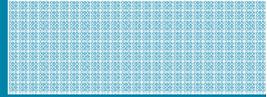




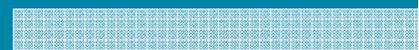
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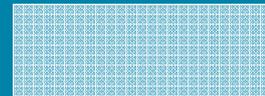
# **Annual Report & Accounts** **2007/08**



**Our mission is to:**  
**Deliver safe, sustainable and publicly acceptable solutions to the challenge of nuclear clean-up and waste management. This means never compromising on safety or security, taking full account of our social and environmental responsibilities, always seeking value for money for the taxpayer and actively engaging with stakeholders.**

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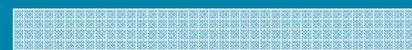


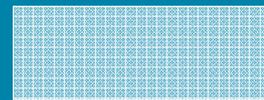
# Welcome to the NDA Annual Report & Accounts 2007/08

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## Foreword



**“The NDA has put in place the first overarching Strategy for the clean-up and decommissioning of the public nuclear legacy.”**

Since it became operational in April 2005 the Nuclear Decommissioning Authority (NDA) has made significant progress in its mission to bring about a more competitive environment for the safe, secure, and cost effective clean-up of legacy waste. In that time it has developed a clear understanding of the scale and nature of the UK’s nuclear liabilities and a clear planning process for managing those liabilities. It has put in place the first overarching strategy for the clean-up and decommissioning of the public nuclear legacy and overseen the restructuring of the nuclear legacy industry, making excellent progress in introducing competition to nuclear decommissioning and delivering substantial efficiency savings across its estate, whilst also overseeing steady but significant improvements in health, safety, security and environmental performance.

It is a credit to the skill, determination and sheer hard work of the whole team at the NDA that it has made such considerable

progress in such a relatively short time. These achievements provide the Government with the confidence that the NDA is well equipped to tackle the considerable challenges ahead. The key priorities for the next twelve months will include driving the Sellafield competition to a successful conclusion and launching the final competitions with a clear and robust timetable; planning how to reduce fixed costs and increase spend on decommissioning; and establishing a clear strategy for getting the best value from the NDA’s assets.

*Malcolm Wicks  
Energy Minister*

## Chairman's Report



**“Our progress gives us confidence that the core strategy of the NDA is robust.”**

*Stephen Henwood*  
Chairman

I was delighted to be appointed Chairman of the NDA in March 2008 and look forward to working with the Board and senior management team as we take forward our challenging and exciting mission. I would also like to thank Nick Baldwin, our senior independent director for his considerable contribution as Interim Chairman.

The first priority of the Board remains to ensure that our work is undertaken safely, securely and with respect for our social and environmental responsibilities. It is encouraging that we are able to report further progress in these areas although there is a need for continuing vigilance.

The Chief Executive's Review summarises the considerable achievements of the NDA in securing appropriate funding from the Comprehensive Spending Review (CSR), delivering on our operational plans with significant efficiency gains and the progress

in implementing our competition policy which has seen the first Parent Body Organisation (PBO) contract let for the Low Level Waste Repository (LLWR) and will see the selection of a new PBO for Sellafield in 2008.

This progress gives us confidence that the core strategy of the NDA is robust. In its implementation we have to respond to and if possible anticipate changing circumstances. During the year we have seen the development of Government policies both for nuclear new build and for the management of waste. We have provided input to the development of these policies which provide clarity about the future environment in which we operate and we will develop our plans to reflect them and to take advantage of the opportunities offered.

When the NDA became operational in April 2005, it meant that for the first time one body took responsibility for the whole of the civil nuclear legacy. Since then, defining the liability and estimating the cost of removing it has been a key objective. Inevitably attention focuses on the headline figure which has grown due to a number of factors, including greater understanding of the hazard, widening scope and better definition of future projects. It is important to recognise that under the headline figure are a number of different work streams that are at different stages of maturity and which contain differing levels of certainty in our cost estimates. Some work streams are relatively mature, for example the decommissioning of Dounreay, whilst at Sellafield there remains uncertainty in some waste retrieval projects.

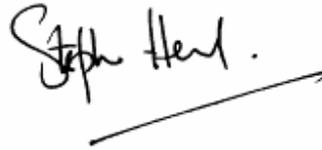
The last year has given us increased confidence that in those areas where our

baseline is mature, we have opportunities to make savings in the implementation phase. Equally it has emphasised that in the less mature areas there is potential for further movement in the costs and on occasions we must change our priorities to address emerging issues.

Our estimating of the cost of future liabilities has come under scrutiny by the Public Accounts Committee. We look forward to the Committee's report and will work to support the implementation of its recommendations. The review of our funding model in line with the recommendation of the Department for Business, Enterprise and Regulatory Reform (BERR) Select Committee is particularly important to us and provides an opportunity to ensure that our funding mechanisms reflect the nature of the activity we perform. This will assist us in securing best value from our supply chain and provide greater certainty to our many stakeholders.

On 11 June 2008, the Board announced that Dr Ian Roxburgh would stand down as Chief Executive Officer (CEO) at the end of July and leave the NDA at the end of the year. The performance recorded in this report is testimony to the significant achievements of the NDA, under Ian's leadership, by an organisation that didn't exist when he was appointed as its CEO. He leaves with our thanks and best wishes for the future.

As I have increased my knowledge of the NDA and its activities since March, I have been impressed by the capability and commitment of its staff but also by that of its many stakeholders. A shared sense of the importance of a successful NDA is very clear and I thank both staff and stakeholders for that.

A handwritten signature in black ink that reads "Stephen Henwood". A long horizontal line is drawn below the signature, extending to the right.

*Stephen Henwood*  
*Chairman*

## Chief Executive's Review



**“Having consolidated our understanding of the estate we inherited, we have focused on developing our role as a strategic authority.”**

*Dr Ian Roxburgh  
Chief Executive and Accounting Officer*

The NDA has continued to deliver its mission and secure better value for money, having overcome a number of challenges during the year.

As we move into the new Comprehensive Spending Review period, we have reflected on progress in delivering the Public Service Agreement (PSA) target agreed during the 2004 Spending Review, covering 2005/06 to 2007/08. Considerable progress has been made, despite strategic developments overtaking key aspects of the target.

I am pleased to report that the average annual net efficiency savings have exceeded the 2% annual target for the three-year period as a whole, with over £450 million in cumulative savings before fees.

One element of our PSA target required us to ensure that competitions had been completed for at least 50% of our sites by

the end of 2008. Despite changes to our competition schedule, following market and regulatory feedback, only three NDA sites will remain under public sector management by the end of 2008.

Whilst the target to reduce the civil nuclear liability by 10% by the end of 2010/11 falls outside the period, substantial improvements have been made each year both in the liabilities estimate and in the process of its production. We have now published an underpinned nuclear liabilities estimate against which future movements will be measured.

Financial performance during the year as a whole was sound. We ended the year ahead of budget and, as at 31 March 2008, had generated an increase in cash of £395 million. Despite operational income being behind budget due to problems resulting from fragile and ageing plants and facilities, total income was £1.46 billion, after realising income from waste substitution.

Following the 2007 Comprehensive Spending Review funding settlement, we consulted on and secured Government approval of our first three year Business Plan. In doing so, we conveyed a difficult message: that, despite planning to spend the largest amount of money on the UK's civil nuclear clean-up programme over a three year period, our aspiration to accelerate decommissioning has been challenged by the need to spend more money on high hazards, particularly at Sellafield. Understandably, our stakeholder community expressed concern about the impact on lower hazard sites.

This experience demonstrated the need for a more sophisticated prioritisation process

that communicates our decisions clearly and commands the confidence of all our stakeholders. We have started to develop a framework that addresses these concerns and aim to finalise this over the next two years.

The case for examining and potentially altering elements of our funding model was supported by the publication on 30 January 2008 of the National Audit Office report, "The Nuclear Decommissioning Authority: Taking Forward Decommissioning". We welcome the report's findings, particularly the recommendation that we need greater flexibility to manage commercial income volatility and respond to urgent expenditure requirements. The funding model was also commented on in the Department for Business, Enterprise and Regulatory Reform (BERR) Select Committee report, "Funding the NDA", which recommended an review. BERR has accepted this recommendation and the NDA has provided a senior team to support this project.

Having consolidated our understanding of the estate we inherited, we have focused on developing our role as a strategic authority. We reshaped our executive team, building on the organisational review in 2006/07. The new divisional approach is already bringing a renewed strategic focus to the delivery of our remit.

Across the NDA, we have continued to strive towards achieving our ambition of becoming a world-class organisation. Our internal risk management framework has been recognised by the Office of Government Commerce as probably the best in the public sector. Also, having successfully retained both the ISO9001 standard and Investors in People accreditation, we have been recommended for certification to the ISO14001 International Standard on Environmental Management. This is a major

achievement that recognises not only our commitment to environmental performance but also the efforts of our staff.

During the year, a major new project was launched to develop a new Business Operating Model that will greatly improve our core business processes. Our aim, following completion of the project in 2008/09, is to be in a position to qualify for recognition under the European Foundation for Quality Management Excellence Model.

We report our detailed performance against objectives published in our Business Plan below.

#### **Encourage the highest standards in health, safety, security and environmental performance**

Overall health, safety, security and environmental performance during the year remained strong, with a further decline in the number of reportable events and a low accident incident rate.

Internally, our Nuclear Safety, Security and Environmental Directorate was strengthened and we improved the suite of metrics used to measure our environmental performance.

A more detailed assessment of health, safety, security and environmental (HSSE) performance is provided in the HSSE section of this report. In addition, a separate Annual HSSE Report has been published on our website ([www.nda.gov.uk](http://www.nda.gov.uk)).

#### **Deliver hazard and risk reduction**

Considerable progress was made during the year in further embedding the prioritisation process throughout the estate. This is best demonstrated by the development of hazard baselines for higher activity radioactive wastes, which prioritise activities in order of concern according to a Safety and Environmental Detriment score. Future work

will focus on integrating this into an enhanced prioritisation framework.

### **Progress decommissioning and clean-up**

The skyline in Dumfries and Galloway was permanently altered on 20 May 2007 with the demolition of the Chapelcross cooling towers. This achievement was a graphic reminder of our primary objective of decommissioning and clean-up and, ultimately, site restoration. Similarly, the cooling towers at Calder Hall in West Cumbria were demolished on 29 September 2007.

We have significantly improved our understanding of the quantity and hazard of radioactive materials across our estate, particularly the higher hazard facilities.

Preferred end states for each site were identified by reconciling local community preferences against a range of national criteria. We will publish details of each site end state in 2008/09. The process has also improved the technical underpinning of Lifetime Plans.

We have continued to improve our knowledge of contaminated land characterisation across all of our sites and continue to promote the sharing of good practice. Internally, we strengthened our capacity by recruiting a manager for land quality.

In our Strategy, we stated our aspiration to accelerate the decommissioning of the Magnox reactors and achieve final site clearance within 25 years, subject to Government approval of a business case. Work carried out during the year suggests that a 25 year programme, while technically feasible, is dependent on a solution for the disposition of reactor decommissioning waste. We plan to complete this project in

2008/09. Meanwhile, we are exploring the option of identifying a lead Magnox site to base our business cost on, subject to availability of funding and viable waste disposal routes.

### **Maximise commercial value from our existing assets and operations**

2007/08 was a good year for electricity sales, despite an extended statutory outage at Wylfa and the prolonged shutdown of Reactor 1 at Oldbury due to ongoing graphite safety case work. Electricity generation, at 5.98 TWh, was marginally ahead of the target of 5.95 TWh, while income from electricity sales was £279 million, again ahead of the target of £204 million owing to higher electricity prices.

At Springfields, all fuel production targets were achieved and customer requirements for uranium oxide were met, although uranium hexafluoride production ended behind programme. Total income from Springfields Fuels Limited was £202 million, £13 million behind a budgeted target of £215 million due to reduced orders for Advanced Gas-Cooled Reactor fuel for British Energy.

Sellafield experienced continued problems with the prolonged closure of the Thermal Oxide Reprocessing Plant and lower than planned throughput at the Sellafield Mixed Oxide Plant. Plant performance remains under close scrutiny. We were able to take advantage of the underperformance of these two plants to reduce the levels of inventory of highly active waste held at Sellafield. The volume of highly active waste held in liquid form is now circa 1,000m<sup>3</sup> for the first time since June 1982 and represents a significant reduction in hazard and risk.

The Magnox Operating Programme (MOP) was reviewed during the year, culminating in the publication of MOP8 in March 2008. Despite significant improvements in Magnox

fuel management since the introduction of the MOP, reduced reprocessing capability at Sellafield means that Magnox reprocessing is now expected to conclude in January 2016 rather than around the end of 2012. We remain committed to the delivery of the MOP within the earliest possible timeframe. Improvement plans are being developed to bring forward this date while maintaining high safety, security and environmental standards. To minimise risks, a wet storage limit for Magnox spent fuel of around 800 tonnes by April 2010 has been set. Contingency plans are also being developed in the event of major plant failure. The revised programme demonstrates excellent cross-site integration and I would like to acknowledge the efforts of our contractors in ensuring delivery of this programme.

Direct Rail Services Limited (DRS) achieved a service delivery performance rate to nuclear customers of nearly 100%. We also ended the year ready to integrate International Nuclear Services Limited (INS) as a wholly owned NDA subsidiary on 1 April 2008. This will give the NDA more direct control of the customer interface for spent fuel reprocessing, waste returns and Mixed Oxide (MOX) fuel supply contracts.

Following the publication of the UK Government's Energy White Paper, which expressed support for a new generation of nuclear power stations in the UK, we invited interested parties to submit proposals for the reuse of NDA assets. The market engagement process ended on 4 April 2008 and resulted in 38 responses covering a wide range of proposals including new build.

In accordance with the Nuclear Liabilities Funding Agreement (NLFA), we continued to provide oversight of British Energy's planning for the decommissioning of its nuclear power stations. We recommended to the Secretary of State that he approve the

application for a five year extension to the operating lives of Hinkley Point B and Hunterston B power stations.

### **Ensure safe management of radioactive waste and materials**

We have continued our support to the UK Government on its Managing Radioactive Waste Safely (MRWS) programme, contributing both to the MRWS White Paper and to the consultation on a framework for implementing geological disposal.

We published the UK 2007 Radioactive Waste Inventory in conjunction with the Department for Environment, Food and Rural Affairs (DEFRA).

The aim of this inventory is to provide up-to-date information on the sources, quantities and properties of radioactive waste present in the UK as well as waste expected to arise in the future.

We carried out a review of radioactive waste storage across the UK, focusing on the need for safe and secure storage until a geological disposal facility has been built. This is the subject of continuing engagement with Government, regulators and the Committee on Radioactive Waste Management (CoRWM).

Waste packages for interim storage and eventual disposal incorporate a number of engineered barriers to prevent hazardous releases and ensure that both people and the environment are protected. We have continued to set rigorous packaging standards and specifications which reflect the waste form as well as the container and store design.

### **Determine the scope of the liabilities**

We have long maintained that the process of characterising nuclear liabilities is an ongoing task and subject to inherent uncertainties.

We now have an underpinned baseline estimate, established after only three years, against which future movements in liabilities can be mapped. The discounted lifetime cost of delivering our contracted work programme is estimated at £40.7 billion. Separately the NDA has estimated that a further £3.4 billion discounted liability is required for construction and lifetime costs of a deep geological disposal facility. The total discounted liability is £44.1 billion (2006/07 - £37.0 billion in total). This increase on previous estimates reflects an improved understanding and better characterisation of the work to be done.

### **Provide socio-economic support and development**

Our socio-economic policy received Government approval in January 2008. It sets out our objectives for socio-economic support and development and identifies the four priority areas where our support will be primarily focused: Anglesey and Meirionnydd; the Gretna-Lockerbie-Annan corridor in Dumfries and Galloway; North Sutherland and Caithness; and West Cumbria.

During the year, we continued to invest in the North Highland Regeneration Fund, which facilitates business growth in Caithness and Sutherland, and to support our partners in the development of an 'Energy Coast' in West Cumbria (in line with the West Cumbria Master Plan).

We agreed, with Cumbria County Council and Copeland Borough Council, the Heads of Terms for the creation of a new trust fund to support socio-economic development in

West Cumbria, as an appropriate Section 106 planning condition on the national Low Level Waste Repository (LLWR), governed by a Board of Trustees with representatives from Local Authorities and the NDA.

To demonstrate our commitment to corporate social responsibility, we began developing a draft sustainability framework, which identifies ten key principles:

- health, safety, security and the environment
- developing and maintaining the right skills
- business integrity
- socio-economic responsibilities
- engagement
- operating with openness and transparency
- treating employees fairly, equitably and with respect
- working environment
- sustainable procurement
- operational sustainability

We intend to refine the framework over the coming year, with a view to reporting on our sustainability performance in future years.

