as well.

Q92 Mr Burrowes: Looking at figure 1, the site provision shows no signs of levelling off. When will the overall site provision stabilise and begin to reduce? Can you give us a date?

John Clarke: No, I can't.

Mr Burrowes: An estimate.

John Clarke: I really wouldn't want to. What I would say is that, as you see in figure 1, for the rest of the estate the figure has stabilised. We see that we are able to get a good grip around it. As for Sellafield, I genuinely don't know. As we said at the previous hearing, and in our last round of public accounts—

Q93 Mr Burrowes: There must be some kind of target.

John Clarke: There isn't, on the basis that the most important thing is to get the right level of understanding of what operations and plants are needed and how long they will take to work on it. This is really an answer to Sir Amyas's comment before. From my perspective, while I understand it is an important number, the focus on the nuclear provision is misleading. The movement of a provision does not directly reflect performance on the site; it reflects a better level of understanding and a better prediction of what the future might be like. And I think it will be some considerable time before we have absolute confidence that we have got it, bearing in mind that we are estimating for 100 years into the future.

Q94 Mr Burrowes: So that I can get my head around the big figures, what percentage of the total £53 billion provision is against the legacy ponds and silos?

John Clarke: In round numbers, about half of the total cost is associated with the remediation of those facilities and then the future treatment plants to deal with them.

Q95 Nick Smith: I want to talk a little more about the high-risk legacy ponds and some remarks that Mr Bishop made earlier about 100 tonnes of material being taken out, I think he said in the last year. What are the time frames? So if it is 100 tonnes in this last year, how big is the pond? How many more tonnes are in there? How will you deal with this over time? Is there an increased risk in the extra time it is taking to look at this stuff?

Tom Bishop: We are very pleased about getting that 100 tonnes out, but Mr Foster will give the details about how much more he has to go.

Paul Foster: For security reasons, I am not at liberty in this forum to tell you how much material we have in a particular pond, I am afraid. That was a pond that was due to be emptied by, I think, 2037 on the original plan, but we hope to have it emptied by about 2019 or 2020. That is one of the ponds that, because of its condition, is a little bit better than elsewhere. We are removing the inventory and fuel and we are looking to de-water it in the next few years, which by recollection will be 15 to 20 years ahead of schedule.

Tom Bishop: That is the point that we see this year. We have been delivering the projects with good progress and meeting the operating targets. We have been delivering efficiency savings and making the hazards go away. One that has not been mentioned today is the clean-up of the sixth highest hazard on the site, the plutonium-contaminated filters, which we have finished four years early and under the budget line. And we are building the supply chain, which is critical as the project moves forward and we start spending more money and competing with the new nuclear industry up there. So Mr Foster, Mr Price and the 11,000 women and men up there really deserve a pat on the back for the work they have done this last year.

Q96 Nick Smith: It sounds like they do, and that is great. But if you are not able to tell us what is in the one pond that you have taken 100 tonnes out of and there are four ponds or silos altogether, can you tell us what is going on in those others and what the scale of the problem is?

John Clarke: I might get kicked and shot for what I am about to say, but, for one of those silos, Sellafield recently completed the removal of less than 5% of the radioactive inventory from one quarter of that facility.

Q97 Chair: Less than 5% of one quarter?

Nick Smith: You will have to go more slowly and help us here.

John Clarke: Less than 5% of one quarter, so about 1% of the total inventory. That is more than the total radioactivity released from the Fukushima event. So that gives you an idea of the amount of radioactive material to go at in these facilities.

Q98 Nick Smith: How potent is it?

Tom Bishop: Very potent. Mr Foster talks about moving sludge, and this number is out in public. The amount of sludge that they have to remove safely—this sludge is really uranium, plutonium, cladding, things that have dissipated—is in the order of 1,500 cubic metres. They are well on plan to do that.

Q99 Nick Smith: I just want to challenge you. I am trying to find out a bit more about this. You described some materials as sludge. How would you describe the other elements in the silos?

Tom Bishop: There is existing fuel in the silos. There is equipment—

Paul Foster: No, sorry Tom—

Tom Bishop: Excuse me, in the pools.

Q100 Chair: Do you know what is in the silos?

Paul Foster: The silos do not contain fuel. There might be elements of fuel in there that is associated with the cladding, but the silos were designed to take the cladding away from the original generation of fuel.

John Clarke: The metal sleeve that goes around—

Paul Foster: The sleeve around the uranium core. There are two different silos—one from the first generation for the weapons programme, and the other from the first generation of the reprocessing programme. It is the external materials that are dropped into the silos, not fuel. We call them swarf or cladding.

Q101 Chair: Okay. I am going to draw it to a close. Amyas, and then I have a few questions I want to ask.

Sir Amyas Morse: I have listened to this session and I think you have given fantastic explanations, for which I am very grateful, but I would offer a little challenge. I understand that you cannot contract for uncertainty, but the NDA is not in that position. It is a non-departmental Government body, and you could perfectly well set them attainment targets. The air of uncertainty about this whole environment is understandable, but troubling none the less, in terms of getting the pace lifted up to where it ought to be.

