

Annual Review 2014

Who we are and what we do

The UK's National Nuclear Laboratory (NNL) offers a breadth of technical products and services supporting the complete nuclear fuel cycle, from fuel manufacture and power generation to reprocessing, waste treatment and disposal. We operate from six sites in Cumbria, Lancashire, Cheshire, Gloucestershire and Oxfordshire, although most of our work is focused around our sites in the North West of England, and we are the second biggest industrial employer in West Cumbria.

With over 10,000 man years of nuclear experience across the fuel cycle, coupled of UK nuclear research and development with world-leading nuclear R&D facilities, we deliver the experts and technologies that ensure the UK nuclear industry operates safely, efficiently and cost

NNL plays a central role in the co-ordination and maintains close links with academia and industry. We support Government in safeguarding the UK's nuclear skills and capabilities and provide advice on key strategic decisions.

Contents







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Our facilities:

- Workington
- Sellafield/Windscale
- Preston
- Risley
- Stonehouse
- Harwell



Our scope of work includes:

- Measurement and analysis
- Waste and spent fuel technology
- Fuels and radioisotopes
- Safety management
- Asset care
- Security
- Reactor operation support
- Environmental services

Our UK customers include:

- Nuclear Decommissioning Authority
- Sellafield Limited
- EDF Energy
- Ministry of Defence
- Springfields Fuels Ltd
- AWE

In other parts of the world we work with Governments and utilities as well as other national laboratories.



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Introduction from the Chairman

Significant changes heralded at the end of the 2012/13 financial year came into effect during 2013/14, making this a transformational year for the National Nuclear Laboratory.

Richard Maudslay Chairman



As I mentioned in our 2013 Annual Report, the Government's Nuclear Industrial Strategy included a number of major developments for NNL, making us a true National Laboratory. These changes move the organisation closer to the centre of the UK Government's thinking on nuclear technical matters

In October 2013, we made the transition from a GOCO (Government-Owned, Contractor-Operated) business to a GOGO (Government-Owned, Government-Operated) business. We said goodbye – in a contractual sense – to Serco, Battelle and The University of Manchester (SBM) and I would like to thank them publicly for their contributions to the successful stewardship of the business during their five year involvement. We are delighted that the two most senior members of the SBM management team elected to remain with NNL following the transition – Paul Howarth as Managing Director and David Healey as Finance and Commercial Director

Later in the year both Ian Smale and Peter Jones came to the end of their terms as Non-Executive Directors and I would like to thank them both for their excellent and thoughtful contributions. We welcomed Craig Lester as a Non-Executive Director, thereby strengthening our links with the Government's Shareholder Executive. As we move forward, we shall expand and further strengthen our Board; the additional talent will assist us to meet the wider and more strategic remit which the Government has given us. At the time of writing we have appointed Mike Weightman, Sir Andrew Mathews and Iain Lanaghan to the Board.

Despite some challenging times in the sector and the considerable changes we went through as a business, I am very pleased to report that once again we were able to record a significant profit. This will be ploughed back into the business - supporting our longterm needs through the commissioning of enhanced facilities and into research and development initiatives.

Fundamental to our on-going success is the skill and dedication of our loyal workforce. I would like to pay tribute to their achievements and look forward to building on these during future years.

In summary, this has been a very successful year for NNL on a broad range of measures. I hope you enjoy reading the details of these successes throughout this report.



11% increase Revenue growth in underlying

business

I am very pleased to report that once again we were able to record a significant profit - this will be ploughed back into the business.

Managing Directors' overview

I must begin by echoing Richard Maudslay's words - this has been a very positive year for NNL and for all of the people associated with the business.

Paul Howarth Managing Director



There have been a number of attentiongrabbing pieces of news from Government and elsewhere which have been central to our work, but I would like to start by reflecting on something even more important – another 12 months where we have seen truly excellent safety performance across NNL. Our performance through the year saw us reach almost 14 million hours worked without a lost time accident - a truly remarkable achievement.

The news from Government has been most encouraging this year, with a series of important announcements building on the foundations of the Nuclear Industrial Strategy. As a research organisation, we were particularly pleased to see the establishment of both the Nuclear

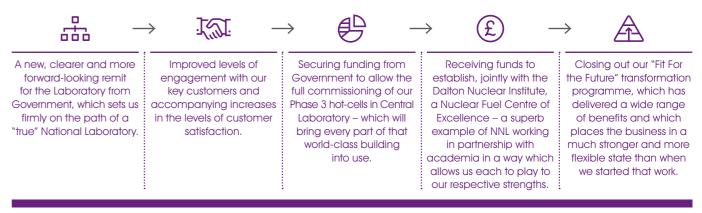
Innovation and Research Advisory Board (NIRAB) and the Nuclear Innovation and Research Office (NIRO) - the latter based within NNL's Warrington offices. These two bodies will be key in identifying areas where the UK needs to focus attention in civil nuclear R&D and in recommending programmes to fill any gaps. I am pleased that NNL is so closely linked in to this important agenda, which is critical to secure the long-term health and benefit of our sector.