### **Deliver skills, research and development and supply chain development**

Direct NDA investment in Research and Development (R&D) in 2007/08 was £18 million in addition to that invested by SLCs. We have continued to sponsor relevant University research programmes. A Nuclear Waste Research Forum (NWRF) was also established as a sub-committee of the NDA Research Board to facilitate the sharing of technical information.

We have increased our understanding of key issues related to the storage and disposal of radioactive wastes through our involvement

in a number of international research programmes and appropriate research.

Examples of innovation across our estate include the Vitrification Test Facility (VTF) at Sellafield, which has demonstrated the potential to increase waste incorporation into containers by 20%.

The National Skills Academy for Nuclear (NSAN) was formally launched on 31 January 2008. The Academy will play a key role in the industry through its network of regional training clusters. Already, National Vocational Qualifications (NVQs) in Radiological Protection and Nuclear Decommissioning have been formally recognised, while foundation degrees in a number of nuclear-related subjects were also approved during the year. The NDA has been particularly active in the development of the Nuclear Academy in West Cumbria, a £20 million project to construct a world-class skills centre that will become the flagship of the network, and in the emerging Scottish Nuclear Skills Academy.

Other key achievements in the delivery of our skills strategy include the appointment of Chairs in the fields of Radiation Science and Decommissioning Engineering at the Dalton Cumbria Facility and the successful completion of phase 2 of the Energy Foresight programme, which is now in use in over 400 secondary schools.

The first national NDA graduate recruitment scheme was launched. Covering a period of two years, the scheme accepted its first cohort of 12 graduates at the year end. We received over 1,000 applications to join the scheme, showing real confidence in our mission. The programme is supported by the Ministry of Defence (MoD), the Environment Agency (EA), BAE Systems, British Energy (BE) and a number of engineering firms, including Amec and Jacobs.

In February 2008, we announced our plans to invest £8 million to create the UK's National Nuclear Archive (NNA) near Wick airport in Caithness. The NNA will manage between 20 and 30 million records documenting the history of the UK's civil nuclear industry since the 1940s. In addition to ensuring the safe management of these important public records and making them more accessible, we expect the establishment of the NNA to create around 20 specialist jobs.

Improving our knowledge of the supply chain is key to developing our supply chain strategy, which we expect to publish in 2008/09. To this end, we issued a questionnaire to SLCs and their procurement teams to better understand how NDA funding is distributed in the supply chain.

#### **Compete the management of our sites**

On 31 March 2008, we awarded the first Parent Body Organisation (PBO) contract for the operation of the LLWR to UK Nuclear Waste Management Limited, a consortium comprising URS - Washington Division, Studsvik, Areva and Serco Assurance. Delivered successfully, the new contract would have the opportunity to deliver lifetime savings of 20%, as well as a 20 year extension to the operating life of the facility. This reinforces our firm belief that attracting world-class management teams to the UK market will deliver innovation and cost savings in our programme.

We expect to announce the preferred bidder for the Sellafield PBO contract in July 2008. Given the quality of all the bidders, no matter who is successful, we are confident that the new PBO will bring world-class skills to bear on our largest and most complex site.

The transfer of assets and liabilities from the United Kingdom Atomic Energy Authority (UKAEA) to the NDA was completed on 1 April 2008. We remain on course to deliver the remainder of the restructuring programme in preparation for future competitions. The remaining competition timetable will be issued after the new Sellafield PBO is announced.

**Control costs and drive efficiency**

Expenditure on our site programme was £2,181 million and our contractors delivered positive cost efficiencies of £110 million.

In the context of the senior management restructuring and for personal reasons, a number of our executive team left during the year. I would like to thank Fiona Hammond, David Hayes, Mark Leggett, Terry Selby and Laurence Williams for their exceptional service over the last three years and for their personally significant contributions in helping to establish the NDA and in delivering its early successes.

As well as acknowledging the efforts of our staff, I would like to welcome the new Chairman, Stephen Henwood, following his appointment on 1 March 2008 and echo the tribute he gave to Nick Baldwin for his interim chairmanship of the NDA Board.

I have been privileged to lead the NDA in its first three years of operation, and to see the organisation grow in such a short space of time into one with the strength and depth to take on this difficult but vital role for the UK. I am grateful for the support of my colleagues and our many stakeholders, and wish them all well in the next chapter of the NDA's endeavours.



*Dr Ian Roxburgh*  
*Chief Executive and Accounting Officer*  
*7 July 2008*

## Health, Safety, Security and the Environment (HSSE)

**The health and safety of NDA employees, contractors and the public, the protection of the environment and the security of our employees and assets is paramount in all that we do. Excellence in these areas is critical to the delivery of our mission.**

The NDA Nuclear Safety, Security, Safeguards, Environment and Health team provide oversight and assurance of the HSSE performance of the NDA, its subsidiaries and the nuclear site licensees.

### **NDA's safety and environmental activities in 2007/08**

The NDA held a second good practice safety conference in Nottingham in May 2008. The NDA has also supported good practice sharing initiatives led by the site licensees such as the Operating Experience Learning Group, the Plutonium Decommissioning Workshop and the Magnox Sites Safety Conference.

Throughout the year we have used the set of metrics agreed with our contractors to measure their performance in the areas of nuclear safety, industrial health and safety, radiation protection, environmental protection and regulatory compliance. We have also worked with the licensees and regulators to develop this set of metrics for future years.

In addition to routine assurance visits to the nuclear sites throughout the year, the NDA

also carried out team safety and environmental assurance reviews at Dounreay, Harwell, Dungeness A and Sellafield. Reviews of sites' arrangements for the revised Construction (Design and Management) Regulations have been carried out and site programmes have been reviewed to ensure that efficiency savings were delivered without compromising our goals. Safety performance of our subsidiary, Direct Rail Services Limited (DRS), has also been reviewed.

We have worked with regulators and others to develop a schedule which sets out the expected steps and required permissions on the route to implementing geological disposal of higher activity wastes.

The NDA has continued to provide support and facilitate regulatory engagement in the development and licensing of new site licence companies to support the industry restructuring. During the year, the new LLW Repository Limited Site Licence Company was formally established as a standalone entity. A period of shadow working required by regulators was completed for Dounreay Site Restoration Limited (DSRL) which was itself formally established on 1 April 2008. Similar periods of shadow working commenced for Magnox North and Magnox South which it is intended will be established as standalone site licence companies in mid 2008. Preparations were made for the transfer of Windscale into Sellafield Limited, which took place on 1 April 2008.

The NDA provided governance to the Westlakes epidemiology study which published the results of its research into the effect of radiation exposure on non-cancer mortality in March 2008.

The NDA continues to support activities that contribute to the restoration of the environment on and around our sites.

We have developed metrics to determine environmental hazards on our sites, together with measures of the total volume and activity of the radioactive waste that needs to be treated and disposed of. This hazard baseline will enable us to measure our progress in decommissioning and cleaning up our sites in future years.

We have completed the initial reconciliation of Site Stakeholder Groups' (SSGs) views on future environmental restoration, end uses and end states for each of the NDA's sites. These end states will be proposed to Government for formal approval through the revision of the NDA's Strategy.

We have also continued work to review our sites' contaminated land management strategies. This is a key part of developing robust lifecycle plans for our sites and comprehensive liabilities estimates. The NDA has appointed a manager for land quality and has supported the development and dissemination of good practice guidance on the management of radioactively and chemically contaminated land in the UK. We have also continued to develop and implement integrated waste strategies at all of our sites.

The Government's Low Level Waste (LLW) policy requires the NDA to develop a UK nuclear industry LLW strategy. To do this we are working in partnership with the strategy team at the Low Level Waste Repository (LLWR) in West Cumbria and a number of deliverables are scheduled which will underpin the LLW strategy work. Strategic positioning papers can be found on our website about the waste management hierarchy, LLW issues and opportunities to minimise disposal of LLW material.

In January 2008, planning permission for a new vault at the LLWR was granted enabling the site to continue to provide waste management services to all of the UK.

We continue to support DSRL in obtaining the planning and regulatory consent for a new LLW repository adjacent to the Dounreay site.

The NDA's strategic priorities include retrieving legacy Intermediate Level Waste (ILW), some dating from the 1950s, conditioning it into a disposable form and then moving it to purpose built stores.

The NDA has embarked on a UK-wide review of waste storage on behalf of the Government which will include storage plans for solid ILW and for High Level Waste (HLW). Also included in the storage review report is a section on the NDA's 2006 strategy commitment on ILW storage optimisation. The NDA will continue to encourage waste minimisation and alternative storage opportunities available to SLCs to help reduce overall NDA liability, i.e. reduce the overall number of ILW packages (and potentially ILW interim stores) and thus increase storage flexibility.

The NDA has been supporting the SLCs in terms of investigating alternative disposal waste forms. Specific areas of interest include thermal processes, polymer encapsulation and high integrity containers.

The NDA has continued to evaluate options for the safe and sustainable long-term management of spent fuel and nuclear materials. Two reports summarising our findings in this area can be found on the NDA's website. In March 2008 the NDA published the eighth version of the Magnox Operating Programme (MOP8) which describes the plan for the management and reprocessing of Spent Magnox Fuel. This

programme marks a step change from previous years' plans as it recognises that in future the rate at which spent Magnox fuel can be reprocessed is limited by plant throughput at Sellafield rather than transport capacity. MOP8 also indicates that the current best estimate for completing the reprocessing of all of the UK's Magnox fuel is 2016. This date is 'rate limited' by reprocessing plant throughput. The NDA will continue to examine options for dealing with spent fuel. We remain committed to defuelling all reactors as soon as possible after generation has ceased and completing reprocessing operations in line with commitments made under the OSPAR Convention.

We continued to work with Government to aid formulation of policy on the long-term management of higher activity wastes through the Managing Radioactive Waste Safely (MRWS) process.

We have supported and sponsored work by Viridian Partnerships to encourage new environmental graduates to consider employment in the nuclear industry. This project will begin during 2008/09 through sponsoring a range of graduate placements within the nuclear industry.

#### **Interaction with regulators**

During 2007/08 we engaged with regulators on a wide range of issues at national level meetings including the Senior Regulatory Forum (SRF).

In addition the NDA has consulted with regulators on a range of issues at site and site licensee level.

In January 2008 we committed to undertake a review of our engagement with regulators and Government to develop a better way of working together. This review was ongoing at the end of the financial year.

#### **NDA HSSE performance**

Within the NDA's own organisation there were nine minor incidents that resulted in personal injury or damage, which is fewer than the 13 reported in 2006/07. None of these incidents were reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

The highest risk to the NDA's own employees remains driving on company business and in recognition of this, further driver safety training has been provided to over 100 employees during the year.

A review of the potential for NDA employees to receive radiation doses led to a decision that no NDA employees needed to remain as Classified Persons. Nonetheless we continue to monitor the radiation exposures of our staff who enter radiation controlled areas as part of their work. Radiation doses to monitored NDA employees in the year averaged less than 0.1 mSv.

Development of the NDA health and safety management system has continued with the production of a revised 'Organisation and Arrangements' section which takes account of the integration of the former UK NIREX Limited organisation into the NDA which took place 1 April 2007.

The programme of formal security audits at NDA offices and vetting checks of new staff, contractors and consultants have continued. In addition, security guidance has been provided to other activities including the planned geological disposal facility, the National Nuclear Archive (NNA) and the Parent Body Organisation (PBO) competitions.

During 2007/08 we revised our HSSE Policy, improved our environmental policy and management arrangements, identified a

number of objectives to reduce our environmental footprint and developed improved internal environmental metrics to be used from 2008/09.

#### **Subsidiary HSSE performance**

The overall accident rate for DRS Limited continued its falling trend of the last five years. In terms of signals passed at danger, which is the headline safety indicator in the rail industry, DRS continued to have the best performance record of all freight train operators in the UK with only a single incident in the year.

International Nuclear Services Limited (INS) became a wholly owned subsidiary of the NDA on 1 April 2008 and so next year we will report on their health, safety, security and environmental performance. In this report, the performance of INS is included within the performance of Sellafield Limited.

#### **Nuclear licensed sites HSSE performance**

Analysis of the safety and environment metrics that the NDA collects from the nuclear licensed sites that NDA owns shows a high standard of performance in all areas of HSSE in 2007/08.

One of the prime means for communicating information about nuclear safety events is the International Nuclear Event Scale (INES). In 2007/08 there were eight events at NDA sites, which continues the low number and downward trend seen since the NDA was established. The INES has seven levels to classify events of all seriousness from Level 1, which is defined as 'an anomaly with significant defence in depth remaining' up to Level 7 which is defined as a 'major accident'. No events in 2007/08 were rated at higher than Level 1.

In radiological protection, the average individual dose for employees at each of our

sites was less than 1 mSv and at most sites was less than 0.2 mSv. The maximum individual dose was 17 mSv to a Sellafield contractor who suffered a contaminated wound. With the exception of this one individual, all other employees and contractors received less than 8 mSv. All individual doses were therefore below the 20 mSv legal limit.

In industrial safety, the Total Recordable Incident Rate (TRIR) at most of our sites has remained low or decreased even further from the low rates that they had at the end of last year. The TRIRs at all of our sites compare very well when assessed against the industry benchmark, showing that our sites have only one sixth as many incidents as the average in US construction or manufacturing industries. Six of our sites have a TRIR of zero, which indicates that they had no incidents at all in 2007/08 which required reporting or treatment beyond first aid.

The total number of events that were reportable to HSE under RIDDOR was 50 which represents a reduction from the 67 events reported in 2006/07.

A number of our sites have won Royal Society for the Prevention of Accidents (RoSPA) awards for their health and safety performance in 2007/08. In particular, Springfields Fuels Limited won the industry sector award for Manufacturing and Magnox Electric won the industry sector award for Engineering Construction. Performance by these SLCs therefore represents best in class in their sectors.

All but three of our sites have sickness absence rates that are below the national average of 8.4 days per employee per year, with the best of our sites having rates below 3.0 days per employee per year. However, an increasing trend in sickness absence has been observed at a small number of our

sites, including Harwell and Winfrith where organisational change was occurring through the year to reflect a revised scope of planned decommissioning work.

The Director of Civil Nuclear Security, in his annual report which is available on the HSE website, has reported that he was satisfied with the standards, procedures and commitment with regard to security within the civil nuclear industry.

All of the NDA's sites in England and Wales report annually on a range of performance measures described in the Sector Plan for the Nuclear Industry voluntarily agreed between the Environment Agency (EA) and nuclear operators. There is no equivalent to the Nuclear Sector Plan for Scotland and so the NDA is currently agreeing a set of environmental metrics for all sites based on the Sector Plan.

Greenhouse gas emissions from NDA sites in England and Wales during 2007 were approximately 220,000 tonnes CO<sub>2</sub> equivalent, primarily arising from the operation of Sellafield. This is just under a third of total nuclear sector emissions.

A major contributor to these emissions was indirect emissions from energy use. NDA sites in England and Wales used approximately 6,800 TJ of energy. Over this period the remaining operating power stations at Oldbury and Wylfa generated over three times this much low carbon energy.

During 2007 the NDA's sites in England and Wales used approximately 8.3 million cubic metres of water (excluding cooling water). This is a reduction from 9.1 million cubic metres used by NDA sites in 2006 and compares with the 15.7 million cubic metres of water used by the Nuclear Sector as a whole that year.

Of all of the estimated ILW in stock on NDA sites as of April 2007, 22% by volume and 21% by activity is now estimated to have been packaged. This equates to 9% by volume of total predicted lifecycle arisings being packaged and 11% by activity.

NDA sites in England and Wales generated 145,000 tonnes of non-radioactive waste during 2007. Eight sites in England and Wales recycled or reused 100% of inert waste generated (the category of waste most amenable to recycling or reuse), four sites recycled or reused 90% or more of non-hazardous waste and two sites recycled or reused more than 90% of hazardous wastes.

Our sites have received three Enforcement Notices in 2007/08 and there have been nine environmental non-compliances. The number of non-compliances has been reducing by approximately half in each of the years that the NDA has been monitoring environmental performance, indicating an improving culture of environmental compliance.

As of the end of 2007/08, all of the NDA's sites remain certificated to the ISO14001 international standard on environmental management.

#### **Further information**

Further detail of the NDA's activities in the fields of HSSE and the performance of the NDA, its subsidiaries and the nuclear licensed sites is provided in the NDA Annual HSSE Report which is published as a separate document in conjunction with this report.

## Financial Review

This Financial Review has been prepared to convey management's perspective of the NDA Group and its operational and financial performance as measured in accordance with the Financial Reporting Manual (FRoM). Some of the key areas covered include management of the nuclear asset infrastructure, movement in nuclear cost estimates and the nuclear liability estimate. It also covers how much we have spent on contracts and how much of that spend discharges our nuclear liabilities. The NDA hopes this document will help readers to understand the financial statements and it should be read in conjunction with those financial statements and accompanying notes. In preparing this Financial Review, the NDA has adopted the recommendations of the Accounting Standards Board's Reporting Statement guidance on Operating and Financial Reviews.

