National Audit Office – Managing Risk Reduction at Sellafield and the Public Accounts Committee

LEAD OFFICER: Steve Smith **REPORT AUTHOR:** Denice Gallen

Summary and Recommendation:

A report published by the National Audit Office (NAO) on Managing Risk Reduction at Sellafield examines the Nuclear Decommissioning Authorities (NDA) progress since the 2008 report approving the lifetime plan for Sellafield and the performance of its portfolio of 14 major capital projects, which are key enablers.

Recommendation:

That the contents of this report are noted and that Members consider options for responding.

1. Introduction

- **1.1** On the 7th November 2012 the NAO published a report into the findings of an assessment undertaken by the NAO to judge the challenges faced in cleaning up Sellafield.
- 1.2 As a result of the report the House of Commons Public Accounts Committee (PAC) visited Cumbria on the 26th November. They conducted a site visit around Sellafield before holding an evidence gathering session at Energus that afternoon. Prior to their visit Copeland Borough Council submitted a letter stating the Council's main concerns to the MPs and draw the attention of the MPs to a number of key issues, refer to Appendix 1.
- 1.3 The report acknowledged the significant milestone achieved by the Nuclear Decommissioning Authority (NDA) when it approved a more robust lifetime plan for the clean-up of Sellafield site by 2120, replacing a previous unrealistic plan. However, significant uncertainties and scheduling risks remain, for example, there is considerable uncertainty over the time required and cost of completing facilities to treat and store highly radioactive material held in deteriorating legacy ponds and silos.

1.4 The PAC evidence gathering session was based on the report and the purpose was to seek answers from Sellafield and the NDA for the shortcomings identified within the report.

2. Background

- 2.1 Sellafield Limited manages the site under contract to the NDA. The NDA sets strategic objectives and Sellafield Ltd develops and implements an NDA approved 'lifetime Plan'. The NDA appointed Nuclear Management Partners Limited, a consortium of private sector companies (URS, AMEC and AREVA), as the 'parent body' of Sellafield Limited, to improve performance by bringing in outside expertise.
- 2.2 The report by the NAO specified that £67.5 billion (undiscounted) is the provision for the cost of cleaning, £4.6 billion is the estimated life time cost of the 14 major projects and 2120 is the target year for the cleanup at Sellafield. Sellafield Ltd have developed a site plan which has been approved by the NDA which includes their proposals for risk and hazard reduction.
- **2.3** It also reported that currently 55 buildings have been decommissioned with 1400 buildings remaining at Sellafield. There has been £1.6 billion spent on running and cleaning up Sellafield during 2011 -2012.¹

3. Highlights of the Report findings

- **3.1** Between May 2011 and March 2012, 12 of the NDA's 14 major projects delivered less than planned. Sellafield Limited extended estimated completion dates for seven and increased the total cost estimate by £0.9 billion. They found that between these dates Sellafield Limited:
- Achieved less than planned in 12 of the 14 major projects, with five achieving less than 90 per cent of the planned scope. This could jeopardise target dates for risk reduction.
- Brought forward the estimated completion date for one of the seven projects in the design phase. Five remained unchanged but their overall cost increased by £0.6 billion to £2.8 billion. The complexity of these projects means that changes during the design stage are inevitable. However, Sellafield Limited did not allow sufficiently for uncertainty in the cost estimates it initially submitted to the NDA for the silos direct encapsulation plant project. It prepared these estimates before it had assessed the full cost implication of the design. The 92 per cent increase in the estimated cost of the project accounted for nearly all of the £0.6 billion increase.

¹ Managing Risk reduction at Sellafield http://www.nao.org.uk/publications/1213/sellafield_risk_reduction.aspx

- Put estimated completion dates back by between 2 and 19 months in six of the seven projects in construction.
- **3.2** The report goes on to state that while delays and increases are partly due to the complexity they also reflect poor project design and delivery by Sellafield Ltd and weakness in the NDA oversight, they identify **five factors** that led to **cost escalation**:
 - **3.2.1** The NDA contract requires it to reimburse Sellafield Limited for all allowable costs. This means that Sellafield Limited does not bear risks for delay and cost increases.
 - **3.2.2** There are gaps in the capacity of subcontractors to undertake the required work.
 - **3.2.3** There has been a long-standing problem, which existed before the NDA was created in 2005, of the site operator starting construction before design risks had been sufficiently addressed.
 - **3.2.4** Weaknesses in cost and schedule estimation by Sellafield Limited remain significant issues for the NDA.
 - **3.2.5** Until mid-2011, the NDA did not collect enough robust and timely information on projects from Sellafield Limited to enable timely intervention