Following the end of the SBM management contract, the new Government-Owned, Government-Operated operating model is testament to Government's faith in NNL as the "go to" organisation on nuclear fission.

All of this could not have happened without our track record – not just on knowledge, insight and innovation - but also our ability to deliver a complex and challenging portfolio of work to our customers in UK and overseas. The operating profit from the delivery of this work will form the basis of our internally-driven Signature R&D programme as well as forming a key element of the investment in facility upgrades, thereby helping to secure our long-term future.

These are exciting times for me to be leading NNL and I believe they are also exciting for everyone who works in the business - as well as those who may be contemplating joining us.

In addition to our safety performance and delivery of projects for our customers, some highlights for me during the year 2013/14 include:





The new Government-Owned, Government-Operated operating model is testament to Government's faith in NNL as the "go to" organisation on nuclear fission.

Business review and strategic objectives

Business model

NNL provides an extensive and integrated range of technology services and solutions across the nuclear fuel cycle, based on the powerful combination of a highly experienced workforce, with unique skills and internationally recognised expertise, and specialist nuclear facilities.

NNL provides technical support and services to customers in three key business areas:

Waste Management and Decommissioning

This business is focused on supporting customers via the development and application of technologies and techniques that assist with the clean-up and eventual decommissioning of nuclear facilities. The business comprises the skills and facilities required to cover the full extent of waste management and decommissioning projects. Particular areas of expertise include environmental and effluent management, measurement and analysis, waste and residue processing, and waste immobilisation technology. Programme integration and project management also form a key part of the service portfolio.

and Fuel Cycle Solutions

This business is focused on providing fundamental technical solutions to customers in the nuclear industry. Particular areas of expertise include fuel cycle performance and associated technology development, spent fuel disposition and plant integrity. The business also offers nuclear security, safety management and engineering services. An advanced modelling and simulation capability underpins the activities of the business.

Reactor Operations Support

This business provides key services to reactor operations including post irradiation examination of fuel, components and graphite to enhance reactor performance. The business also offers power station chemistry, endoscopy and metallography services.

NNL's largest customers are the Nuclear Decommissioning Authority (NDA), Sellafield Limited, Springfields Fuels Limited, EDF Energy and the Ministry of Defence (MOD). NNL also serves other customers in the UK, USA, Japan, Europe and Middle East.

NNL has a number of unique nuclear facilities. The flagship facility is the Central Laboratory located on the Sellafield site. It is unique in the UK with a capability that includes non-active/ active laboratories and a rig hall. Other facilities include the Windscale Laboratory (active handling and inspection), Preston Laboratory (uranium research) and the Workington Laboratory (non-radioactive test rig services).

Office based facilities are located at Risley (modelling and simulation/environmental management), Stonehouse (reactor operations support) and Harwell (materials science and chemistry).





Strategic objectives

The NNL vision is to deliver the best nuclear science and technology solutions in the world and our mission, which represents what we must do, is to be the key UK civil nuclear fission R&D provider by:

- Delivering high value independent, authoritative advice and a quality service to our customers
- Creating value for stakeholders by maintaining the commercial basis for our business and sustaining a strong positive cash flow for reinvestment in programmes and capabilities
- Increasing our influence on the UK nuclear research agenda

NNL has five strategic objectives which have been developed to drive the business to deliver its vision and mission. Together with high standards in operational EH&S, security and quality performance, which are a prerequisite, NNL's agenda is firmly focused on the following objectives.



Maximise NNL impact on UK nuclear agenda

This objective sets out to reinforce NNL's position as the key advisor to government and industry, and grow its role as the UK technical advisor whilst delivering National Strategic technical work. It also aims to ensure NNL continues to evolve into a true National Laboratory taking science to solutions by utilising its experienced staff and unique facilities to form partnerships with customers, universities and key nuclear service advisors.



Grow and deliver sustainable commercial revenues

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In order for NNL to be commercially successful, it is essential that revenues are sustained above a level that supports its fixed cost base; this provides the flexibility required to deliver the mission. Commercial success is fundamental in order to generate the surpluses required to deliver the remaining strategic objectives.



Maximise impact of science and technology

The impact of NNL's science and technology is determined by a range of factors including reputation, culture, skills, facilities, and programmes of work. Delivery of this strategic objective requires optimisation of each factor.

Become recognised as employer of choice in nuclear sector

NNL aims to be recognised as the employer of choice in the nuclear sector and the world's best lab. In order to do so, NNL must be seen to develop and attract the best people to deliver the best programmes of work, in the best facilities, in the best way.

The science and technology and facilities strategic objectives respectively seek to address the programmes of work and facilities aspects of this aspiration. However, developing and attracting the best people and ensuring work is delivered in the best way will only be achieved through implementation of a people strategy aimed at attracting and developing the right talent, and establishing the right culture, reputation and reward structures.