### Summary financial performance

Figure 1: Summary group financials

Income and Expenditure Account extracts	2007/08 £m	2006/07 £m
Income	1,458	1,206
NDA expenditure	(2,647)	(2,656)
<i>of which: contractor expenditure</i>	<i>(2,181)</i>	<i>(2,192)</i>
Nuclear liability charge (see note 4 to the accounts)	(4,512)	(3,842)
Operating deficit before financing	(6,306)	(6,043)
Financing charges	(2,165)	(1,765)
Deficit for the year	(8,471)	(7,808)

Balance Sheet extracts	2007/08 £m	2006/07 £m
Tangible fixed assets	3,495	4,009
Nuclear liabilities	(44,095)	(37,036)
<i>of which: Geological Disposal Facility</i>	<i>(3,381)</i>	<i>(3,460)</i>
<i>Decommissioning and Clean up Liability</i>	<i>(40,714)</i>	<i>(33,576)</i>
Net liabilities	(43,203)	(36,380)

Cash Flow Statement extracts	2007/08 £m	2006/07 £m
Purchase of tangible fixed assets	(438)	(368)
Grant-in-Aid received	1,646	1,108
Increase/(decrease) in cash in the year	395	(124)



*William Roberts, Chief Financial Officer*

**In 2007/08 the NDA was able to fund and deliver an increased programme of work and was able to overcome income shortfalls caused by operational plant problems.**

**Our total expenditure in 2007/08 was £2,647 million (2006/07 £2,656 million) funded from income of £1,458 million and Grant-In-Aid of £1,646 million**

**The NDA has produced a baseline estimate for the decommissioning and clean-up liability which is underpinned and sets the discounted liability at £40.7 billion.**

**Separately the NDA has estimated that a further £3.4 billion discounted liability is required for construction and lifetime costs of a deep geological disposal facility.**

**The total discounted nuclear liability is therefore £44.1 billion (2006/07 - £37.0 billion) in total.**

Results for the year prepared in accordance with our accounting policies and summarised in Figure 1, show a net deficit of £8,471 million (2006/07 - £7,808 million),

primarily attributable to increased future cost estimates leading to an increase in nuclear and non-nuclear provisions.

Financial consistency and efficiency have been delivered by strong budgetary and investment control and planning, seeking increased efficiency in spending on priority activities, critically reviewing discretionary spend and improving the understanding of our cost drivers. The NDA continues to monitor and challenge these efficiencies as part of the operation of its contracts with site licensees.

Spend by the NDA's site contractors was in line with the previous year at £2,181 million (2006/07 £2,192 million).

Income was £1,458 million, an increase of £252 million against the prior year income of £1,206 million. The income contained significant volatilities, with loss of operating revenues from poor plant performance at the Thermal Oxide Reprocessing Plant (THORP) and the Sellafield MOX Plant (SMP) offset by realising income from waste substitution contracts. After realising this income, we have managed our operations within our agreed Government funding.

The total discounted nuclear liabilities estimate (comprising the decommissioning and clean-up liability and the geological disposal facility liability) has increased to £44,095 million (2006/07 - £37,036), an increase of the balance sheet of £7,059 million, resulting in a charge to the income and expenditure statement of £4,512 million which is net of the liabilities discharged in the year.

The uplift in liabilities arises from a more comprehensive understanding facilitating better measurement and improved cost estimation and the NDA is now, after three

years of intensive work, able to establish this year's estimate as an underpinned baseline against which future performance can be measured. There remain some areas of uncertainty, which could affect the estimates (both up and down), notably the high hazards at Sellafield and the uncertain state of some infrastructure underpinning commercial operations, but across most of the NDA's estate the scope of work is now clear.

Financing charges mainly relate to the restatement of nuclear and non-nuclear provisions at current prices and the unwind of one year's discounting of the provisions.

Fixed assets represent the book value of the nuclear infrastructure at £3,495 million for 31 March 2008 compared to £4,009 million at March 2007. The purchase of tangible fixed assets amounted to £433 million of capital expenditure by the NDA's site contractors, (see Figure 12), as well as £5 million of capital expenditure by the NDA and its subsidiaries. The overall book value has decreased as a result of depreciation and impairment charges in the year.

Cash Grant-In-Aid of £1,646 million represents the amount of funding received from the taxpayer by the NDA, which with commercial income of £1,458 million, funds the NDA's activities.

### **Achievement of targets**

As part of the 2004 Spending Review (SR04), the Department for Business, Enterprise and Regulatory Reform (BERR) and HM Treasury agreed a Public Service Agreement (PSA). This target sought ambitious further improvements in key priority areas of efficiency, competition and liability management in the SR04 period which ran from 1 April 2005 to 31 March 2008.

The first element of the PSA target, to reduce the civil nuclear liabilities by 10% by 2010, falls outside the SR04 period. Therefore an early objective for the NDA was to introduce a more robust process to assess the cost of the legacy and establish a benchmark against which future action to reduce it could be measured. Substantial improvements have been made each year in improving both the liabilities estimate and the process for its production. We have now published an underpinned liabilities estimate against which future movements will be measured.

The second element was to deliver annual 2% efficiency gains from 2006/07. Over the three year period the NDA has delivered net efficiency savings on the programme above the annual 2% target. In addition, the NDA delivered efficiency savings on its non-programme expenditure. The NDA has used efficiency savings to bring forward decommissioning and clean-up work and to fund appropriate socio-economic projects.

The third element was to ensure successful competitions have been completed for the management of at least 50% of our sites by the end of 2008. The original competition schedule was changed following market and regulatory feedback. Over the three years the NDA has overseen restructuring of the Nuclear Legacy industry, completed its first competition for management of the Low Level Waste Repository (LLWR), managed the Sellafield competition and assisted in the sale of Magnox Electric and Westinghouse. As a result, all but three of the NDA's sites will be under private sector management by the end of 2008.

As part of the 2007 Comprehensive Spending Review (CSR07), BERR established a Departmental Strategic Objective (DSO) which will be the means of assessment for NDA for the next three year

period from 1 April 2008 through to 31 March 2011. The DSO is to be achieved through three strategic priorities around reducing UK civil nuclear liabilities, delivering value for money savings and reducing risks associated with high hazards.

### Risk management

The NDA has robust risk management processes which are covered in more detail in the Statement of Internal Control. The principal risks faced by the NDA are:

- health, safety, security and environmental risks
- plant failure
- lack of access to technology and inadequate innovation
- skilled employee resource
- changes in legislation, fiscal and regulatory policies
- loss of reputation due to real or perceived failure
- IT failures
- variability of commercial income
- availability and use of funding
- effective programme and contract management
- inability to attract suitable bidders for PBOs
- pension scheme funding requirements

The NDA's financing by a combination of Government funding and commercial activities means that the NDA is not exposed to the degree of financial risk faced by private sector entities.

### Other developments

During 2007/08 the NDA and Site Licence Companies (SLCs) undertook a series of restructuring activities which impacted the legal structure of the estate, all of which were completed by the end of the financial

year. Most of this restructuring led to new PBOs being put in place to manage and operate the activities of our sites.

Early in the financial year, the NDA supported the BNFL sale of Magnox Electric, leading to the acquisition of Reactor Sites Management Company Limited, the Parent Body Organisation (PBO) of Magnox Electric Limited, by EnergySolutions, Inc. Magnox Electric Limited is the legal entity comprising the two operating divisions - Magnox North and Magnox South.

On 1 April 2008, Phase 2 of the restructuring of the United Kingdom Atomic Energy Authority (UKAEA) was successfully achieved through a joint project between the NDA and UKAEA. This resulted in the creation of the SLC - Dounreay Site Restoration Limited (DSRL) and its PBO UKAEA Limited. Also, Windscale (formerly part of UKAEA) was integrated by nuclear transfer scheme into Sellafield Limited, and a further scheme was enacted to transfer IT assets and certain liabilities to the NDA.

This outcome represents a key step in delivering the NDA's strategy of restructuring UKAEA to facilitate the NDA competition programme. It also represents a major move towards consolidating Windscale into Sellafield Limited as at 1 April 2008 as part of the Sellafield competition programme.

Phase 3 of the UKAEA Restructuring Project is planned to take place in 2008/09. This will, via transfer scheme and subject to NII relicensing, create a new Site Licence Company – Research Sites Restoration Limited (RSRL), comprising Harwell and Winfrith sites. It will also enact a final transfer scheme to transfer certain remaining liabilities to the NDA.

On 1 April 2008, International Nuclear Services Limited (INS) became a wholly owned subsidiary of the NDA, acquiring the remaining 51% of its issued share capital from Sellafield. Through the enactment of two nuclear transfer schemes, the employees and certain contracts, rights and liabilities were transferred to INS and the shares, customer contracts and certain rights and liabilities were transferred to the NDA.

2007/08 also saw the successful completion of our first competition which was for a PBO to run LLWR near Drigg.

Meanwhile the next competition for the appointment of a new PBO for Sellafield Limited has continued through 2007/08, with eight months of competitive dialogue culminating in the issue of the Invitation to Submit Final Tenders (ITSFT) on 21 December 2007. Bids were returned on 7 April 2008. The announcement of the preferred bidder is scheduled for 11 July 2008 and award of contract is scheduled for 6 October 2008.

On 1 April 2008 the NDA acquired BNFL Properties Limited from BNFL by nuclear transfer scheme and subsequently renamed the company NDA Properties Limited. On the same day, the lease associated with Southmoor House (Wythenshawe), which was held by British Nuclear Fuels plc, was transferred to NDA Properties Limited.

On 1 April 2008 the NDA also became lead employer on the BNFL Group Pension Scheme. On the same date LLWR employees were transferred to the Combined Nuclear Pension Plan (CNPP).

## Nuclear Liabilities Estimate

The nuclear liabilities estimate is comprised of two distinct estimates - firstly for the decommissioning and clean-up liability and secondly the geological disposal facility (GDF) liability. Except where stated, all figures quoted are discounted at the Treasury required rate of 2.2% (2006/07 - 2.2%).

### Decommissioning and Clean-up liability

This section deals with the decommissioning and clean up liability. Consistent with the accounting treatment, this section includes Windscale in UKAEA and LLWR in Sellafield.

#### The beginning

The NDA was established in April 2005 and inherited 19 sites that between them make up a highly complex nuclear legacy spanning more than 50 years that has its roots in early scientific work, military objectives and pioneering civil power generation. One of the NDA's key challenges has been to get a better understanding of the nature and scale of the decommissioning challenge. The NDA has been working over the last three years to establish an underpinned baseline from which any future movements can be measured. Significant progress has been made, and whilst there are still areas of uncertainty, large areas of the work plan are well characterised and able to provide a stable baseline from which to operate.

#### Progress to date

The establishment of an underpinned estimate was a key component of the PSA target set by BERR in the 2004 spending round. Successive versions of the Lifetime

Plan (LTP) have been produced which have provided improved understanding of our estate. In 2006 we produced the first NDA LTP and commenced a two year programme to achieve our base line position. To gain a full understanding of such a complex estate in a relatively short period of time has been a considerable challenge, as recognised by the National Audit Office (NAO), who noted in their January 2008 report "Taking Forward Decommissioning" that significant progress had been made and confirmed that the NDA has invested significant effort in determining the scale of the task it faces in decommissioning the UK's civil nuclear facilities. It acknowledged that we have produced, for the first time in the UK, a unified strategy for decommissioning the UK's legacy nuclear sites.

In summary, the NDA and its site contractors have applied considerable effort over the past three years to underpin the civil nuclear liabilities estimate. This has resulted in a baseline which the NDA now believes to be sufficient for the purposes of measuring performance and change, which is in alignment with the NDA's PSA target.

The NDA intends to maintain this baseline by change management processes, potentially allowing a movement away from the traditional lifetime planning process. This would move the NDA and its contractors to the first phase of baseline management. Under this regime the NDA will identify and seek to realise programme opportunities for liability reductions.

Efforts expended on the development of LTPs since the NDA's inception have reduced uncertainties in such areas as:

- scope definition, estimating and scheduling processes
- contaminated land and groundwater treatment processes
- inter-site transfers of nuclear materials and wastes
- waste quantification, waste volumes and waste packaging
- hazards posed by materials and conditions of storage

Progress over the last few years means that we now have a national overview of the estate and the interactions across our sites. The nature of the decommissioning task and the logical order of activities to progress hazard reduction, decommissioning and site clean up are now well understood and therefore the risk of redundant expenditure being incurred is significantly reduced. We are in a much better position to ensure value for money to the taxpayer.

### Future challenges

Challenges however still remain given the complexity of the sites and other variable factors. Since the NDA was formed and the process of understanding the legacy began, we have seen significant new issues emerge which have had considerable programme and cost implications, such as the operational difficulties of THORP and other key plant. In summary, the condition of the estate the NDA inherited has proved to be more challenging than anyone previously understood and demonstrates that the NDA is dealing with an evolving situation.

Work on characterising the challenge and developing this baseline has allowed the NDA to identify the previously less well defined areas such as:

- site end states
- timing of final decommissioning of our sites
- material to be retrieved from legacy ponds and silos
- contaminated land quantities
- disposition plans for wastes and spent fuel as well as decisions over future LLW storage plans

It is also clear that there are some other assumptions that can affect the ultimate liabilities estimate, such as:

- different inflation rate assumptions spread over the life of the programme
- the availability and timing of funding
- future government policy positions
- future regulatory change

These factors have the potential to increase or decrease the liabilities estimate in future. So, whilst we have strong certainties about the majority of the task ahead and the associated costs, it is also clear that this figure will be subject to further change in the future.

The ability of PBOs to improve decommissioning plans and deliver greater value for money will be a further factor going forward. We have already started to see a reduction in timescales and a downward trend in costs at Dounreay and LLWR, with Dounreay showing a 10% decrease in discounted provision of £258 million, and an 18% reduction at LLWR of £32 million. We remain confident the same will be true of our other contracts in time.

### Year on year progress

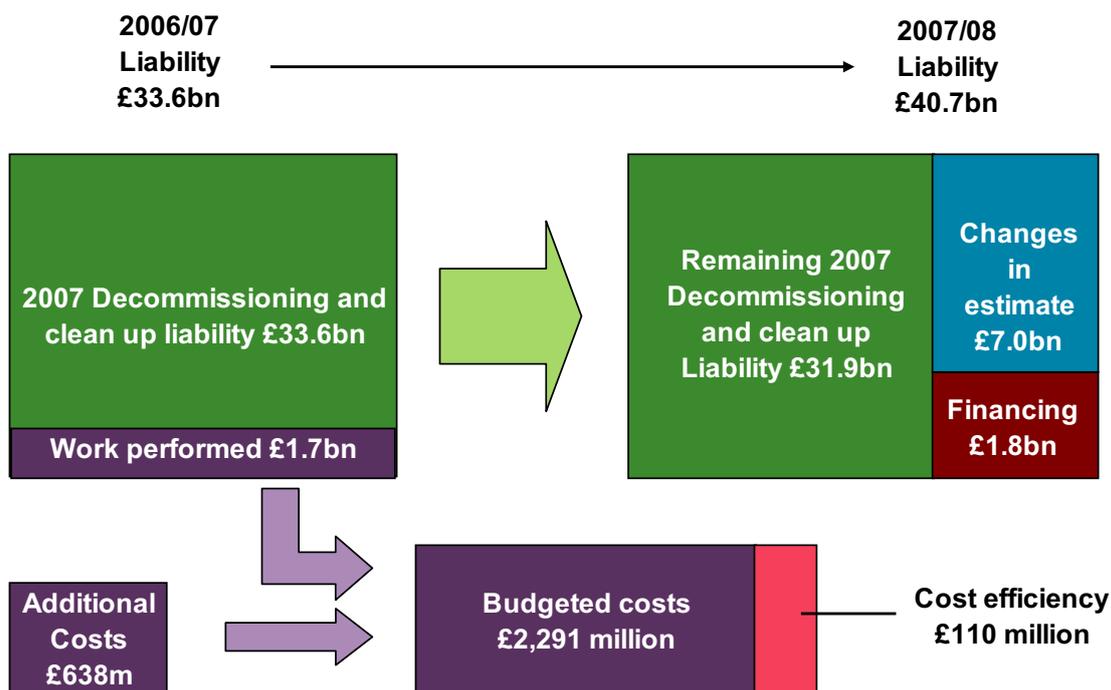
During the year the decommissioning and clean-up liability has increased by £7.1 billion from £33.6 billion to £40.7 billion. This increase is as a result of three components. The movements are:

- a reduction of £1.7 billion in respect of work performed during 2007/08 against the 2007/8 provision
- an increase of £1.8 billion for financing to update the cost estimates to 2008 money values and unwinding one year's discounting
- an increase in future cost estimates of £7.0 billion reflecting the latest available information

The work done in the year provided value for money and the NDA performed decommissioning and clean-up which was estimated to cost £2,291 million for a cost of only £2,181 million, providing efficiencies of £110 million. Of the £2,291 million, £1,653 million had been provided for in the 2006/7 liability and £638 million related to commercial activities and capital spend.