3.3 Reports Conclusion:

"The Authority faces a considerable challenge in decommissioning at Sellafield owing to past neglect. Since 2008, it has made progress by appointing a parent body to the site and agreeing with Sellafield Limited a more robust lifetime plan. The plan, which was agreed in May 2011, still contains uncertainties about delivery schedules and costs in the short and long term. The Authority does not yet have adequate external benchmarks to assure whether the plan is sufficiently challenging. It is too early to judge whether the Authority's appointment of Nuclear Management Partners Limited as the parent body of Sellafield Limited is value for money. Sellafield Limited has saved £425 million, compared to previous expected costs, and it has reported further savings that the Authority is reviewing. However, the portfolio of 14 major projects at Sellafield has so far not provided good value for money, with significant lifetime cost increases and delays of between 2 and 19 months during 2011-12. The Authority is working with Sellafield Limited and Nuclear Limited Management Partners to understand and address underperformance. Other activities on the site have improved, notably the increase in the amount of spent nuclear fuel reprocessed each year. Securing value for money will depend on how well the Authority develops its intelligent client capability by benchmarking Sellafield Limited's proposed performance and strengthening contract levers to incentivise progress towards risk reduction."²

4. Public Accounts Committee (PAC)

- 4.1 The PAC consisted of Rt Hon Margaret Hodge (Chair), Mr Richard Bacon, Meg Hillier, Austin Mitchell and Ian Swales. The witnesses called to give evidence before the panel were; George Beveridge Deputy Managing Director Sellafield, John Clarke Chief Exec NDA, Phil Wynn Owen –Acting Permanent Secretary DECC, Mark Higson Office for Nuclear Development DECC.
- **4.2** A number of Members and the Nuclear Energy Officer were present at the meeting. The following observations were made:
- **4.3** The panel accepted that the nuclear legacy at Sellafield is a unique and complicated problem that had largely gone unaddressed for generations, but being complicated was not an acceptable excuse. Sellafield Ltd were criticized by the Chair on the time and efficiency of projects. The panel questioned why risk had not been transferred from tax payers to private companies.
- 4.4 Meg Hillier questioned the witnesses on the level of jobs created in the area and what mechanisms are in place in the contracts to ensure local job creation and how does Sellafield measure success of money invested in socio economic schemes. The issue of innovation and spin out from Sellafield was also raised and the witnesses were asked how Sellafield was helping to support innovation in the area and what they are doing to improve this.
- 4.5 The issue of 'Reachback', where specialists from parent-body companies are utilized for their particular expertise, was raised and the level of pay was described as unjustifiable. In the USA earnings of such specialists are capped, however when they are brought to Sellafield the caps do not apply and they can earn substantially more. Why the same wage restrictions were not imposed was queried. The way in which work is tendered was queried. The Committee found it difficult to understand how the administrator of a contract was allowed to commission the work to their own company.
- **4.6** John Clarke of the NDA accepted that there had been mistakes made in the past, however he argued that the timeframes set by regulators were unrealistic and that is why projects had not been delivered on time.

4

² Managing Risk reduction at Sellafield pg46 http://www.nao.org.uk/publications/1213/sellafield_risk_reduction.aspx

- **4.7** The chair questioned if the Major Projects Authority (MPA) had been involved Mark Higson stated that they were aware that DECC had sent a letter to the MPA and were awaiting feedback as to whether they will review the projects.
- **4.8** A full audio transcript of the evidence gathering session is availed at: http://www.parliamentlive.tv/Main/Player.aspx?meetingld=11977

5. Way Forward

5.1 The Public Accounts Committee will, in due course, publish its own Report which will contain further recommendations for the NDA and Sellafield Ltd.

6. Appendix one – Letter of Public Accounts Committee (PAC).



Copeland Borough Council tel: 0845 054 8600 The Copeland Centre, fax: 01946 59 83 03 Catherine Street, Whitehaven, email: info@copeland.gov.uk Cumbria CA28 7SJ

web: www.copeland.gov.uk

The Rt Hon Margaret Hodge MP Chair of the Committee of Public Accounts House of Commons London SW1A 0AA

Dear Mrs Hodge

Managing Risk Reduction at Sellafield - Copeland Borough Councils response to the National Audit Office Report and questions.

The National Audit Office report reflects the complex nature of the work carried out at the Sellafield site and outlines some real risks which are now being addressed. The Council welcomes the report and the forthcoming visit by the Commons Public Accounts Committee (PAC) and would ask that the following comments and observation are taken into account in the 'evidence Session' to be held on the 26th November 2012.

The legacy of intolerable risks associated with Sellafield is something that Copeland Borough Council has always been aware of. It is the Councils responsibility to our local community to ensure that the NDA are doing their utmost to ensure that these risks are reduced and removed. There is some confidence that this is the case.