Optimise facility availability and utilisation

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National R&D Programmes are expected to result in significant new programmes of work for NNL's facilities. NNL's commercial revenues are growing significantly and this growth is dominated by new work in NNL's facilities. At the same time, a significant investment programme is underway to develop NNL's facilities. Facilities that are currently in care and maintenance are being commissioned and ageing facilities refurbished. This development programme places further demands on NNL's facilities and, in the case of refurbishment. restricts available capacity.

These opportunities will place unprecedented demands on NNL's facilities during the next few years. Benefits will include additional capacity, new capabilities and further operational flexibility. A facilities strategy has been developed to address these demands, building on progress achieved to date and reflecting feedback received from stakeholders and users of the facilities.

Review of business

The Government completed a strategic review of NNL in 2013, the results of which were published as part of its Nuclear Industrial Strategy (NIS) on 26 March 2013. The NIS outlined a new co-ordination role for NNL and set out that NNL would move to being a Government-Owned, Government-Operated (GOGO) company when the management contract with the Serco, Battelle, and University of Manchester consortium (SBM) came to an end.

SBM continued to manage NNL until 30 September 2013 after which NNL moved to being a GOGO company. NNL retains its existing corporate structure so continues to report through the NNL Board to DECC via the Shareholder Executive.

The NIS set out that the UK should establish a national programme of civil nuclear R&D and that Government should invest in facilities to support both such a programme and the wider industry. Central to its recommendations is the clear need to have a strong UK National Laboratory for the nuclear sector. NNL has therefore become more involved in advising Government on nuclear matters and in strategic research projects, in addition to work for commercial customers.

The Government has established a Nuclear Innovation Research Advisory Board (NIRAB) and a Nuclear Innovation Research Office (NIRO) to coordinate the nuclear energy national R&D programme; NIRO is hosted by NNL. NNL has also received grant funding from Government to establish a Nuclear Fuel Centre of Excellence (NFCE) in collaboration with the Dalton Cumbria Facility (DCF) and a National Nuclear User Facility (NNUF) in collaboration with both the Culham Centre for Fusion Energy (CCFE) and DCF. These both contribute to the delivery of its new mission.

NNL signed a number of agreements and memoranda of understanding during the year reflecting its increasing role as the UK's national nuclear laboratory. Agreements with key French nuclear organisations, Commissariat à l'Energie Atomique (CEA), Areva and EDF Energy, were signed as part of the David Cameron, François Hollande 2014 Anglo French summit. Other collaborations include:

Organisation	Purpose
CCFE	Materials research, advanced computing technology, modelling and simulation, robotics and remote handling and neutronics, all of which are relevant to both nuclear fission and nuclear fusion.
CEA	Cooperation on advanced fuel and reactor technologies, particularly with regards to the ASTRID fast reactor.
Areva	Developing nuclear fuel cycle technology, building on NNL's involvement in the UK's Nuclear Fuel Centre of Excellence and exploring technologies to enhance existing plant lifetime.
EDF Energy	Research, education and training for nuclear energy with a particular focus on the new build programme.
Nuclear Advanced Manufacturing Research Centre	Nuclear skills development, with a strong emphasis on the development of Subject Matter Experts, working alongside the National Skills Academy for Nuclear and its extension into the field of nuclear manufacturing.



NNL has three major investment programmes in progress to commission or refurbish key nuclear facilities. Upon completion these investments will all release significant new capability into the business.

Central Laboratory Phase 2

(Alpha Radiation Laboratories) Work during the year identified a number of issues which have increased cost and extended the expected commissioning time. Final completion of commissioning works in Phase 2 is now likely to be further delayed to early 2016 by the need to meet Sellafield's new site-wide security requirements.

Central Laboratory Phase 3 (High Active Cells)

A risk reduction and general scoping programme was successfully completed during the year. Further work is required to finalise the commercial arrangements with customers for use of the facility. Until these commercial arrangements are firmer and customer requirements are fully understood, further progress on commissioning the facility will be limited.

Windscale Laboratories (High Active Facility)

Despite good progress elsewhere, some ongoing difficulties were encountered in completing a key outage to refurbish the import / export route to the facility. This impacted both operations in the facility during the year and progress on other aspects of the refurbishment. The import / export route was returned to service in July 2014.

Funding for these facility investments continues to be provided by NNL's parent company (NNL Holdings Ltd) and by re-investment of NNL's profits.

Key Performance Indicators (KPIs)

NNL uses performance indicators, both financial and non-financial, to monitor its progress, some of which are used to calculate employees' bonuses. The non-financial KPIs are shown below.