The £1,838 million increase for financing is the combined effect of unwinding one year's discounting and the monetary value of restating the provision in 2008 money values. Each year the provision will increase as the discounting unwinds.

**Figure 2: Analysis of movement in the decommissioning and clean-up liability and efficiencies achieved on liabilities discharged**



*Additional costs relate primarily to planned commercial activities and capital spend which are not included in the nuclear liability work performed*

The changes in estimates account for £7.0 billion of the increase in the discounted liabilities estimate. The main drivers for this are as follows:

- **the impact of revising the Magnox Operating Programme (MOP8).** Reduced reprocessing capacity at Sellafield means that Magnox reprocessing is now expected to conclude in January 2016 rather than around the end of 2012. This extends the time period over which Magnox stations are defuelled and the spent fuels reprocessed and put into passively safe form. As a result this requires the facilities at Sellafield to operate for longer and subsequently impacts on down-stream Sellafield waste plants as well as delaying the entry to care and maintenance of Magnox sites, all of which increases the costs. The revised MOP8 has therefore affected the Decommissioning and Clean-up liability at Sellafield and most Magnox sites. The impact of the reduced reprocessing capacity and consequent plant life extensions greatly affects the waste and nuclear material management costs but also impacts other cost categories and accounts for approximately £1.5 billion of the increase
- **higher construction sector inflation rates have led to an increase in prices.** Increased costs for labour, construction, raw materials, and consumables such as steel have affected all SLCs and the direct costs of decommissioning and

clean-up. These cost pressures account for £2.1 billion of the increase

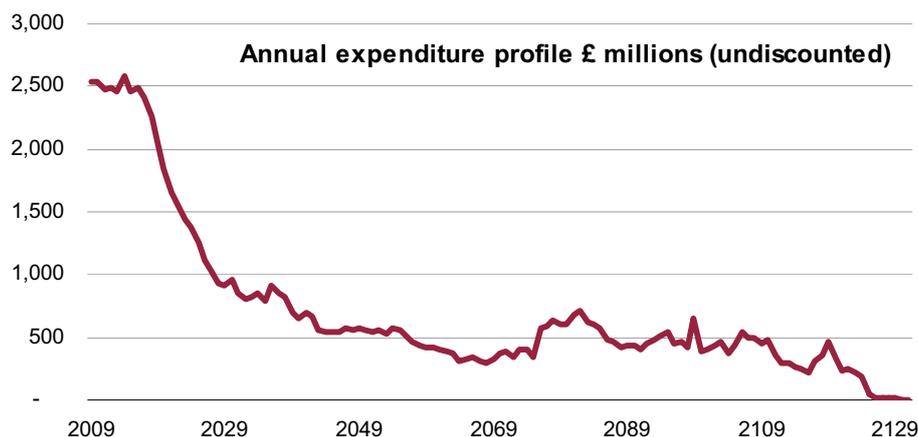
- **reduction in uncertainty for intermediate level waste costs and contaminated land remediation.** Efforts to identify the previously less well defined areas such as the material to be removed from legacy ponds and silos and contaminated land quantities has enabled these elements to be included in the liabilities estimate. Whilst much of these costs are Sellafield related, they have been included in the centrally held NDA liabilities. This accounts for approximately £2.1 billion of the increase
- **phasing of expenditures.** The focus on higher hazards in the near term has reduced the annual expenditure levels at some sites and therefore re-phased decommissioning expenditures to later years. This increases the total liability as site support expenditures have to be maintained for longer. This has added approximately £1.3 billion to the liability, principally at the Magnox and Research sites.

Figures 7 and 8 set out the increase by site and by category of spend. These show that overall, the most significant percentage increases are at Windscale and Magnox sites as well as NDA central liabilities, with reductions at Dounreay, Calder Hall and LLWR. Waste and nuclear material management are the category with the largest increase.

### Undiscounted decommissioning and clean-up future cost estimate

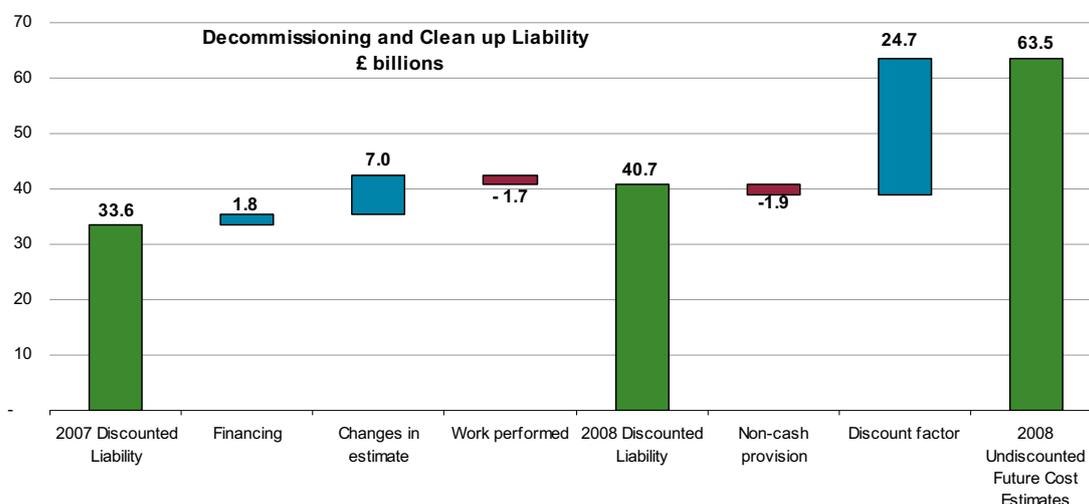
The undiscounted amount of the decommissioning and clean-up future cost estimate is £63.5 billion (2006/07 - £51 billion). This figure excludes the costs of commercial operations which generate income and do not form part of the liability (2007/08 £11.4 billion, 2006/07 £11.7 billion). These future costs will be incurred over a significant period of time and the expenditure profile has been shown in Figure 3.

Figure 3: Expenditure profile for decommissioning and clean up



The adjustments to obtain the discounted decommissioning and clean-up liability estimate from the undiscounted future cost estimates are shown in Figure 4.

Figure 4: Derivation of decommissioning and clean-up liability cost estimate



There are two adjustments made to obtain the discounted decommissioning and clean-up liability from the undiscounted future cost estimates of £63.5 billion:

- a FRS12 adjustment of £1.9 billion to provide for the 'non-cash' depreciation charges on assets used in discharging nuclear liabilities
- £24.7 billion adjustment arising from discounting future costs at 2.2% per annum in line with HM Treasury guidance, the rate is unchanged from 2006/07

### Geological disposal facility

This section deals with the geological disposal facility (GDF) cost estimate part of the overall nuclear liabilities estimate.

In 2001 the UK Government initiated the Managing Radioactive Waste Safely (MRWS) programme with a public consultation on the process. This was to find a practicable solution for the UK's higher activity wastes that:

- achieved long-term protection of people and the environment
- did this in an open and transparent way that inspired public confidence
- was based on sound science
- ensured the effective use of public monies

Following feedback from the initial consultation, an independent body, the Committee on Radioactive Waste Management (CoRWM) was set up to recommend options to provide a long term solution to managing higher activity radioactive wastes in the UK.

On 31 July 2006, CoRWM published an integrated package of recommendations. The UK Government responded, announcing plans for the long term management of higher-activity radioactive waste to Parliament on 25 October 2006. The announcement accepted CoRWM's recommendation of geological disposal, coupled with safe and secure interim storage along with a programme of ongoing research and development as the way forward. In addition the NDA was made the body responsible for planning and implementing geological disposal.

Following consultation, the UK Government published the White Paper – "Managing Radioactive Waste Safely: A Framework for

Implementing Geological Disposal" in June 2008.

The White Paper sets out The UK Government's framework for the implementation of geological disposal based on voluntarism and partnership and was accompanied by a call for communities to express an interest in discussing the possibility of hosting a geological disposal facility.

A selection process to identify suitable sites for surface based investigations is being developed by the NDA. The NDA will consult widely on the proposed process before it is finalised and agreed by the UK Government. Although the NDA will apply the agreed process, the final decision on selection of sites for surface based investigations will be made by the UK Government.

The NDA is the implementing organisation, responsible for planning and delivering the geological disposal facility and, as part of this process, will engage with the communities and other stakeholders. The NDA already provides interim storage of waste on its sites and will continue to do so for as long as it takes to site and construct a geological disposal facility.

### The geological disposal facility

Geological disposal involves isolating radioactive waste deep inside a suitable rock formation so that a combination of engineered barriers and radioactive decay result in a negligible risk. It is a multi-barrier approach, based on placing wastes deep underground, protected from disruption by man-made or natural events. Geological disposal is internationally recognised as the preferred approach for the long-term management of higher activity radioactive waste.

The detailed layout and design of the geological disposal facility, both above and below ground, will be tailored to the inventory of waste, the geography and specific geological characteristics at the site in question.

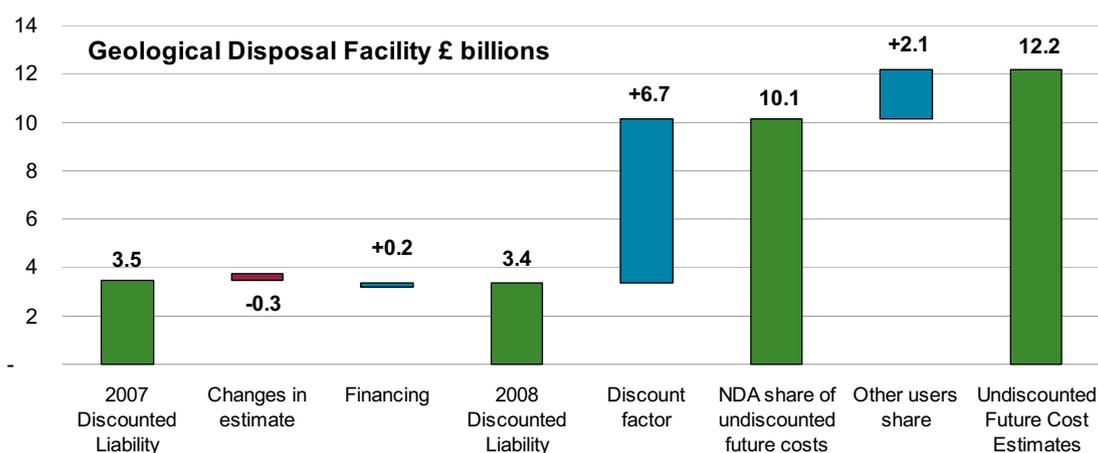
The NDA has statutory responsibility under the Energy Act 2004 for carrying out research to support the activities for which it is responsible. The NDA will undertake further research during the geological disposal facility development process to, for example: refine facility design and construction; improve understanding of the chemical and physical properties and interactions of emplaced waste; address specific issues raised by regulators; and support the development of site-specific safety cases.

### Costs of geological disposal

The cost is influenced by many different factors, including the inventory of waste, the timing of waste arisings, the geology at the site in question and the design of a geological disposal facility (GDF). The current best estimate for the undiscounted lifetime costs of a GDF is £12.2 billion (at 2008 money values) which is consistent with the previously cited figure of £10 billion when escalated from 2003 to 2008 money values. The lifetime cost of geological disposal includes research, design, construction, operation and closure.

The total undiscounted costs are £12.2 billion, of which the NDA's share is £10.1 billion, which is then discounted at 2.2% to give a discounted amount of £3.4 billion, the balance being payable by other users. Figure 5 shows the annual movement in the geological disposal facility as well as the reconciliation to the undiscounted estimated costs. This addresses all the known waste that currently exists and waste arising from current facilities.

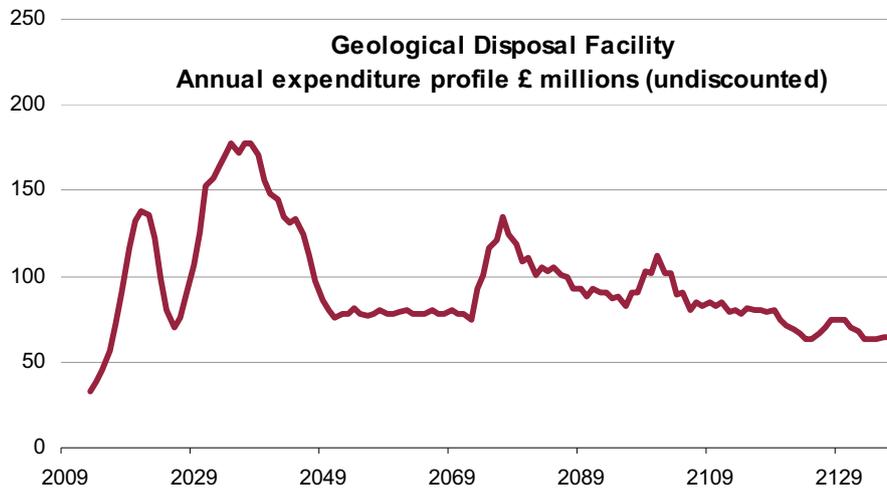
Figure 5: Derivation of NDA's share of GDF cost estimate



The change in estimate shows the impact of the amendment from last year's calculation incorporating a multi-location scenario and this year's calculation being based on a co-located facility. This reduces the provision by £273 million. The other movement is the financing charge, which is the unwind of one year's discounting and the restatement at 2008 price levels, and

amounts to £194 million. The anticipated expenditure profile for the geological disposal facility is as follows:

**Figure 6: GDF expenditure profile**



## Total Nuclear Liabilities

The nuclear liabilities estimate is comprised of two distinct estimates - firstly the estimate for decommissioning and clean-up liability and secondly the estimate for the geological disposal facility (GDF). This section deals with the total of these two liabilities and shows how the movement in the provision ties into the income and expenditure account in the financial statements.