The Council recognises that the 'clean up' of Sellafield sites is a complex task one which has been further complicated by successive governments inability to galvanise concerted effort. Although it is a challenging task it is essential that local communities have confidence that the decommissioning and clean-up process is progressing and we welcome the scrutinizing of the operation of site achieving to ensure they are safe effective and offering value for money.

Issues Report Raised

The following are the key issues that this council believes should be considered:

1. Nuclear Management Partners (NMP) Ltd as the Parent Body Organisation (PBO) has an agreement with the NDA to improve performance by using outside expertise through the 'reachback' processes. It would be beneficial at this time to reflect on this approach and to see if it has been successful and delivered meaningful and measurable results for

the community of Copeland, both in achieving their initial goal of risk reduction and through the wider socio-economic impacts on the community and up skilling of the local workforce?

This issue is addressed in the report "Nuclear Management Partners also seconds specialists, known as 'reachback', partly to manage critical projects and programmes better. The Authority reimburses the cost, plus an additional 10 per cent contribution to the parent companies' overheads. Reachback costs totalled £44 million between November 2008 and March 2012. The cost in 2011-12 was £17 million, for 63 full-time equivalent secondees, against a forecast of £12 million. In February 2012, the Authority identified a lack of evidence to support using reachback resources. In response, Sellafield Limited has taken steps to improve its governance arrangements and in August 2012 produced a reachback deployment strategy." (Pg. 26, 2.16)

- 2. The report highlights that one of the key factors affecting performance is construction proceeding before design risks were sufficiently addressed (pg. 29, 3.1). The Council believes that this is a direct consequence of the design team working remotely. The design team needs to be relocated onto or in close proximity to the site, providing for far greater integration of design and implementation and more effective and immediate response to problems and issues which inevitably emerge given the complexity of the work involved. Linkages between design and implementation would develop organically and significant progress could be made to ensure that design issues are resolved prior to construction commencing. It would also directly facilitate a feedback process where lessons learnt from the implementation stage can be fed back into the design process. What is the rationale behind having the design team located in any location other than in close and practical proximity to site?
- 3. Throughout the report there are numerous references to the cost over runs and under performance of projects stating that "Between May 2011 and March 2012, 12 of the Authority's 14 major projects delivered less than planned." (Pg. 8.11). The report is critical of the implementation of 'Risk Transfer' as the NDA reimburses Sellafield Ltd for all reasonable costs and the ability of the NDA to both set the budget at the start of the year and to then amend it (pg. 35, 3.9). There is little accountability for cost overrun and the fees incentive to keep cost down is ineffective. The Council seeks further clarity into how the NDA "is considering how the existing incentive framework could be strengthened if it is chooses to renew the parent body agreement in 2014"?
- 4. The report states that "Gaps in the capability of subcontractors in the supply chain to undertake work to the standards required for nuclear installations have had direct consequences for the speed and efficiency of project delivery" (Pg. 38 3.11). The NDA and Sellafield have a commitment to work with the local supply chain to help it become 'fit for purpose'. How has the NDA/Sellafield allowed such an avoidable situation to occur and what strategy are they implementing to ensure that this gap is plugged, to enable the supply chain to work effectively?
- Local suppliers have difficulty in accessing the work at Sellafield. This is a direct result of
 the procurement process and the implementation of a large-scale framework contracts.
 There appears to be a blockage in the filtering down of large scale projects from tier 2
 contract holders to local sub-contractors. The report states that the NDA is working

- with Sellafield Ltd to develop its procurement strategy (Pg. 38 3.12). How will the framework be modified? And how will the concerns as outlined above be addressed?
- 6. Under the Energy Act 2004 the NDA has a duty to consider the socio-economic impacts of its strategies and plans. The Council echoes the concerns raised by the Public Accounts Committee and the calls to incentivise site operators more effectively and to strengthen their supply chain (Pg.6.6). An effective quality assurance process needs to be in place to ensure that Sellafield Ltd is helping local firms. Is there adequate provision to ensure that the NDA holds Sellafield to account for their socio-economic obligations to the locality?
- 7. The existence of intolerable risks at Sellafield has arisen as a result of successive government's inability to address the problem and deferred decision-making. What have been the effects of deferred decision making (Pg.16, 1.10) and how are lessons learnt from this experience taken forward in the current decommissioning programme to ensure that we leave a positive legacy for future generations?

The Council appreciates the opportunity to critically review the strategy, plans and processes currently implemented within the Sellafield decommissioning strategy and governance system. We would welcome the opportunity to work with the NDA and the NMP to provide positive meaningful engagement that would help facilitate the future implementation of the plan through successful community engagement and adding value to the local supply chain.

If you require any further clarity on any of the points raised above please do not hesitate to get in touch. I would be pleased to have the opportunity to elaborate.

Yours Faithfully

Cllr Elaine Woodburn

Leader of Copeland Borough Council

En doch