KPI area	KPI	2014 target	2014 outturn
67	Days Away Case (DAC) events (including contractors)	2	0
Safety	OSHA recordable injuries	4	1
	Significant events including RIDDOR	2	0
니드 III health	Days sick per employee (excluding long term sickness)	2.8	3.3
Environmental	Environmental Agency (EA) compliance classification scheme Cat 1 and 2 events	0	0



Overall performance on non-financial KPIs remains good but actions continue to maintain or improve the results.

Financial review

During the year NNL continued its focus on delivering services to its customers, maintaining quality and delivery standards while implementing significant facility investment projects. NNL has demonstrated a consistent ability to win new work in increasingly competitive markets, successfully managing and delivering projects whilst maintaining a strategic UK skills base and delivering value to both its customers and owner.

Total revenue was below the level achieved in 2013 due primarily to a reduction in revenue recognised on the Central Laboratory Phase 2 commissioning project. In addition the ongoing difficulties with part of the refurbishment of the Windscale Laboratory have restricted operations, impacting both revenue and margins. Revenue growth was however achieved with a number of customers leading to an increase in underlying business of 11%.

Revenue

	2014 £m	2013 £m	Change %
Underlying business	85.4	77.6	+11
Central Laboratory Phase 2 commissioning project (note 1)	0	9.3	-100
Total	85.4	86.9	-2

Note 1

The Central Laboratory Phase 2 commissioning project is backed by a contract with Sellafield Ltd who will utilise a large proportion of the capacity of the facility once commissioning is complete. As a result of these arrangements the project is accounted for as a construction contract in accordance with IAS 11.

Revenue on the Central Laboratory Phase 2 commissioning project is recognised by multiplying the total contract value by the percentage of the work completed. The percentage of work completed is assessed on the basis of proportion of total expected costs actually incurred. A number of issues were identified during the year which led to an increase in the total expected cost. Although the project continued to progress towards completion during the year, the increase in actual costs was matched by a proportionate increase in the total expected costs resulting in no further increase in the percentage of work completed. On this basis, although the project remains profitable no further revenue has been recognised this year.

There has been little change in the major customers in the year, the main ones again being Sellafield Ltd, EDF Energy LTD, Springfield Fuels Ltd, the Ministry of Defence and the Nuclear Decommissioning Authority.

Operating costs

Total operating costs have decreased by £0.7m. The incentive fees paid to the managing contractor (SBM) in 2013/14 are £1.1m lower than the prior year, as a result of the GOCO contract ending on 30 September 2013. Staff costs have increased significantly year on year but most of this increase is driven by the demand from capital investment projects.

Profits and dividends

	2014 £m	2013 £m	Change %
Underlying profits	8.7	10.3	-16
Managing contractor (SBM) incentive fee	(0.6)	(1.6)	+63
EBIT (profit from operations)	8.1	8.7	-7

Costs were closely managed in order to maintain operating margins, however underlying profits were impacted by the issues with the Central Laboratory Phase 2 commissioning project and Windscale Laboratory refurbishment resulting in a reduction of 16%. This was partially offset by the saving in the year on the managing contractor's (SBM's) incentive fee, which reduced by £1.1m largely as a result of the management contract ending on 30 September 2013, leaving EBIT 7% below 2013 performance.

Fixed assets

To achieve its mission of delivering the best nuclear science and technology solutions, NNL continues to invest in its long-term future; £21.7m was invested in fixed assets in the year. The principal investments were:

- Enhancements to the Windscale Laboratory £9.5m
- Enhancements to the Central Laboratory in Phase 3 £4.9m
- Establishment of a Nuclear Fuel Centre of Excellence £5.5m

The enhancements to the Central Laboratory in Phase 3 and the establishment of a Nuclear Fuel Centre of Excellence were both funded by government grants. The enhancements to the Windscale Laboratory were partially funded by a grant from the NDA.

Other non-current assets and liabilities

Intangible Assets are comprised principally of a £2.6m service concession asset – this is the value attributable to NNL's right to use some capacity in Phase 2 of the Central Laboratory which is being commissioned primarily for Sellafield Ltd's use. The amount is expected to be recovered from future work to be undertaken for third parties.

The trade and other receivables balance of $\pm 12.6m$ represents amounts due for construction activities in Phase 2 at Central Laboratory.

Trade and other payables of \pounds 29.9m mainly represent capital grants received and receivable in respect of the investment programs described earlier. This balance also includes a loan of \pounds 4.2m from NNL (Holdings) Ltd which is supporting the laboratory investments.

Current assets and liabilities

Trade receivables have increased \pounds 10.4m since 2013 which is attributable to timing of work during the year – a number of programmes on which work had been in progress for much of the year were only invoiced in quarter 4. Other receivables have increased \pounds 7.8m since last year due to grants related to the capital investment programme which had not been received at the balance sheet date.

Trade and other payables have increased \pm 5.6m, principally as a result of a capital grant payable to Manchester University and an increase in trade accruals.

Cash at bank at 31 March stood at £13.1m.