I don't think there would be any harm in saying that despite your not knowing for sure when you will be able to plateau out the nuclear provision and start to drive it down, you should have a target or a reasonable estimate of what that would be and what they would expect you to be driving for. Nor, frankly, do I think it would do any harm to have some target for attainment, for understanding the scope of the problem and things of that sort. It would give a lot of comfort to your stakeholders if you had that. Of course, you can always, like your contractors, come forward and explain why they weren't quite right at the time.

You are taking on a very big role, and it is reasonable for people to expect you to be working under a little bit of pressure—other than just discovery—to move the ball forward in some of these areas. I am listening carefully and sympathetically, and I offer you that comment. I don't think it would do any harm at all for you to have some stretch targets in some of these areas, and for you to use your best endeavours to achieve them.

Stephen Lovegrove: I wouldn't want to give the impression that this is purely a voyage of discovery. It isn't, and there are stretch targets. We monitor the NDA closely, and the NDA board monitors the executive of the NDA closely. Many of these issues are encapsulated in that process. I take the challenge and I take the comment seriously. We need to think creatively about ways in which we can describe and motivate best performance on the site, recognising that it is difficult.

Q102 Chair: Okay. I have three or four more questions. What has happened to the geological disposal facility? Where are we on that?

John Clarke: The Department are leading on a new, or a revised, process for bringing forward volunteer communities to potentially host—

Q103 Austin Mitchell: Are there any volunteer communities?

John Clarke: Well, in the revised process, no one has been asked to volunteer at this point. At the end of the last process, there was an agreement that there would be a programme of geological screening at a national level to screen out areas that are demonstrably not suitable. That view was gathered from the consultation process. That process is going on now, together with designing the detailed process by which communities may volunteer. We are about two years away from the point at which the Department would be asking communities to volunteer. The NDA and its subsidiary, Radioactive Waste Management Ltd, are assisting in that and providing information to prospective communities as and when they wish to have it. We expect to be looking for a call for volunteers in about two years.

Q104 Austin Mitchell: Will they be rewarded?

John Clarke: Sorry?

Austin Mitchell: Will they get any financial benefit from volunteering?

John Clarke: The new process envisages some modest financial benefit in the volunteering stage.

Stephen Lovegrove: I would be very happy to write a note on where the process—

Q105 Chair: How much are we delayed now? When you talked to us about it, you were waiting for a decision, and then Cumbria went against you.

John Clarke: That stage of the process has gone back by about two to three years. The question at the moment is whether we can still envisage seeing a position where the repository is available from 2040. That is still the base working assumption.

Q106 Chair: Can I ask you about the supply chain to local SMEs? You are at about 19%. What is your target?

John Clarke: The target across the whole NDA estate is to get up to 23%—sorry, 22%—by the end of the year. We will achieve that across the whole estate. Our aim is to get Sellafield to that level as well. The position that they have reached is excellent—just short of 20%. It is remarkable that something like 7% is directly spent with SMEs. For an enterprise the size of Sellafield, that is quite a remarkable feat. You would expect most of it to be through a supply chain. We expect Sellafield to aim for and achieve the 23% target for the end of next year that we have set across the rest of the estate.

Q107 Chair: The other thing is apprenticeships, trainees—which we have talked about before—and graduates. The percentage has gone up. How many apprentices are there? What are we at? How many trainees? How many graduates?

Tony Price: We have 500 apprentices at Sellafield and we have recruited a record number of 170 this past year. We have another record coming in this next year—200. Some 25% of those are now female. That is above the national average, which we are very pleased about.

Q108 Chair: And they are local people. And trainees and graduates? Are you building capability locally rather than having all of them—

Tony Price: Yes, we are increasing the numbers. Again, 50% of the graduate intake is female, which is way above the national average so we are very pleased about that.

Q109 Chair: Finally, Copeland council has rejected a proposal to take waste from the Royal Navy—is that right?

John Clarke: The first thing I would say is that it is not my accountability; it is an MOD accountability. The Navy and the MOD are looking for facilities to deal with some elements of the nuclear submarine programme. It is my understanding that Copeland have made their views known.

Q110 Chair: And they are looking to you to dispose of the nuclear waste, are they?

John Clarke: No. The MOD is looking at where it might dispose of them. They are including in that the potential for NDA sites but, again, they are in direct consultation with communities.

Chair: Okay. Good.

In a sense, this has probably been the best we have had out of the three sessions on this. We welcome the fact that you will end up being a more sensible structure. I have to say, coming away from it, that Amyas's final remark was helpful. It is still completely crazy. Every time we look at the whole of Government accounts, this hits you as the complete, unpredictable, massive burden on future generations. The idea of developing strong targets and ambitions on which at least we can interrogate you, both in terms of money and time, would be hugely beneficial in allaying some of the taxpayers' fears. Thank you very much indeed.