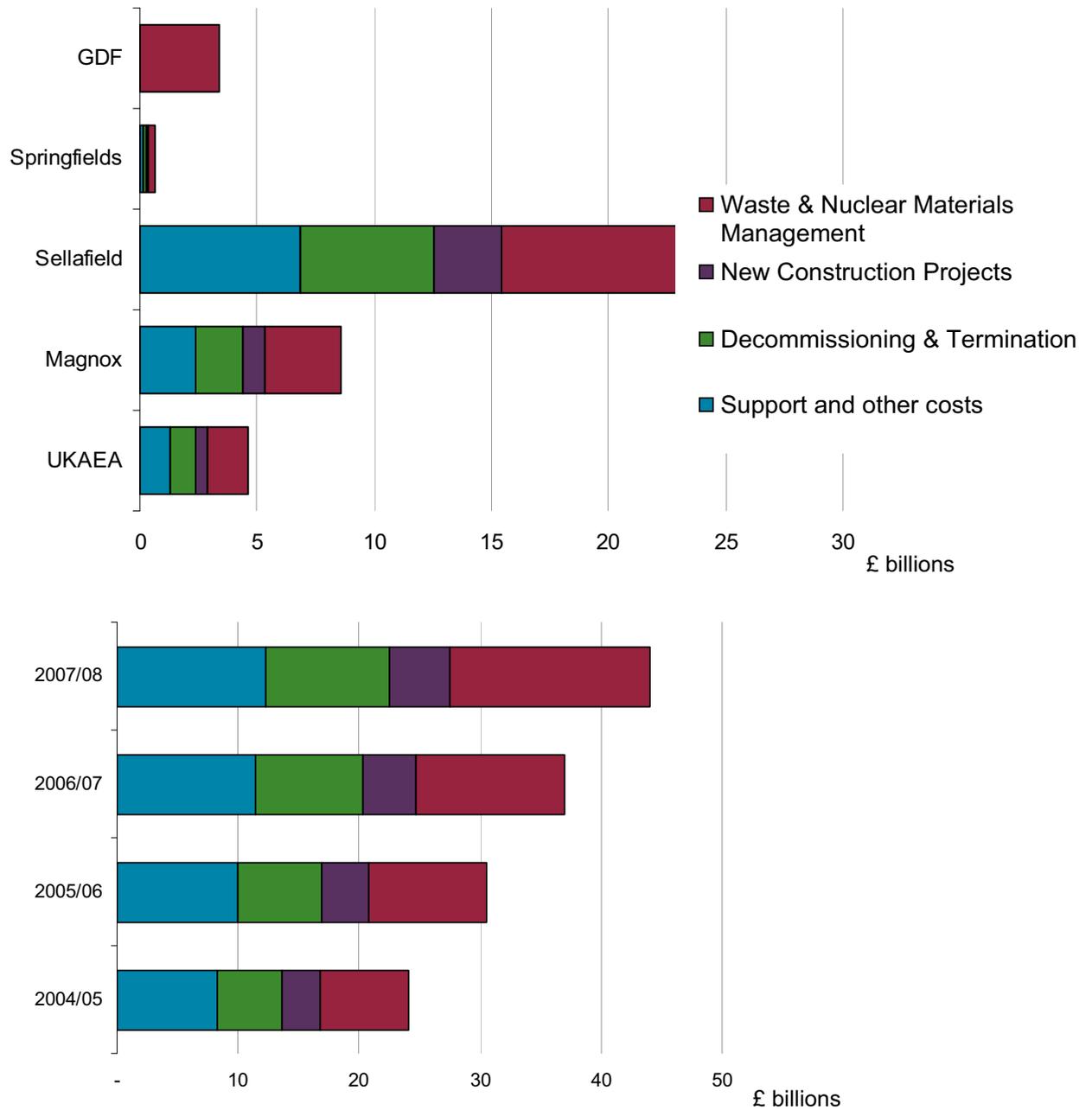
Figure 7: Total discounted nuclear liabilities by site and SLC

DISCOUNTED DECOMMISSIONING AND CLEAN UP LIABILITY			
TOTAL DISCOUNTED NUCLEAR LIABILITIES	2007/08 £m	2006/07 £m	Movement £m
<b>Magnox Electric Limited</b>			
Berkeley	507	414	93
Bradwell	703	611	92
Chapelcross	775	595	180
Dungeness A	870	688	182
Hinkley Point A	888	703	185
Hunterston A	667	610	57
Oldbury	911	620	291
Sizewell A	748	686	62
Trawsfynydd	835	668	167
Wylfa	770	480	290
Magnox central costs	906	499	407
<b>Sellafield Limited</b>			
Calder Hall	316	342	(26)
Capenhurst	576	416	160
LLW Respository	149	181	(32)
Sellafield	23,605	20,922	2,683
<b>UKAEA</b>			
Downreay	2,410	2,668	(258)
Harwell and Winfrith	1,321	1,164	157
Windscale	907	646	261
<b>Springfields Fuels Limited</b>			
	634	609	25
<b>NDA central liabilities</b>			
	2,166	-	2,166
<b>Geological Disposal Facility</b>			
	3,381	3,460	(79)
<b>Authority</b>	<b>44,045</b>	<b>36,982</b>	<b>7,063</b>
NDA group companies	50	54	(4)
<b>NDA Group</b>	<b>44,095</b>	<b>37,036</b>	<b>7,059</b>
<b>Summary</b>			
	<b>2007/08</b>	<b>2006/07</b>	<b>Movement</b>
Magnox	8,580	6,574	2,006
Sellafield	24,646	21,861	2,785
Research sites	4,638	4,478	160
Other areas	2,850	663	2,187
<b>Decommissioning Liabilities Estimate</b>	<b>40,714</b>	<b>33,576</b>	<b>7,138</b>
<b>Geological Disposal Facility</b>			
	3,381	3,460	(79)
<b>Total Nuclear Liabilities Estimate</b>	<b>44,095</b>	<b>37,036</b>	<b>7,059</b>

The prior year site figures have been adjusted to show the geological disposal facility costs separately. The NDA central liabilities include contingency for £2,166 million of risks which were previously held at a SLC level but are now centrally managed at NDA HQ.

Figure 8 shows the make-up of the nuclear liabilities estimate analysed by type of liability and by SLC with the second graph showing the liability by type in total and its progression since the NDA's establishment.

Figure 8: Total discounted nuclear liabilities by SLC and by type of liability



**Figure 9: Movement in total nuclear liabilities estimate**

	2007/08 £m	2007/08 £m	2006/07 £m	2006/07 £m
Opening provision		37,036		30,575
Financing charges:				
Changes in price levels	1,388		1,137	
Unwind of one year's discount	776		616	
Total		2,164		1,753
Transfers from non-nuclear provisions				137
Increase in nuclear liabilities		6,671		5,532
Less: provisions utilised to offset current expenditure on liabilities discharge		(1,776)		(1,549)
Change in recoverable commercial obligations		-		588
<b>Nuclear Provision as at 31 March 2008</b>		<b>44,095</b>		<b>37,036</b>

Whilst the increase in the total nuclear liabilities estimate is £7,059 million, of which the increase in cost estimates accounts for £6,671 million, the nuclear provisions charge in the income and expenditure account for 2007/08 is £4,512 million (as compared to £3,842 million for 2006/07). This represents the net charge arising from the increase in provisions, excluding financing, and is related to the increase in nuclear liabilities as follows:

**Figure 10: Nuclear liability charge**

Reconciliation of nuclear liability charge from changes in future cost estimates	2007/08 £m	2007/08 £m
Changes in future cost estimates		6,671
Less: increase in customer recoverable (see note 16)	(533)	
Less: increase in customer recoverable reclassified from Fixed Assets (see note 16)	(465)	
Less: increase in nuclear provisions for capital costs (see note 11)	(225)	
Add: discharge from customer recoverable (see note 16)	307	
Add: reclassification relating to capital costs (see note 11)	533	
Net change in future cost estimates		6,288
Less: provisions utilised to offset current expenditure on liabilities discharge		(1,776)
<b>Nuclear liability charge in note 4</b>		<b>4,512</b>

Reconciliation of financing charge	2007/08 £m	2007/08 £m
Financing charges		2,164
Less: revalorisation of customer recoverable (see note 16)	(260)	
Less: financing element of Fixed Assets additions (see note 11)	(41)	
<b>Financing charge in note 6</b>		<b>1,863</b>

## Non-Nuclear Provisions

**Figure 11: Non-nuclear provisions**

Provision	2007/08 £m	2006/07 £m
Restructuring	156	158
Contract loss provisions	2,825	2,397
Other	153	79
<b>Total</b>	<b>3,134</b>	<b>2,634</b>

The restructuring provisions relate primarily to continuing annual payments to be made under early retirement arrangements. The remaining contract loss provisions relate to contracts, primarily with overseas customers, where, in accordance with Statement of Standard Accounting Practice 9 'Stocks and long-term contracts', the NDA has made full provision for the anticipated shortfall between future income and costs. Other provisions include provisions for insurance claims and early retirements not covered by the restructuring provisions as well as a provision required for any shortfall in funding the Magnox Electricity Supply Pension Scheme (ESPS).

## Operational Expenditure

The NDA operates sites through contracts with Sellafield Limited, Magnox Electric Limited, UKAEA and Springfields Fuels Limited. These contracts are cost-reimbursable, with the NDA funding allowable costs and paying the contractors fees where key performance targets are met. The expenditure was as follows:

**Figure 12: NDA spend**

Operational expenditure £ millions	Sellafield Limited	Magnox Electric	S'fields Fuels	UKAEA	Total 2007/08	Total 2006/07
Staff costs	497	244	64	62	<b>867</b>	854
Raw materials & consumables	63	22	14	16	<b>115</b>	201
Sub-contractors	220	143	24	91	<b>478</b>	486
Other	115	110	27	36	<b>288</b>	289
Capital expenditure	348	44	14	27	<b>433</b>	362
<b>Net site licensee spend</b>	<b>1,243</b>	<b>563</b>	<b>143</b>	<b>232</b>	<b>2,181</b>	<b>2,192</b>
Fees paid to contractors					97	128
NDA directly managed costs					369	336
<b>Total NDA expenditure</b>					<b>2,647</b>	<b>2,656</b>

Note: 'Other' includes: research and development; transportation costs; audit fees; security; IT; training & recruitment; regulatory charges; rent and rates; charitable donations; legal and general costs. All of the expenditure in Figure 12 relates to the delivery of the NDA's programme.

Figure 12 demonstrates that during 2007/08 the NDA incurred £2,181 million of allowable costs paid to contractors (2006/07 £2,192 million). The largest elements of the site operations' expenditure are staff costs and spend on sub-contractors, reflecting the man-power intensive nature of the site operations. The number of full-time equivalent staff engaged by the contractors on nuclear decommissioning and commercial activities during the year is shown in Figure 13.

**Figure 13: SLC employee numbers**

Employees (Full time equivalent)	2007/08	2006/07
Sellafield	11,116	10,771
Magnox Electric	4,347	4,312
Springfields	1,524	1,468
UKAEA	1,480	1,606
<b>Total Contractor Staff</b>	<b>18,467</b>	<b>18,157</b>

Staff costs increased from £854 million in 2006/07 to £867 million in 2007/08 as a result of additional staff and additional pension costs reflecting increases of longevity assumptions. Reasons for increased staffing were predominantly to carry out the additional planned work in legacy ponds and silos, 'catching up' in filling vacant posts, and conversion of long-term interims and contractors to permanent staff.

### Research and development (R&D)

The NDA needs to support a wide range of R&D to enable the activities of the SLCs. Over 90% of the R&D aligned to the NDA mission has a strong development component and is managed by SLCs as part of their day to day activities. Direct spend on R&D by the NDA amounts to £18 million with further direct spend on funding of skills initiatives. Additionally the SLCs, as part of their commitment to delivering

decommissioning, invest in R&D which is funded by the NDA.

Examples of R&D in practice during the year include the Thermal De-nitration (TDN) Magnox reprocessing reactor returning to service after an extended outage which in turn allowed the restart of Magnox reprocessing. This saved three months of shut down costs equating to approximately £20 million. Also, as a result of the trials on the Vitrification Test Rig (VTR) at Sellafield, improvements have been identified which could cause a potential reduction in the LTP of £30 million.

The NDA has integrated research programmes into national and international programmes generating additional funding and knowledge transfer to the UK. For example we have interacted closely with the UK Research Councils and a major £4 million research funding initiative in Nuclear Waste Management has been established.

### Industry pensions

The NDA is responsible for funding a number of pension schemes. In the income and expenditure account there is a direct charge of £7 million in respect of the NDA Group's pension costs, which comprises contributions to the Principal Civil Service Pension Scheme (PCS) for NDA employees, the Direct Rail Services (DRS) element of the BNFL Group Pension Scheme (GPS), the Merchant Navy Pension Schemes for Pacific Nuclear Transport Ltd (PNTL) and the UK Nirex Limited Pension Scheme.

For privately owned site licensees, the Combined Nuclear Pension Plan (CNPP) was established by the NDA in October 2006 to provide future pension benefits for their employees. The NDA is the lead company and contributions to the scheme are paid by the site licensees and the pension costs are reimbursed. On 1 April 2008 the NDA saw the transfer of LLWR employees to the CNPP.

As part of the NDA's responsibilities under the Energy Act 2004, the NDA has agreed to take over the lead company role for the GPS from 1 April 2008. The GPS is a funded scheme and was fully funded to Financial Reporting Standard (FRS) 17 levels on this date. The scheme is run on a sectionalised basis. Therefore, it is possible to identify each participating employer's share of the total assets and liabilities, which should be reflected in the accounts of the respective employers.

The NDA also reimburses the costs of Magnox Electric Limited, the sponsoring employer of the Magnox Group of the ESPS, which provides pensions for the majority of the Magnox SLC employees.

Both the CNPP and the GPS were fully funded at the year end. The 2007 ESPS funding valuation revealed a past service deficit and a payment schedule will be put in place to restore that deficit and a provision has been made in the accounts for this.

## Commercial Income

Figure 14 details the outputs and income from the NDA's commercial activities. Spent fuel management income largely represents the income earned under spent fuel storage, reprocessing contracts for spent fuel and waste storage activities, and for the vitrification of highly active liquors as well as waste substitution income. The contracts are long-term contracts entered into in the previous three decades.

**Figure 14: Commercial activities**

Commercial income £ millions	2007/08		2006/07	
	Output	Income	Output	Income
Electricity generation	5.98TWh	279	11.624TWh	469
Spent fuel management	51T (THORP) 454T (Magnox)	390	0T (THORP) 594T (Magnox)	387
Waste Substitution Income		486		-
Fuel manufacture	144T (AGR) 2T (MOX)	184	197T (AGR) 2.6T (MOX)	232
Other	N/A	119	N/A	118
<b>TOTAL</b>		<b>1,458</b>		<b>1,206</b>

SLC income analysis	2007/08 £m
Sellafield	946
Magnox Electric	280
Springfields Fuels Limited	202
UKAEA	5
NDA	25
<b>Total</b>	<b>1,458</b>

The NDA exceeded its income expectations in the year, with income of £1,458 million, £252 million greater than the previous year and £76 million greater than budget.

The favourable income variance was primarily the result of the inclusion of £486 million of Waste Substitution Income (WSI) which compensated for the loss of operational income. This income derives from the fact that reprocessing customers are willing to pay additional amounts for the option to replace the Intermediate and Low Level Waste originally scheduled to be returned by High Level Waste of the same level of radiation as it involves lower shipping costs and requires less storage. Operational performance was below expectations for the Sellafield plants with THORP remaining offline for the major part

of the year although some initial operations restarted towards the end of the year. The Sellafield MOX Plant continued to under perform against plan producing only two tonnes of work-in-progress and with no full fuel assemblies produced in 2007/08. Income from Springfields was below budget as a result of lower fuel orders from British Energy's Advanced Gas Reactor stations.

Oldbury and Wylfa Magnox stations completed planned outages and outperformed the budgeted generation of 5.95 TWh. This was primarily as a result of Oldbury reactor 2 return to service and Wylfa reactors 1 and 2 being in operation for the latter part of the financial year.

Other income is primarily from the transportation, internationally by INS and within the UK by DRS, as well as rental income from NDA properties and this remained consistent with 2006/07 at £119 million in 2007/08.

## Funding

The NDA uses Government funding on which it relies as commercial income does not cover its total expenditure. Grant-in-Aid amounted to £1,646 million for 2007/08 (£1,108 million for 2006/07) and is shown as financing in the Cash Flow Statement and not as income.

Any surplus from funding is carried forward as a reserve against income shortfalls and emerging costs. Taking into account forecast commercial income and agreed levels of Grant-in-Aid, the NDA has funding in place for its 2008/09 Annual Plan. The NDA applies for Government funding in three-year cycles, effectively fixing the grant for those three years. The NDA has agreed funding for the years 2008/09, 2009/10 and 2010/11 as part of the Comprehensive Spending Review 2007 (CSR07). Funding beyond 2010/11 will be determined in the next Government spending review.

The nature of the NDA's activities exposes the NDA to substantial variability in its commercial income, largely attributable to factors over which it has limited or no control. Site expenditure can also vary although to a lesser and more manageable extent. The NDA has been developing extensive reporting and control mechanisms and our contractors have made significant investments in information technology systems. Together these have allowed the NDA to maintain a clear view of its financial position, to make funding decisions in its prioritisation of work and to manage its operations within agreed Government funding.

Funding certainty has been provided despite income fluctuations with the highest ever funding being received. The significant income shortfalls from operating plant failures were partly offset by waste

substitution incomes shortly before the year end. However, to manage the uncertainty the NDA requested £400 million additional grant in the Spring Supplementary Estimates. This was agreed by Government, providing an additional level of comfort that funds would be provided to fulfil the decommissioning programme.

As a result of this Supplementary Estimate, the funding arrangements were considered by the BERR Select Committee on March 4th and in its subsequent report "Funding the Nuclear Decommissioning Authority" published on 8 April 2008, it concluded that government funding for the NDA will almost certainly have to increase significantly in the coming years to offset anticipated reductions in commercial income. Following the conclusions of this report and after three years of operation BERR has decided that it is timely to review the NDA's funding arrangements, to ensure that the model facilitates the NDA's efficient operation within a framework of overall fiscal control and accountability. NDA welcomes this review and is pleased to be contributing to this important project. We also welcome the findings of NAO's "Taking Forward Decommissioning" report, particularly the recommendation that the NDA needs greater flexibility to manage commercial income volatility and respond to urgent expenditure requirements.

## Asset Management

Figure 15: Tangible fixed assets

Analysis of assets by site licensee	2007/08		
	Tangible Fixed Assets £m	Depreciation £m	Impairment £m
Sellafield Limited	2,957	309	348
Magnox Electric Limited*	166	2	(7)
Springfields Fuels Limited	-	-	14
UKAEA	186	6	-
NDA HQ & Group Companies	186	12	1
<b>Total</b>	<b>3,495</b>	<b>329</b>	<b>356</b>

\*Magnox Electric negative impairment relates to the reversal of previously recorded impairments

Operational difficulties caused us to review THORP. As a result of this review we were able to determine that due to the prolonged outage, although the commercial benefit will outweigh the future operating costs, they do not cover the full carrying value of THORP, and there has been an impairment of £341 million in the Fixed Asset valuation of THORP.