Treasury management

Cash sums that are surplus to immediate requirements are deposited in an interest bearing account at the Royal Bank of Scotland.

NNL does not have significant foreign currency transactions; in the main foreign exchange gains and losses are accounted for as they are incurred. However, for significant foreign contracts, NNL policy is to hedge against specific foreign currency risk. At 31 March 2014, NNL had minimal currency exposures (2013 – negligible).

Credit risk

NNL is exposed to credit risk from its trade receivables due from customers and cash deposits with financial institutions. The financial position of NNL customers is assessed at the time credit terms are applied for and on a continuing basis. Provision is made for any debts which are considered to be doubtful. At the year end, management do not consider there to be any material unprovided doubtful debt.

Cashflow risk

NNL monitors cash flow risk by maintaining and monitoring cash flow forecasts and ensuring that adequate unutilised borrowing facilities are maintained.

Supplier payments

It is NNL's policy to follow the Prompt Payers Code of Practice drawn up by the Confederation of British Industry (CBI). This policy requires NNL to agree the terms of payment with its suppliers, to ensure that those suppliers are aware of those terms and to abide by those terms. Copies of the code are available from CBI, Centre Point, 103 New Oxford Street, London WC1A 1DU. NNL's main payment terms are net monthly.

Events after the reporting period

There have been no events after the reporting period which require disclosure.



Financial and Commercial

David Healev

E21.7m Invested in fixed assets in the year

To achieve its mission of delivering the best nuclear science and technology solutions, NNL continues to invest in its long-term future.

Future outlook

In response to the NIS, NNL's vision and mission has been restated to give particular emphasis to its role in supporting UK national programmes across the civil sector. New strategic objectives have also been agreed with stakeholders to enable NNL to evolve into a true National Laboratory and the principal R&D delivery organisation for national nuclear programmes.

Overall drivers for NNL include the objective to support the UK's strategic nuclear research and development requirements and operate supporting facilities. NNL will lead and integrate technology programmes and provide advice to Government in support of nuclear policy. As a major priority, NNL will identify, safeguard and enhance key nuclear scientific skills and facilities and develop a technology skills pipeline into industry.

NNL's new strategic objectives encompass and coordinate strategies to develop its role supporting the UK nuclear agenda, business development, science and technology, people, and facilities. Surpluses generated through commercial work will be reinvested in national programmes. Commercial success is a prerequisite to generate the surpluses that allow such reinvestment.



Delivery of the new strategic objectives will require: significant revenue growth, all facilities commissioned and fully utilised, and new contracts in place with key customers including Government. NNL will also support NIRAB/NIRO to secure funding for the Nuclear Energy National R&D Programme and aims to position itself as the lead R&D provider to NIRO.

Existing customers constitute the principal growth drivers, in particular Sellafield Limited, MoD and EDF Energy. NNL's current key contract with Sellafield Limited will expire at the end of March 2015 and therefore must be renewed in the near future. NNL is working with Sellafield,

the NDA and Government to optimise the arrangements for NNL to support Sellafield into the future. Growth is also projected in new markets. NNL's market strategy focuses on higher growth sectors where NNL is differentiated.

NNL will deliver its new mission through establishment of further Centres of Excellence (CoE) in national programme areas. NNL aims to re-define its relationships with key customers as partners in these CoE's. In order to initiate and lead National R&D Programmes, NNL will establish a portfolio of relevant, self funded National Programme R&D work.

Risks and uncertainties

The Directors are confident with regard to the future of the business. Nonetheless, risks and uncertainties do exist which could adversely impact future financial performance. The principal risks arising from NNL's operations and how NNL manages these risks are set out in the table below. Management actions to reduce risk ation and Participation in wider nuclear It in local safety community, sharing best additional practice and learning from confidence experience enerally and Development and testing of arket size; loss business continuity arrangements Actions to improve safety culture of reputation ee and/or Reinforce safety, security, tation, loss environmental and quality sed costs or culture and compliance lepending Introduce specific programmes to target any areas of concern evenues from Work with Sellafield, the NDA and Government to optimise the arrangements for NNL to support Sellafield into the future Position NNL's services into areas with high priority government funding Pursue additional nongovernment funded work Develop markets and offerings to expand customer base nd loss of Effectively manage delivery of Windscale Laboratory refurbishment programme Implement mitigation actions to minimise impact of building improvements on customer programmes Effectively manage stakeholder relationships

Risk description	Impact
Nuclear accident	Depending on loca severity, could resul access constraints; cost burden; loss of in nuclear power ge hence reduced ma of key facility; loss o
Significant health and safety, security, environmental or quality event	Loss of key employe facility, loss of reput of revenue, increas regulatory action d on event
Reduced scope of work under any replacement Sellafield contract (due for renewal by March 2015), or significant funding cuts by the Government / Nuclear Decommissioning Agency resulting in reduction in market size or competitive pressures increasing	Significant loss of re core customers
Windscale Laboratory unavailable due to unreliability	Loss of revenues an reputation

Sustainability report

By the end of the year, we had worked for nearly 4 years and over 6 million hours since the last NNL Days Away Case and 9 years/13.9 million hours since the last Lost Time Accident. This is a tremendous performance of which we are justifiably proud.

We also reported no RIDDOR (Reporting of Injuries Diseases and Dangerous Occurrences Regulations 1995, amended) reportable events during 2013/14 and nor have there been any "significant events" during the year.

For reasons explained below NNL has seen a significant increase in the numbers of more minor events being reported across the business – around 200 more such events than the previous year. This is attributed mainly to an increased focus on the security and quality cultures with the organisation, bringing them into line with our safety culture. We firmly believe that by reporting - and acting upon these more minor events, we help to prevent more significant occurrences.

Similarly, we saw an increase in "near misses" during the year (from four to nine), although three of these were attributable in some way to the extreme weather conditions experienced during the winter.

As a result of this vigilance, we were delighted to hear in the spring of 2014 that NNL had won the prestigious RoSPA (Royal Society for the Prevention of Accidents) R&D Sector award for 2014. NNL has now won the sector award eight times, alongside three Highly Commended awards, in the last 11 years.

In order to ensure that NNL maintains a high level of health and safety performance and enhances its security and quality performance we are continuously looking at ways to improve our cultures. Specific programmes will be launched in the coming year around security together with the adoption of leading indicators across all areas to help anticipate and manage trends in performance.

14 million hours Worked without a lost time accident



during 2013/14 In order to ensure that

NNL maintains a high level of health and safety performance and enhances its security and quality performance we are continuously looking at ways to improve our cultures.

On environmental matters, NNL continues to demonstrate strong performance across all key aspects. Compliance with environmental permits and authorisations across all facilities was maintained. Waste management procedures remained robust with no reported events arising from NNL waste streams. This represents a continuation of the good performance levels achieved during the last five years and beyond.

We recorded six minor environmental events during the year, primarily minor spills or leaks, all of which were controlled and managed internally with no significant or lasting consequences. This was the lowest total in the last four years. Finally, but importantly, the year also included re-certification to ISO 14001 (Environmental Management System) following completion of the three year assessment and review cycle.

Our people

Within NNL we continue to provide learning and development opportunities for all of our staff. The opportunities we now have for growing the business make the development and retention of our staff an even higher priority than previously. We have extensive work ongoing to develop both the technical skills to support nuclear R&D in the future as well as developing the other skills of our people, including behavioural skills.

A dedicated Learning & Development directory has been launched and internal development programmes such as our 'Emerging Leaders' and 'Technical Excellence' programmes have been well received. These programmes sit alongside our wellestablished graduate development programme recruitment, we have been actively and our newly created apprentice programme. Our increased focus on developing our leaders has continued with significant investment in leadership training.

We continue to see an encouraging improvement in the level of employee engagement, which was one focus of the 'Great Place to Work' strand of NNL's Fit For the Future transformation programme. That work has delivered some significant positive changes, including improvements in the following areas:

- The manner in which NNL views its service to customers
- 'Open and transparent' communication
- Quantity and quality of discussions regarding each individuals' development plans and career path
- A re-launched learning and development process including the 'Career Pathways' tool.

The results are used to focus on further improvement in areas such as rewarding and recognising contribution and in raising the profile of our senior leaders across the organisation.

We continue to see an improvement in the levels of sickness absence among employees In 2013/14 an average of 3.26 days per employee were lost to sickness (down from 3.58 in 2012/13). This compares very favourably with an average of 7.6 days lost per employee in the UK and 8.7 days across the public sector. Employee absence is always carefully monitored and return to work interviews carried out by managers to ensure appropriate support or adjustments can be offered.

NNL remains committed to a policy of equal opportunities for all employees, and great care is exercised in our recruitment and selection procedures with training given to all managers to ensure that there is no discrimination. Whilst we do not discriminate in supporting a number of schemes to encourage more girls and women to consider studying science, technology, engineering and maths (STEM) subjects, and to consider the nuclear industry as a potential career option. NNL is strongly represented in the newly-formed UK Women in Nuclear group.

Employee recognition

We were delighted that NNL Research Fellow Dr Dominic Rhodes was appointed MBE for his services to Science in the 2014 New Year's Honours list.



3.26 days

Per employee were lost to sickness (down from 3.58 in 2012/13

This compares very favourably with an average of 7.6 days lost per employee in the UK and 8.7 days across the public sector.



Our communities and customers

During the year, we have strengthened our focus on Corporate Social Responsibility (CSR) work as this becomes a key element of the way we do business under NNL's new remit.

We have developed a more structured way of assessing and responding to requests for support, with a strong focus on STEM activities and on helping the communities where we are based and where our staff live. Our increasing public profile means we continue to receive more requests for support than ever before and we are careful to ensure that we balance the way we contribute across a range of activities and locations.