The future of the Sellafield MOX Plant (SMP) is currently being reviewed as the plant has consistently failed to meet output targets. The results of this review will form the basis of recommendations to Government at a later date.

With its responsibilities relating to the Energy Act 2004 (including the additional responsibilities for radioactive waste management and effective competitions), the NDA has a pivotal role in a complex industry. The NDA's primary function is to safely and cost-effectively oversee the decommissioning and clean-up of all the sites under its ownership, as well as to deal effectively with large stocks of nuclear materials and wastes.

The NDA also has a responsibility to maximise the commercial value of its assets on behalf of the UK taxpayer in order to offset the costs of the decommissioning programme. This could be through making land available or exploring the potential value of the stocks of nuclear materials in its possession. The NDA is currently looking at this area in more detail in order to align it more with our decommissioning and clean-up programme.

The way in which we look after our assets affects a wide range of people and the NDA works collaboratively with the SLCs and the Government to facilitate the delivery of our plans. We also work with our stakeholders to take account of, where possible, the wider social impacts of the operation of the integrated waste strategy.

### Government energy review

The UK Government has published a White Paper, alongside the Energy Bill, which sets out a range of measures to address the twin challenges of tackling climate change and securing energy supplies and specifically highlights the role of future nuclear

generation. This may have implications for the value of NDA's assets.

In January 2008, companies were invited by Government to bring forward plans to build and operate new nuclear power stations as part of the UK's strategy for a secure, diverse, low carbon energy mix.

The NDA knows from the extensive consultation conducted with its communities on their preferred end state for each of its sites that some communities, for example, around Sellafield and Wylfa, have a considerable interest in maintaining their economic prosperity through new nuclear build.

It also knows from contact with the energy industry that there is considerable interest in how the NDA's assets could play a role in future energy supply, which could include a new build programme.

The UK Government has set out in the White Paper that it will be carrying out a Strategy Siting Assessment (SSA) to assess the suitability of sites for new nuclear build. The NDA, in order to decide upon the strategy for future use of its sites and land around its sites, will in due course invite proposals which meet its strategic objectives and maximise value for money for the UK taxpayer, which is also an ongoing objective.

### Going concern

The accounts show a deficit on the Income and Expenditure Account of £8,471 million for the year ended 31 March 2008, largely arising from the increase in the nuclear liabilities and net liabilities of £43.2 billion primarily attributable to the nuclear provision.

There is no reason to believe that BERR's future sponsorship and future parliamentary approval will not be forthcoming. It has accordingly been considered appropriate to adopt a going concern basis for the preparation of these financial statements.

William Roberts  
Chief Financial Officer

## Directors and Executives

### Non-Executive Directors



**Stephen Henwood**  
**Chairman**

Stephen Henwood was appointed Chairman on 1 March 2008.

A Management Accountant, he has extensive experience in senior financial and operational roles with Tate & Lyle plc and BAE Systems plc. His most recent role was Group Managing Director, International Partnerships, BAE Systems.

He is also a Non-Executive Director of Nord Anglia plc, Hampson Industries plc and Lost Wax Media Limited.

## Non-Executive Directors



**Nick Baldwin** R\*

Nick Baldwin was interim Chairman of the NDA following Sir Anthony Cleaver's retirement on 31 July 2007 until 29 February 2008.

A Chartered Engineer, Fellow of the Institution of Electrical Engineers (FIEE) and Fellow of the Institution of Mechanical Engineers (FIMechE), he has been a Non-Executive Director of the NDA since October 2004.

He has a portfolio of advisory, consultancy and governance roles, working in the Government, utility, private equity and housing sectors. He is a Non-Executive Director of Scottish and Southern Energy plc, and the Forensic Science Service. He also has Chairman roles with the Public Weather Service Customer Group and Worcester Community Housing.

Previously he worked in electricity, gas and water utilities, culminating in being the Chief Executive of Powergen plc.

R\* - Indicates Chair of the Remuneration Committee

R - Indicates Member of the Remuneration Committee



**Tony Cooper** R

Tony Cooper is a former senior Trade Union Official with nuclear industry connections and has held a number of public sector Non-Executive roles, including roles in the Forestry Commission and the Postal Services Commission. He was Chairman of the Nuclear Industry Association (NIA) but stepped down from that role in December 2005 following his appointment to the NDA Board.

He is a former Non-Executive member of the Department of Trade and Industry (DTI) Strategy Board and the DTI Investment Committee. Tony also served on the DTI Energy Advisory Committee for the entirety of its 10 year life.

Tony is Chairman of the Combined Nuclear Pension Plan (CNPP) Trustees and Trustee Director of the Group Pension Scheme (GPS).

## Non-Executive Directors



**David Illingworth** A\*

David Illingworth is Chairman of the NDA's Audit Committee and is also Independent Chairman of the Trinity Retirement Benefit Scheme (TRBS).

David was President of the Institute of Chartered Accountants in England and Wales (ICAEW) from 2003 to 2004. He served as Chairman of the Consultative Committee of Accounting Bodies (CCAB) and as Director and Deputy Chair of the Financial Reporting Council (FRC). He was a member of the Takeover Panel from 2003 to 2004.

David joined KPMG in 1968 and, after qualifying as a chartered accountant and spending 26 years in the partnership, left in 2004.



**Professor Roger Scott** A

Professor Scott has led an academic career, working at the Scottish Universities Research and Reactor Centre, which culminated in his being appointed Director and Professor of Nuclear Science.

He is a Fellow of the Institute of Physics and of the Royal Society of Edinburgh. His academic research in both pure and applied nuclear physics and his close involvement with all aspects of the decommissioning of a research reactor have led to in-depth knowledge of the relevant technical, regulatory and waste disposal issues.

He is presently engaged part-time to produce and submit to the Health and Safety Executive (HSE) a case for delicensing the former reactor site at the Scottish Universities Research and Reactor Centre. He has undertaken occasional consultancy work for BAE Systems and Halcrow.

A\* - Indicates Chair of Audit Committee

A - Indicates Member of Audit Committee

## Non-Executive Directors



### **Dr Lyndon Stanton** <sup>A</sup>

Dr Stanton is currently a Non-Executive Director of the Environment Agency and was Deputy Chairman of the Churches Conservation Trust, a Department of Culture, Media and Sport sponsored heritage non departmental public body, until late 2005. He was a Trustee of the Prince of Wales's Phoenix Trust for Historic Building Conservation from 1996 to 2004 and Chairman in 2003 and 2004. He has been a trustee of the Norden Farm Centre for the Arts-Maidenhead since 2002 and chairs the Finance and Audit committee.

Dr Stanton spent much of his career in the chemical industry with Arco Chemical Europe, where he held various business development and business management roles. He was Arco's President and Chief Executive from 1994 to 1998 and, when the company merged with another American chemical company, Lyondell, he continued in this role in the newly structured organisation until his retirement at the end of 2000. His early career, involving both technical and commercial appointments in the UK and continental Europe, was with ICI.



### **Primrose Stark** <sup>R</sup>

Primrose Stark served as the Human Resources Director of First Engineering Limited for eight years, having been part of the successful management employee buy out from British Rail. She also represented engineering contractors as a Board Member on the Railway Industry Training Council from 1997 to 2003.

She began her career with the Health Service and with British Rail, where she held a number of human resources and change management roles.

Primrose currently works as a consultant in business transformation and change management. She is also involved in the development of a competency management system in the construction sector.

*A – Indicates Member of Audit Committee*

*R – Indicates Member of Remuneration Committee*

## Executive Directors



**Dr Ian Roxburgh** <sup>B</sup>  
**Chief Executive**

Dr Ian Roxburgh joined the NDA as CEO in September 2004. Having previously been Chief Executive of the Coal Authority, Dr Roxburgh brings knowledge and experience both of the energy sector and in dealing safely with its historical legacy.

Before working for the Coal Authority, Dr Roxburgh was Managing Director of George Wimpey Strategic Land Management Limited, a private sector business that specialised in the building of housing developments on former brown field sites. He has also worked as a Senior Inspector with The Planning Inspectorate and as a Course Director and Senior Lecturer in Environmental Science at Plymouth Polytechnic.

Dr Roxburgh has written a text book entitled 'Geology of High Level Nuclear Waste Disposal' and has also contributed to the hydrogeological entries for the New Oxford University Press 'Concise Oxford Dictionary of Earth Sciences'.

*B – Indicates Board Member*



**William Roberts** <sup>B</sup>  
**Chief Financial Officer**

Appointed in January 2005, Bill Roberts has extensive experience in finance and has been responsible for shaping large infrastructure enterprises in both the public and private sectors.

Before joining the NDA, Bill held senior finance and board positions with TXU and CDC Group, where he worked internationally, and has worked in the energy sector for fifteen years. Prior to that, Bill worked on UK railway privatisation after qualifying as a chartered accountant with Ernst & Young.

In addition to his role as the NDA's Chief Financial Officer, Bill is a trustee director of the Combined Nuclear Pension Plan (CNPP) and director of Rutherford Indemnity Limited. He is Chairman both of Direct Rail Services Limited (DRS) and of the GPS Pension Scheme.

## Executive Directors



**James Morse** <sup>B</sup>  
**Divisional Director, Programme Assurance**

James Morse joined the NDA from Bechtel where he worked on a variety of project management and project director roles, latterly leading 1,200 staff working on the West Coast Mainline Modernisation programme for Network Rail.

James brings 25 years of experience in programme and project management, having previously worked for Exxon Chemical, Foster Wheeler Energy and Costain Engineering in a variety of project engineer and project management roles. He has gained significant project and management experience both in the UK and internationally.

In addition to his role as the NDA's Divisional Director, Programme Assurance, James is a director of DRS Limited and INS Limited.

*B – Indicates Board member*



**Richard Waite** <sup>B</sup>  
**Divisional Director, Strategy and Technology**

Richard Waite joined the NDA from BAE Systems, where he was the Land Systems Business Improvement Director with responsibility for project management and engineering across a diverse range of defence business areas.

He was also Programmes Director in the company's RO Defence business, responsible for the delivery of a large land weapons systems order book to time, cost and specification targets.

Richard joined the defence industry in 1998 as Prime Contracts Director for GEC Marine and, prior to his defence career, spent 18 years in the nuclear industry. His nuclear career has spanned a number of roles in Advanced Gas-Cooled Reactor design and construction before joining the Sizewell B project, where he became Site and Commissioning Manager before taking up the role of Projects Director in Nuclear Electric.

In addition to his role as the NDA's Divisional Director, Strategy and Technology, Richard is a director of Cogent, the Sector Skills Council covering the chemicals, nuclear, oil and gas, petroleum and polymers industries and has recently been appointed as Chairman of INS Limited, a wholly owned subsidiary of the NDA.

## Executive Directors



**John Clarke** <sup>B</sup>

**Divisional Director, Commercial**

John's most recent role before joining the NDA in June 2008 was Managing Director of INS Limited. In this role he managed the transition of INS from a subsidiary of Sellafield Limited to a wholly owned subsidiary of the NDA.

John has more than 25 years experience of working in the nuclear industry. A Chartered Engineer and Fellow of the Institution of Chemical Engineers (FIChemE), his early career involved a range of roles in the design, development, commissioning and operation of nuclear fuel processing plants. A member of the Sellafield Limited Executive Team for eight years, John spent five years as Head of Environmental, Health, Safety and Quality (EHSQ), followed by three years as Director of Production where he was accountable for the majority of operational activities at Sellafield.

John is a director of INS Limited and of Pacific Nuclear Transport Limited (PNTL).

*B – Indicates Board member*

## Senior Executives



**Jon Phillips**

**Director of Communications and Stakeholder Relations**

Jon Phillips joined the NDA in March 2005 from BAA plc, where he had worked since 1992 in a number of roles, including Community Relations, Media Relations and Public Affairs.

In his most recent role as Communications Director at Heathrow, Jon had been involved in building awareness and support for the sustainable growth and physical transformation of the airport, including the construction of Terminal 5.

Jon spent five years working in consultancy public relations before joining BAA.

## Senior Executives



**Alan Rae**  
**Director of Nuclear Safety, Security,  
Safeguards, Environment and Health**

Since joining the NDA in 2005 Alan has been extensively involved in the NDA's competition programme and leading several aspects of the NSSE team work. Alan has been the NDA's Director of Nuclear Safety, Security, Safeguards, Environment and Health since November 2007 and in this role reports directly to James Morse, Divisional Director, Programme Assurance.

Alan has 25 years experience in the nuclear industry prior to joining the NDA. This included 10 years in plant operations and over 15 years as a nuclear safety regulator. Alan's experience includes regulation of plant operations, commissioning and decommissioning on both civil and defence related nuclear facilities. Alan also has extensive safety policy experience both domestically and internationally including a posting with the US Nuclear Regulatory Commission.



**Jim McLaughlin**  
**Director of Human Resources**

Jim McLaughlin joined the NDA in April 2008 from the Royal Bank of Scotland where he had worked since 2003, most recently as their Head of Learning.

Jim has more than 25 years of experience in the construction, power generation and supply industries, including the roles of Director of Learning for Scottish Power and International HR Director based in the USA.

## Directors' Report

### About the NDA

The Nuclear Decommissioning Authority (NDA) is an executive non departmental public body (NDPB) and was established on 22 July 2004 under the Energy Act 2004.

It was created with the primary objective of overseeing and monitoring the decommissioning and clean-up of the UK's civil nuclear legacy.

The Board meets each month, except August, with additional meetings being held when necessary. Board papers are circulated to directors in advance of each meeting. Responsibilities are delegated to the Audit Committee and Remuneration Committee.

### Accounts direction

These Accounts have been prepared in a form directed by the Secretary of State with the approval of HM Treasury and in accordance with Section 26 of the Energy Act 2004.

### Directors' interests

Directors of the NDA must declare any personal, private or commercial interests. A register of such interests is maintained by the NDA.

No director has any personal, private or commercial interests which would conflict with his or her role as a director of the NDA.

### Locations

The NDA's headquarters are located at Moor Row in Cumbria and it has offices in Calderbridge, Warrington, Forss, London and Harwell.

### Directors

The directors who served during the year to 31 March 2008 and their responsibilities were:

Sir Anthony Cleaver	Non-Executive Chairman (retired 31 July 2007)
Stephen Henwood	Non-Executive Chairman (appointed 1 March 2008)
Dr Ian Roxburgh	Chief Executive and Accounting Officer
Primrose Stark	Non-Executive Director
Dr Lyndon Stanton	Non-Executive Director
Tony Cooper	Non-Executive Director
David Illingworth	Non-Executive Director
Nick Baldwin	Non-Executive Director *
Professor Roger Scott	Non-Executive Director
William Roberts	Chief Financial Officer
James Morse	Divisional Director, Programme Assurance
Richard Waite	Divisional Director, Strategy and Technology
Mark Leggett	Divisional Director, Commercial (resigned 31 January 2008)

\*Nick Baldwin served as interim Non-Executive Chairman between 1 August 2007 and 29 February 2008.

Non-Executive Directors were appointed in October 2004 with three-year service contracts, which have subsequently been extended by a 12 month period.

The Chairman has been appointed for a period of three years with a possible additional period of three years.

#### **External auditors**

The NDA Group's auditor, the Comptroller and Auditor General (C&AG), appointed under the Energy Act 2004, audits the NDA's financial statements. The services provided by the C&AG relate to statutory audit work for the NDA and its consolidation. During the year the National Audit Office undertook a value for money review of the decommissioning progress to date.

#### **Disclosure of information to the NDA's external auditor**

As Accounting Officer, as far as I am aware, there is no relevant information of which the NDA's auditors are unaware. I have taken all the steps that I ought to have taken to establish that the NDA's auditors are aware of that information.

#### **Employees and employment Equal opportunities**

The NDA believes that every individual has a right to equal treatment and opportunities. Discrimination or harassment on the grounds of gender, age, marital status, ethnic or national origin, religion, sexual orientation or disability will not be tolerated. The NDA's Equal Opportunities and Diversity Policy outlines the rights of all employees as well as the responsibility on all staff to comply with equal opportunities legislation. Furthermore, ongoing monitoring of equal opportunities data is undertaken to ensure compliance with this policy.

#### **Learning and development**

A comprehensive learning and development programme continues to be rolled out at individual, team and organisational level to meet the needs of the business.

#### **Staff Consultation Group**

Employee involvement is critical to the success of the business and to this end a Staff Consultation Group has been set up to discuss management and policy matters between staff and management.

#### **Pensions**

All employees are entitled to join the Principal Civil Service Pension Scheme (PCSPS). Details of the scheme are given in note 28 to the accounts.

#### **Investor in People**

The NDA was awarded Investors in People (IiP) status in May 2006.