During the year we funded over 2000 hours of our employees' time for CSR work, and we know that this was exceeded substantially by the contributions that employees made in their own time. Some highlights are listed below:

- We worked once again with the well-respected Smallpeice Trust, running seven courses through the year. We led a group of Cumbrian companies offering STEM activities to thousands of young people as part of the Whitehaven Festival.
- We were once again actively involved in the Engineering Education Scheme.
- We took two sixth-formers into NNL for a week in February as part of the "Dream Placement" scheme.
- We have supported local schools with numerous visits and events.



O New recruits taken on during 2013/14

At the end of 2013/14 we had a total of 28 apprentices in the business.

Building on this success, we committed to sponsor both the Cheshire Science Festival and the Lancashire Science Festival during 2014/15, and to participate actively in both events. We will also be present at the Cheltenham Science Festival and the Farnborough Airshow, amongst many other events.

We hosted around 12 summer student placements and around 35 work experience places during 2013/14, all aimed at giving young people an insight into what it is like to work in the nuclear industry and to demonstrate the range of opportunities offered by the sector.

We took on a total of 80 new recruits during 2013/14, including 18 graduates and eight apprentices. At the end of 2013/14 we had a total of 28 apprentices in the business.

Our Directors

The Directors of NNL during the year were:			
Richard Maudslay CBE FREng	Chairman		
Peter Jones FCCA (Resigned 31/07/2014)	Non-Executive Director		
Ian Smale (Resigned 31/12/2013)	Non-Executive Director		
Craig Lester (Appointed 18/03/2014)	Non-Executive Director		
Paul Howarth	Managing Director		
David Healey FCCA	Finance Director		
Since the year end and prior to the signing of the financial statements the following Directors were appointed:			
Mike Weightman CBE (Appointed 08/08/2014)	Non-Executive Director		
Sir Andrew Mathews KCB (Appointed 05/08/2014)	Non-Executive Director		
lain Lanaghan (Appointed 12/08/2014)	Non-Executive Director		

Paul Howarth

Paul was appointed as Managing Director of the National Nuclear Laboratory on 1 January 2011. A Technology Director with a track record of establishing and delivering multimillion pound nuclear energy programmes, Paul has a wide understanding and appreciation of the varied drivers in the academic and business worlds. Paul has run large groups and extensive portfolios in both environments and engaged with senior stakeholders across Government, academia and industry. He has a strong knowledge of the research affairs of national and international nuclear organisations.

Paul co-founded the Dalton Nuclear Institute at the University of Manchester. He worked with BNFL, the North-West Development Agency (NWDA) and the University of Manchester to formulate and agree the case for the Institute. Prior to working at the University, Paul spent 11 years with the BNFL Group. He joined Research and Technology (NNL's predecessor) in 1998 and progressed from Commercial Manager to Head of Technology for Nuclear Generation. From there, he eventually made the step up to Programme Director for Advanced Reactors and Head of Group Science and Skills Strategy.

David Healev

David was appointed Financial and Commercial Director on 3 April 2009. An experienced Financial and Commercial Director, David has more than 20 years' experience spanning a number of different companies and industries. Most recently, David has been a Commercial Director within Serco's Defence, Science and Technology division. Here, he was the Deputy Financial

and Commercial Lead on the £5bn Search and Rescue Helicopter competitive dialogue PFI bid. David's was also the financial and commercial lead on the successful SBM bid to run the NNL.

David's previous experience covers many industry sectors both in the LIK and internationally, managing the finances and commercial aspects of businesses with revenues in excess of £50m and achieving considerable cost savings during periods of business restructuring.

David is a Fellow of the Chartered Association of Certified Accountants.

Richard Maudslay CBE

Richard was appointed Chairman on 18 May 2009. Much of his career had been in the power engineering sector, including seven years as the Managing Director of NEI Parsons Ltd, prior to its merging with Rolls-Royce. At Rolls-Royce, for five years Richard was the Managing Director of their Industrial Power Group and a Main Board Director. There, he led Rolls-Royce's exit from large steam power generation and prepared other parts of the Group for sale. Since 1998, Richard has held a range of Non-Executive Chair and Director roles with publicly listed, privately owned and government owned businesses. These have included a Ministerial appointment to Chair of DSTL (MoD's Defence Science and Technology Laboratory) between 2005 and 2008, during a time of considerable change. His involvement with government also includes being a member of the DTI Enterprise and Business Group Board (2002 – 2007) and Chair of the North East Science and Industry Council (2004 - 2008).

Craia Lester

Craig currently works at the Shareholder Executive (part of BIS) and is the Government's non-executive shareholder representative on the Board of the National Nuclear Laboratory, as well as being a Non-Executive Director of Ordnance Survey. During the year, he stepped down from the Board at Companies House.

Before that he led the Shareholder Executive's Nuclear Decommissioning Authority team and has had a varied career across the public sector, including senior policy, operational and delivery roles in HM Treasury and HMRC. He also spent three years as Director of Client Development at the Valuation Office Agency leading their feeearning property work.

Mike Weightman

After graduating Mike worked for 13 years in the nuclear industry before joining the Nuclear Installations Inspectorate, part of HSE's Nuclear Safety Directorate. He progressed through the ranks and held a variety posts covering the whole of the nuclear industry. In 2013, Mike retired from his post of HM Chief Inspector of Nuclear Installations and CEO of the Office for Nuclear Reaulation.

As part of his career in HSE, Mike led the independent investigation into the Potters Bar rail disaster, brought together the regulation of nuclear safety, security and safeguards, prepared the nuclear regulator for new nuclear build and drove forward the Office for Nuclear Regulation toward independent operation as a statutory corporation.

He is well known internationally having been the Chair of the OECD Nuclear Energy

Agency's Committee on Nuclear Regulatory Activities, is a member of the IAEA's International Nuclear Safety Advisory Group, and led the IAEA's Fukushima Fact Finding Mission to Japan in May/June 2011.

Mike continues to be active in the nuclear field as:

- A Non-Executive Director for the UK National Nuclear Laboratory;
- An independent international advisor to the Japanese Nuclear Regulation Authority;
- A visiting Professor at Cambridge University Engineering Department;
- Consultant to the NEA and IAEA;
- Independent Advisor to several engineering companies, and undertaking various projects including evaluating the Finnish SAFIR nuclear research programme on behalf of the Finnish Government.

He is a Fellow of the Royal Academy of Engineering, Institute of Physics, and Institute of Mining Minerals and Materials. In 2013 he was made a Companion of the Order of the Bath for his services to nuclear safety.

Andrew Mathews

Andrew Mathews joined the Royal Navy straight from Newcastle Royal Grammar School in 1976. Initial training at Dartmouth, was followed by an engineering degree at the Royal Naval Engineering College Manadon and nuclear training.

Andrew joined his first nuclear submarine, HMS Turbulent, building in Barrow in Furness in 1983. Further sea appointments included the Marine Engineer Officer (MEO) of HMS Trenchant, the Navy's then newest submarine, and MEO to Captain Submarine Sea Training; responsible for submarine safety training

and nuclear watch keeping standards across the RN's submarine flotilla.

Sea appointments were sandwiched between shore jobs in submarine support and acquisition and courses which included an MSc in nuclear reactor design and a two year period working on the design of the Navy's next generation of PWR. Promoted Commodore in 2002 as Naval Base Commander Devonport, he was responsible for the operation and management of the largest naval base in Europe; providing support to both nuclear submarines and surface ships.

In 2005, Andrew was promoted to Rear Admiral and appointed as Director General Nuclear and Submarines running the RN's nuclear submarine and weapons programme and being responsible for nuclear safety across the entire MoD nuclear programme. During this time, he also served on the Navy Board as Controller of the Navy and oversaw the start of the new programme to replace the Vanguard Class deterrent submarines.

Promoted to Vice Admiral in 2009 and appointed as Chief of Materiel Fleet, he managed the RN's support and acquisition programme for all ships and submarines and was responsible for the operation of the RN's 3 naval bases. With over 4500 people and a budget of £5.4 billion pa, the post included both Defence Equipment and Support Main Board and Navy Board membership and chairmanship of the DE&S Safety Board.

Appointed CB in 2008 and promoted KCB in 2013, Andrew retired from the Roval Navy in March 2014. He is a Non-Executive Director

for the National Nuclear Laboratory. Married to Beverley, with two grown up children, he spends his time restoring a house in Cornwall and rediscovering its garden and also tries to find time to sail and cycle.

lain Lanaghan

lain Lanaghan joined the NNL Board as a Non-Executive Director and Chairman of the Audit Committee in July 2014.

He is building a balanced portfolio of non-executive directorships. He has over 30 years experience as a Chief Financial Officer of both listed and private equity backed companies. He has specialised in growing, commercialising and financing international companies.

He is founder and Non-Executive Chairman of Metropolitan European Transport Ltd, a buy-and-build transport group operating in Germany. The group has grown from a start-up in 2011 to turnover of over €30m. He is a Non-Executive Director and Chairman of the Audit Committee of Northern Petroleum plc. He also advises other companies, particularly in the energy sector.

He was Group Finance Director of FTSE 250 FirstGroup plc and AIM listed Faroe Petroleum plc. He co-founded and was CFO of Abellio GmbH. He prepared private equity backed Atlantic Power for IPO prior to a successful trade exit. He was also Finance Director of PowerGen International, which arew from a start-up to \$7bn of operated projects.

He is a member of the Institute of Chartered Accountants of Scotland, having worked with KPMG in London and Frankfurt.



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