#### **ISO9001:2000 Quality Management System**

The NDA was certified to the ISO9001 Quality Management system by Lloyds Register Quality Assurance (LRQA) in October 2006.

#### **ISO14001 Environmental Management System**

The NDA was recommended for certification to the ISO14001 Environmental Management System by LRQA on 28 March 2008.

The number of the NDA's full-time equivalent employees during the year to 31 March 2008 averaged 340 (2006/07 – 234), (see note 5 for more detail).

#### **Activities of subsidiary companies**

##### **Direct Rail Services Limited (DRS)**

DRS is a wholly owned subsidiary company and was established in 1995 to provide the civil nuclear industry with a strategic rail transport service. Initially handling the specialist transportation of used nuclear fuel from the UK's nuclear power stations to the Sellafield reprocessing facility in Cumbria, DRS's reputation for excellence in this area has led to the company's development into a wider range of non-nuclear related business.

#### **Rutherford Indemnity Limited**

This is a wholly owned subsidiary engaged in nuclear insurance and re-insurance based in Guernsey.

#### **United Kingdom Nirex Limited (Nirex)**

The ownership of the shares of this entity was transferred from the Government to the NDA under the direction of the Secretary of State on 30 November 2006. The trade and activities of UK Nirex Limited were transferred to the NDA on 1 April 2007 and the process of winding up Nirex has commenced. Ownership of the 11 Nirex subsidiaries, all of which were dormant in 2007/08, has passed to the NDA.

#### **International Nuclear Services Limited (INS)**

On 2 October 2006, the NDA acquired a 49% share in INS. As the NDA was deemed to have effective control of the company it was treated as a subsidiary from that date. The remaining 51% share in INS was acquired on 1 April 2008. INS is involved in the transportation of spent fuel, reprocessing products and waste. INS owns 100% of INS Japan KK and INS SA, companies registered in Japan and France respectively, and which are both involved in fuel transportation.

#### **Pacific Nuclear Transport Limited (PNTL)**

INS has a 62.5% shareholding in PNTL, which is accounted for as a subsidiary. PNTL is involved in the transportation of nuclear fuel overseas.

#### **INS Rokkasho KK**

On 19 September 2007, the NDA acquired 66% of the shares in INS Rokkasho KK, which is accounted for as a subsidiary. INS Rokkasho KK is incorporated in Japan and is involved in the provision of consultancy in the nuclear industry.

#### **Better payment practice**

The NDA is working towards compliance with the Better Payment Practice Code in its treatment of suppliers. The key principles are to settle the terms of payment with suppliers when agreeing the transaction, to settle disputes on invoices without delay and to ensure that suppliers are made aware of the terms of payment and to abide by the terms of payment. During the year, the NDA has achieved a 96% success rate for payment of suppliers in accordance with terms (2006/07 82%). The NDA is striving to achieve a 100% success rate.

#### **Charitable and political donations**

During the year, the NDA made charitable donations of £2,500 (2006/07 – £3,000). No political donations or contributions were made.

#### **Investment in socio-economic developments**

In accordance with its remit under the Energy Act 2004, during the year the NDA made socio-economic grants of £15 million (2006/07 £10 million).

#### **Research and development**

During the year, the NDA funded expenditure of £18 million (2006/07 £13 million) on research and development. In addition, the NDA funded research and development undertaken by our contractors.

#### **Funding, counterparty and foreign exchange risk**

Although a NDPB, the NDA is also responsible for certain commercial activities and is, therefore, subject to risks and uncertainties surrounding a commercial operation. Its electricity trading activity is subject to price variation risk and was managed by British Energy Trading Services Limited to hedge energy price exposure. The NDA's foreign exchange risk is managed by the site licensees to hedge

foreign currency transactions. Details are to be found in notes 1 and 33 of the accounts.

#### Data security

The NDA's IT network was designed and built to comply with Government information security standards. It is subject to inspection by the Office for Civil Nuclear Security (OCNS) to ensure that it remains compliant. As an NDPB the NDA is required to apply all new policies concerning IT security, including the restrictions on the use of CDs, DVDs and memory sticks. The NDA network is also subject to annual independent penetration testing, which ensures that existing security policies are complied with. The NDA has had no losses of confidential information during the course of the financial year ending 31 March 2008.

#### Summary of results for the period

The summary of the results for the year is as stated in the Financial Review.

Transfers to and from reserves are detailed in note 29 to the accounts.

#### Changes in fixed assets during the period

The changes in fixed assets are reported in notes 10 and 11 to the accounts.

#### Events after the year-end

- (a) A transfer scheme for certain UKAEA assets was successfully implemented on 1 April 2008.
- (b) The remaining 51% of the shares in INS were acquired under a transfer scheme. Subsequently 143 employees were transferred from Sellafield Limited into INS.
- (c) Publication of White Paper on Managing Radioactive Waste Safely (MRWS) in June 2008.

- (d) NDA became lead employer for the Group Pension Scheme (GPS) on 1 April 2008.
- (e) Full ownership of BNFL Properties Limited was transferred to the NDA under a transfer scheme on 1 April 2008. The company has subsequently been renamed NDA Properties Limited.
- (f) On 31 March 2008, UK Nuclear Waste Management Limited (UKNWM) was awarded the contract for the management and operation of the LLWR. The new Management and Operation (M&O) contract came into effect on 1 April 2008.
- (g) On 1 April 2008 a number of trading contracts, previously held by site licensee companies on behalf of the NDA, have been novated into the name of the NDA. The principal contracts relate to waste reprocessing and transport.
- (h) The Board announced that after more than three and a half years of leading the NDA, Dr Ian Roxburgh will step down as CEO on 31 July 2008. From 1 August 2008, Richard Waite, Divisional Director, Strategy and Technology, will be acting Chief Executive until a successor is appointed.

#### Going concern

The accounts show a deficit on the Income and Expenditure Account of £8,471 million for the year ended 31 March 2008, largely arising from the increase in the nuclear liabilities and net liabilities of £43.2 billion

primarily attributable to the nuclear provision.

A full explanation of the adoption of a going concern basis appears in the Accounting Policies, note 1 to the Accounts and Financial Review.

A handwritten signature in black ink, appearing to read 'I. Roxburgh', with a horizontal line underneath.

*Dr Ian Roxburgh*  
*Chief Executive and Accounting Officer*  
*7 July 2008*

## Corporate Governance

### Best practice

The NDA, as a non departmental public body (NDPB), operates in accordance with the provisions of the Energy Act 2004 and Cabinet Office guidelines for NDPBs. It also seeks to apply, where appropriate, best practice in corporate governance as represented by the revised Combined Code on Corporate Governance.

### The Board

Responsibility for ensuring that high standards of corporate governance are observed at all times within the NDA rests with the Board of Directors. In particular, they are responsible for ensuring the maintenance of a control framework in which they can obtain assurance that risk is properly assessed and managed, appropriate internal controls are in force and complied with, and business performance is properly monitored.

The Board sets out the strategic framework and direction within which the NDA operates. The Secretary of State for Business, Enterprise and Regulatory Reform (BERR) in consultation with the Scottish Ministers appoints the Chairman of the Board.

Matters reserved to the Board include:

- establishing committees of the Board, reviewing their activities, and where appropriate ratifying their decisions
- reviewing and approving the NDA Annual Report and Accounts following review by the Audit Committee
- receiving and considering reports from the Audit Committee on the control, risk management and assurance framework
- ratification of the NDA Strategy and Plans
- approval and maintenance of NDA policies
- approval and operation of delegated authorities
- ratification of all significant matters relating to the NDA, such as material acquisitions and disposals of assets, major litigation or significant matters related to the public interest or of interest at a ministerial level in government

The Board has five Executive Directors (2006/07 – five) and seven Non-Executive Directors (2006/07 – seven), including the Non-Executive Chairman and meets monthly, except for August.

The day-to-day business management of the NDA is delegated by the Board to the Chief Executive Officer and the other Executive Directors. In addition, the Board has delegated certain responsibilities to the Audit Committee and the Remuneration Committee.

### The Chairman

The Secretary of State for BERR and Scottish Ministers set the NDA Chairman objectives for the NDA Board. The Chairman is responsible for the leadership of the Board, ensuring that it effectively discharges its responsibilities and managing its agenda.

### **The Chief Executive Officer and Accounting Officer**

The Chief Executive Officer, Dr Ian Roxburgh, is also the Accounting Officer.

The responsibilities of the Accounting Officer are set out in a letter from the Permanent Secretary to BERR, the Accounting Officer Memoranda and the Management Statement and Financial Memorandum.

The Accounting Officer is accountable to Parliament for the activities of the NDA, the stewardship of public funds entrusted to the NDA and the extent to which key performance targets and objectives are met.

He is personally responsible for:

- the propriety and regularity of the public finances for which he is answerable
- the keeping of proper accounts
- prudent and economical administration
- the avoidance of waste and extravagance and the effective and efficient use of all available resources
- the maintenance of public service values within the NDA, and for the transparency and openness of its proceedings

He is also responsible for taking appropriate action if the NDA Board should consider taking a course that would not comply with these requirements.

### **The Remuneration Committee**

The purpose of the Remuneration Committee is to support the Board in discharging its responsibilities under the Energy Act 2004 to determine the remuneration and terms of service for the Chief Executive and the Executive Directors.

The NDA Remuneration Committee is comprised wholly of Non-Executive Directors. These members are:

Nick Baldwin (Chairman)  
Sir Anthony Cleaver (retired 31 July 2007)  
Primrose Stark  
Tony Cooper  
Stephen Henwood (from 1 March 2008)

The Committee typically meets in line with the annual cycle for determining the remuneration and terms of service for the Chief Executive and other Executive Directors, setting the pay remit and approving the bonus scheme arrangements.

The Committee has met three times during the accounting period ended 31 March 2008 with 100% attendance at these meetings. The CEO, along with the Director of Human Resources, also attends these meetings, except for the discussion of issues relevant to their own remuneration.

### **The Audit Committee**

The Board has delegated responsibility for reviewing the NDA's system of internal control and monitoring its effectiveness to the Audit Committee. The system is designed to manage rather than eliminate the risk of failure to achieve the NDA's objectives. Any such system can only provide reasonable, and not absolute, assurance against misstatement or loss.

Through the Audit Committee the Board has reviewed the effectiveness of the internal control system, including financial, operational and compliance controls and risk management in accordance with best practice.

The NDA Audit committee is comprised wholly of Non-Executive Directors. These members are:

David Illingworth (Chairman)  
Professor Roger Scott  
Dr Lyndon Stanton

The CEO, in his capacity as Accounting Officer, along with the Chief Financial Officer, attends audit committee meetings.

The Committee has met six times during the 2007/08 accounting period ended 31 March 2008, with 100% attendance at these meetings. Senior employees of the NDA and representatives from both BERR and the National Audit Office (NAO) were also invited to attend.

The roles and responsibilities of the Audit Committee are set out in the terms of reference approved by the Board and include, amongst other things:

- reviewing the NDA Annual Report and Financial Statements prior to submission to the Board and reporting on them appropriately
- ensuring that systems are in place to provide the Board and management with relevant, accurate and timely information based on solid management information systems which are continually being challenged and improved
- reviewing and challenging the risk management framework process with specific reports produced for Audit Committee approval
- approval of the Internal Audit plan and work programme

- reviewing and following up the NAO's Management Letter and recommendations from internal audit
- reviewing and challenging individual internal audit reports
- reviewing the effectiveness of the NDA's system of internal control and its internal audit function to ensure compliance with its policies, strategies and operating procedures
- reviewing key findings and following up on recommendations arising from value for money studies undertaken by the NAO
- reporting to the Board on its review of the overall effectiveness of the NDA's system of internal control over the NDA's operations as well as on lifetime plans and on competition processes
- monitoring the external auditors' independence and objectivity

The Audit Committee is an advisory body and through a continuous improvement review process identifies, evaluates and controls the significant risks the NDA faces. During the year the Audit Committee undertook a review of its own effectiveness in conjunction with the external auditors. The internal control environment will continue to be monitored by the Committee which will, where necessary, ensure improvements are implemented.

Details of the work undertaken by the Audit Committee in these areas are set out in the Statement of Internal Control.

## Remuneration Report

### Setting remuneration

The Nuclear Decommissioning Authority (NDA) was constituted under the Energy Act 2004, which states that the NDA Board should total not less than seven or more than thirteen directors comprising both Non-Executive and Executive Directors. The number of Executive Directors must, as far as is practical, be less than the number of Non-Executive Directors.

The remuneration of the Chairman, Chief Executive Officer and Non-Executive Directors is determined by the Department for Business, Enterprise and Regulatory Reform (BERR). The Remuneration Committee makes recommendations to BERR on the overall package for Executive Directors. Non-Executive Directors are not involved in decisions relating to their own remuneration.

In reaching its recommendations, the Remuneration Committee has regard, amongst other things, to the following considerations:

- the need to recruit, retain and motivate suitably able and qualified people to exercise their different responsibilities
- regional/local variations in labour markets and their effects on the recruitment and retention of staff
- Government policies for improving the public services, including the requirement on departments to meet the output targets for the delivery of departmental services

The Remuneration Committee takes account of the evidence it receives about wider economic considerations and the affordability of its recommendations.

### Remuneration policy

The individual components of the remuneration packages are:

#### Salaries and allowances

Salaries and allowances are reviewed annually and in the first instance have been benchmarked against industry data. They represent a rate deemed applicable to attract the calibre of employee, with the appropriate level of experience, required to undertake the role and responsibility of the position.

#### Performance-related bonuses

These are calculated in accordance with fixed formulae that are agreed each year with BERR on the basis of recommendations from the Remuneration Committee.

The NDA has a total reward strategy comprising both pay and grading arrangements and other rewards and non-pay benefits. This includes a commitment to permit staff, including executives, to participate in a bonus scheme. NDA specific objectives, set and approved by the Remuneration Committee, are tracked and monitored throughout the year as part of the performance management process.

Subject to satisfactory performance, bonuses are awarded as follows:

- for CEO and Executive Team employees, 75% of the bonus is based on corporate objectives and 25% based on personal objectives. This recognises that the executive team members of staff have a greater ability to control overall NDA performance than do staff in other grades. Achievement of the personal objectives is approved by the Remuneration Committee

- for all other employees, 50% of the available bonus is based on corporate objectives with the remaining 50% of available bonus being based on the successful completion of performance against personal objectives

The final decision on the achievement of personal objectives and the measurement of personal performance for all other employees rests with the Chief Executive.

#### Fees

Non-Executive Directors are entitled to fees that are determined by BERR. They do not receive performance-related bonuses or pension entitlements but are reimbursed for reasonable expenses incurred in the performance of their duties as directors.

#### Service contracts

##### General

Civil service appointments are made in accordance with the Civil Service Commissioners' Recruitment Code, which requires appointment to be on merit on the basis of fair and open competition but also includes the circumstances when appointments may otherwise be made.

Unless otherwise stated below, the officials covered by this report hold appointments, which are open-ended until they reach the normal retiring age of 65. Early termination, other than for misconduct, would result in the individual receiving compensation as set out in the Civil Service Compensation Scheme.

Further information about the work of the Civil Service Commissioners can be found at [www.civilservicecommissioners.gov.uk](http://www.civilservicecommissioners.gov.uk)

Service details		
	Date employment commenced	Notice period
Dr Ian Roxburgh	10.09.04	12 months
William Roberts	17.01.05	6 months
Richard Waite	04.04.05	6 months
James Morse	21.03.05	6 months
Mark Leggett	13.03.06	Resigned 31.1.08
John Clarke	01.06.08	6 months

The following information has been audited:

Directors' emoluments 2007/08						
	Salaries £	Car benefit £	Bonus £	Healthcare £	Total emoluments £	2006/07 emoluments £
<b>Non-Executive Directors</b>						
Sir Anthony Cleaver i)	40,000				40,000	116,667
Stephen Henwood ii)	6,667				6,667	-
David Illingworth	35,000				35,000	34,167
Primrose Stark	25,000				25,000	25,000
Dr Lyndon Stanton	25,000				25,000	25,000
Nick Baldwin iii)	57,500				57,500	34,167
Tony Cooper iv)	40,417				40,417	47,833
Professor Roger Scott	25,000				25,000	25,000
<b>Executive Directors</b>						
Dr Ian Roxburgh	213,459	13,408	85,384	221	312,472	347,208
William Roberts	149,161	12,000	50,715	221	212,097	214,571
James Morse	149,161	12,000	50,715	221	212,097	214,571
Richard Waite	149,161	12,000	50,715	221	212,097	246,721
Mark Leggett v)	239,380	10,000	25,902	221	275,503	249,321
i) retired 31/07/07 ii) appointed 01/03/2008 iii) includes amounts relating to service as interim chairman iv) includes £5,417 relating to additional services as a trustee of CNPP (£13,666 2006/07). v) resigned 31/01/08, salary includes contractual payments in lieu of notice and amounts in respect of the forecast 07/08 bonus and long-term incentive plan						

### Long-term incentive plan

The Executive Directors have been enrolled in long-term incentive arrangements linked to Public Service Agreements (PSA) targets and approved by the Remuneration Committee. The extent to which the remuneration under this plan will vest is wholly dependant on the extent to which the NDA meets its performance hurdles. An amount of up to £75,000 for each director will vary if the directors do not meet or exceed these targets.

### Compensation payments

During 2007/08 (and 2006/07), there were no compensation payments made to past Executive Directors.

### Third party payments

During 2007/08 (and 2006/07), there were no payments made to third parties for services of an Executive Director.

### Civil service pensions

Pension benefits are provided through the Civil service pension arrangements. From

30 July 2007, civil servants may be in one of four defined benefit schemes; either a 'final salary' scheme (**classic**, **premium** or **classic plus**); or a 'whole career' scheme (**nuvos**). These statutory arrangements are unfunded with the cost of benefits met by monies voted by Parliament each year. Pensions payable under **classic**, **premium**, **classic plus** and **nuvos** are increased annually in line with changes in the Retail Prices Index (RPI).

Members joining from October 2002 may opt for either the appropriate defined benefit arrangement or a good quality 'money purchase' stakeholder pension with a significant employer contribution (**partnership** pension account).

Employee contributions are set at the rate of 1.5% of pensionable earnings for **classic** and 3.5% for **premium**, **classic plus** and **nuvos**.

Benefits in **classic** accrue at the rate of 1/80th of final pensionable earnings for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement.

For **premium**, benefits accrue at the rate of 1/60th of final pensionable earnings for each year of service. Unlike **classic**, there is no automatic lump sum.

**Classic plus** is essentially a hybrid with benefits in respect of service before 1 October 2002 calculated broadly as per **classic** and benefits for service from October 2002 calculated as in **premium**.

In **nuvos** a member builds up a pension based on his pensionable earnings during their period of scheme membership. At the end of the scheme year (31 March) the

member's earned pension account is credited with 2.3% of their pensionable earnings in that scheme year and the accrued pension is uprated in line with RPI. In all cases members may opt to give up (commute) pension for lump sum up to the limits set by the Finance Act 2004.

The **partnership** pension account is a stakeholder pension arrangement. The employer makes a basic contribution of between 3% and 12.5% (depending on the age of the member) into a stakeholder pension product chosen by the employee from a panel of three providers. The employee does not have to contribute but where they do make contributions, the employer will match these up to a limit of 3% of pensionable salary (in addition to the employer's basic contribution). Employers also contribute a further 0.8% of pensionable salary to cover the cost of centrally-provided risk benefit cover (death in service and ill health retirement). The accrued pension quoted is the pension the member is entitled to receive when they reach pension age, or immediately on ceasing to be an active member of the scheme if they are already at or over pension age.

Pension age is 60 for members of **classic**, **premium** and **classic plus** and 65 for members of **nuvos**.

Further details about the Civil Service pension arrangements can be found at the website [www.civilservice-pensions.gov.uk](http://www.civilservice-pensions.gov.uk)

Executive Directors' pension							
	Real increase in pension	Real increase in lump sum	Pension at end date	CETV at start date	CETV at end date	Employees contributions and transfers in	Real increase in CETV funded by employer
	In band £000's		In band £000's	In band £000's	In band £000's	In band £000's	In band £000's
Dr Ian Roxburgh	2.5 - 5	N/A	70 - 75	1,302	1,547	12.5 - 15	66
William Roberts	2.5 - 5	N/A	5 - 7.5	45 - 50	90-95	25 - 27.5	9
Richard Waite	2.5 - 5	N/A	7.5 - 9	70-75	125-130	17.5 - 20	30
James Morse	0 - 2.5	N/A	5 - 7.5	50-55	90-95	5 - 7.5	25
Mark Leggett	0 - 2.5	N/A	0 - 5	20-25	45-50	5 - 7.5	46
Notes							
Dr Ian Roxburgh has double accruals agreed from 15/10/05							
William Roberts is a supplementary member and has paid added years during the period of £21,308							
Richard Waite is a supplementary member and has paid added years during the period of £12,834							
James Morse is a supplementary member							
Mark Leggett was a supplementary member							

The following information has been audited:

#### Cash Equivalent Transfer Values

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the

individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Civil Service pension arrangements and for which the CS Vote has received a transfer payment commensurate with the additional pension liabilities being assumed. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost (Annex 13C Disclosure of salary, pension and compensation information for 2007/08

EPN 210 7 pension benefits at their own cost). CETVs are calculated within the guidelines and framework prescribed by the Institute and Faculty of Actuaries.

**Real increase in CETV**

This reflects the increase in CETV effectively funded by the employer. It does not include the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

A handwritten signature in blue ink, appearing to read 'Nick Baldwin', with a horizontal line underneath.

*Nick Baldwin*  
*Chairman of the Remuneration Committee*  
*7 July 2008*

## Statement of the Directors' and Accounting Officer Responsibilities

Under Section 26 of the Energy Act 2004, the Secretary of State (with the approval of HM Treasury) has directed the NDA to prepare a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of the NDA and of its income and expenditure, recognised gains and losses and cash flows for the accounting period.

In preparing the accounts the NDA is required to:

- observe the Accounts Direction issued by the Secretary of State (with approval of HM Treasury), including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis
- make judgements and estimates on a reasonable basis
- state whether applicable accounting standards have been followed, as set out in the *Government Financial Reporting Manual*, and disclose and explain any material departures in the accounts
- prepare the accounts on a going concern basis

The Accounting Officer of the Department for Business, Enterprise and Regulatory Reform (BERR) has designated the Chief Executive as Accounting Officer for the NDA. The responsibilities of an Accounting

Officer including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding the NDA's assets, are set out in the Accounting Officers' Memorandum published by HM Treasury.

## Statement on Internal Control

### Scope of responsibility

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of the Nuclear Decommissioning Authority's (NDA) policies, aims and objectives, while safeguarding the public funds and departmental assets for which I am personally responsible, in accordance with the responsibilities assigned to me for managing public money.

A process of accountability has been established with the Department for Business, Enterprise and Regulatory Reform (BERR) through the Management Statement and Financial Memorandum that involves:

- the accountability to Parliament of the Secretary of State and the Scottish Government for the activities and performance of the NDA
- the funding and allocation of grants to the NDA by the Secretary of State in accordance with the relevant sections of the Energy Act 2004
- establishment and agreement of corporate and business plans with appropriate objectives and performance targets along with the identification of risks that may prevent delivery of the plan including contingent liabilities
- regular review of the systems of internal control and risk management and monitoring their effectiveness at the Audit Committee
- regular progress reports and monitoring information on performance and finance which are reviewed at monthly

accountability meetings together with any other issues or significant problems, whether financial or otherwise

- providing BERR with copies of all internal audit reports, the corporate risk register and risk action programmes

### The purpose of the system of internal control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can, therefore, only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of the NDA's policies, aims and objectives; to evaluate the likelihood of those risks being realised and the impact should they be realised; and to manage them efficiently, effectively and economically.

The system of internal control that I take responsibility for has been in place in the NDA for the period commencing 1 April 2007 to the year ending 31 March 2008 and up to the date of approval of the Annual Report and Accounts and accords with HM Treasury guidance.

### Capacity to handle risk

The NDA's risk management strategy has been determined and endorsed by myself, the Audit Committee and the Board, all of whom are actively involved in the risk management process and have been instrumental in the development and endorsement of both the risk policy and the internal audit policy and strategy.

The Board closely monitors the outputs from the operational deployment of these two policies. This is achieved either directly through reports to the Board, or via its sub-committees.

This statement covers the period between 1 April 2007 and 31 March 2008 and up to the date of approval of the Annual Report and Accounts. The NDA's capacity to handle risk is influenced by the existence of a complex governance structure where decommissioning and commercial operations along with NDA transactions are undertaken under contract by site licensees. This is the third year of operation and the NDA is still in the process of maturing as a non departmental public body (NDPB).

Management by risk assessment is at the forefront of the management style engendered and promulgated by myself and my management team.

The NDA's risk management philosophy is supported by the policy, process and procedure documents which are held on the NDA's Electronic Document Records Management System (EDRMS) and are accessible to all staff. In addition, the NDA continues to train and induct all new employees on risk management.

The NDA risk management policy sets out the NDA's attitude to risk and defines roles and responsibilities throughout the organisation. Overall responsibility for risk management lies with myself as Accounting Officer and this responsibility is discharged by the management team and NDA staff taking 'ownership' of any risks that lie within their domain. The Head of Risk facilitates the effective management of risk and, through the culture of 'continuous improvement', has developed and enhanced the infrastructure to support, embed and

report on risk management at every level of the business.

### **The risk, control and assurance framework**

Accepting that risk is an inherent part of doing business, our risk management control and assurance framework is designed to capture risk from across the business and to provide assurance that risk is fully understood and managed.

The key to effective risk management delivery is ensuring that our staff has the right training, tools, processes and support and that they understand the business objectives, strategy, policies, procedures, values and expected performance.

Our risk register is accessible by every member of staff and sets out clearly our risks, their causes and impacts, describes the rating of the impact and likelihood, and sets out the control activities in place and the actions required to mitigate the risks.

Keeping the content of the register up to date is determined as an integral part of the day job for our staff at every level of the business. Regular reviews at project, department and divisional level support an effective monthly reporting cycle through a structured framework consisting of the senior management forum, the Executive Risk Management Committee through to the Board. This framework is supported by a detailed risk review at the Audit Committee on a quarterly basis. A balanced approach allows both control and support at each of the various levels of the framework.

The NDA has focussed on continual improvement of its risk framework over the year. Key areas have included:

- the introduction of opportunity management within the business which will develop and mature to provide the mechanism to realise benefit and opportunity across the business
- the introduction of additional governance and compliance reporting within the risk framework to support and promote ownership and responsibility for controls and action plans
- the facilitation of internal risk workshops providing additional support across the business
- the continued engagement with our site licensees, upon whom we rely to manage effectively the risks relating to all of their operations, with a focus of ensuring consistency of approach, best practice standards and escalation of risks emerging from these key stakeholders.

#### Internal control framework

In addition, the NDA has continued to develop and enhance arrangements to provide assurance on the adequacy of the governance arrangements, encompassing the relationship with BERR, with the primary interface now via the Shareholder Executive (from October 2007) and the Scottish Government, and our relationship with the site licensees, which form part of the control framework. Internal control developments include:

- the establishment of a project to create and adopt an NDA Business Operating Model that will review and revise the key business processes and the underpinning arrangements for governance, management

information, and people management in order to more effectively deliver the organisation's objectives. This review takes cognisance of both the altered arrangements for reporting to BERR and other key stakeholders, and the changes resulting from the restructuring of the NDA estate

- the Chief Financial Officer has been given specific responsibility for developing and delivering a more robust primary interface with the Shareholder Executive. This includes the development of a single reporting structure and processes to demonstrate the integrity of all reported information
- a restructure of the organisation into four delivery divisions along with a strengthened team representing the CEO's office. This reorganisation is designed to provide clearer definitions of areas of responsibility and strengthened lines of communication. This reorganisation also supports the transition of the previous NDA regional based teams to be Site Licence Company (SLC) facing. These SLC teams are led by an SLC Interface Director, supported by staff with experience in a broad range of business activities, whose role has been to gain assurance that contractual obligations are being delivered by the SLCs.
- management information from sites on the financial position, performance and programme status is a standing item for the Business Management Board and is considered regularly by the NDA Board

- the SLC facing teams have had additional finance resource allocated to them to strengthen their oversight and interface on site financial matters
- working protocols between NDA Internal Audit and the site licensees' Internal Audit functions have also been reviewed during the period and have resulted in development of a Governance and Assurance Interface Procedure that is being applied across the site licensees and Parent Body Organisations (PBOs) as we move into an increasingly competitive environment. This procedure forms part of the NDA to SLC contract arrangements.

#### Review of effectiveness

As Accounting Officer, I have responsibility for reviewing the effectiveness of the system of internal control.

My review of the effectiveness of the system of internal control is informed by the work of the internal auditors and the executive managers within the NDA who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports. I have been advised on the implications of the result of my review of the effectiveness of the system of internal control by the Board and the Audit Committee, and a plan to address weaknesses and ensure continuous improvement of the system is in place.

The Executive Risk Management Committee has been reviewed and continues to be chaired by myself and consists of the Executive Directors, the Head of Risk and the Head of Group Internal Audit. The committee meets bi-monthly. The committee

reviews reports from the Risk Management Forum before reporting upwards to the Audit Committee and this is considered to be an integral part of the NDA's risk management framework.

The following review and assurance mechanisms have been operational during the period:

- an Internal Audit unit, operating to the requirements defined in the Government Internal Audit Standards. The internal audit mandate is to look across management systems as a whole and the unit has developed and delivered a robust internal audit plan to assess the effectiveness of the internal controls both within the NDA and its contracted site licensees. In addition, Internal Audit has oversight of the assurance work carried out within other functions of the NDA and by external parties, and are able to monitor progress on key actions and report these to the Audit Committee. The audit programme is focused around key risks with additional input from functional management teams and the Business Management Board and is endorsed by the Audit Committee. Regular reports are submitted to the Audit Committee on the adequacy and effectiveness of internal control, together with recommendations for improvements. The Head of Group Internal Audit also provides an annual report, which contains an independent opinion on the adequacy and effectiveness of internal control across the NDA
- a level of assurance has been gained from the site licensees through visibility of, and a degree of influence over, their internal audit work programmes.

Protocols are also in place to enable, where necessary, joint audit work and arrangements which have been utilised on a number of occasions. This has enabled our Internal Audit to provide an opinion in the Annual Audit Report on the internal audit arrangements within the site licensees. A number of issues have been identified within the SLCs and action plans are in place to address these. Whilst prime responsibility for implementation of these actions lies within the SLC, NDA Internal Audit monitor progress and close out

- the continuous development and improvement of the quality management system to provide an effective framework for the recording and control of the business policies, processes and procedures. This system has been subjected to both internal and external audit throughout the 2007/08 financial year, as a result of which the NDA obtained ISO9001 certification and was recommended for ISO14001 certification across its operation in March 2008. This complements the ISO14001 certification already held by its Harwell office
- the cross Government review of data handling procedures has resulted in the NDA taking a number of steps to ensure best practice is understood and embedded across the NDA. Data governance arrangements have been strengthened so that all identified data systems have a suitable senior data owner in place to ensure the security of data

Based on the internal audit programme of work performed during the financial year, Internal Audit concluded that the systems of

control, subject to review, were generally satisfactory and that the NDA has a sound risk management framework in place to support effective corporate governance.

The areas where there were one or more weaknesses in control, or significant departure from policies or procedures that individually or taken together seriously endangered the achievement of key business objectives, were in relation to the following:

- control arrangements relating to the contractual arrangements with the SLCs for deploying the efficiency scheme
- control arrangements relating to the formal issue of revised project control procedures to the SLCs to implement improvements to the Lifetime Plan (LTP) review process
- the provision of a strategy linking the Sellafield resource plan and the skills plan
- the integration of the development of the NDA's Strategy, Business Plan, LTPs and CSR funding submissions
- the NDA's understanding of the site data and extent of independent cost estimating, comprehensive risk identification and prioritisation of funding allocation
- the NDA's knowledge of government accounting and budgeting rules

All audit recommendations have been accepted by senior management and action plans put in place to address the weaknesses identified. Systems are in place to follow up these action plans and report progress to the Audit Committee.

A handwritten signature in black ink, appearing to read 'Ian Roxburgh', is centered on the page. The signature is written in a cursive style with a horizontal line underneath.

**Dr Ian Roxburgh**  
Chief Executive and Accounting Officer  
7 July 2008

## The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament

I certify that I have audited the financial statements of the Nuclear Decommissioning Authority for the year ended 31 March 2008 under the Energy Act 2004. These comprise the Consolidated Income and Expenditure Account, the Consolidated and Authority Balance Sheets, the Consolidated Cash Flow Statement and the Consolidated Statement of Recognised Gains and Losses and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

### Respective responsibilities of the Nuclear Decommissioning Authority, Accounting Officer and Auditor

The Nuclear Decommissioning Authority and Accounting Officer are responsible for preparing the Annual Report, the Remuneration Report and the financial statements in accordance with the Energy Act 2004 and Secretary of State directions made thereunder and for ensuring the regularity of financial transactions. These responsibilities are set out in the Statement of the Nuclear Decommissioning Authority and Accounting Officer's Responsibilities.

My responsibility is to audit the financial statements and the part of the remuneration report to be audited in accordance with relevant legal and regulatory requirements, and with International Standards on Auditing (UK and Ireland).

I report to you my opinion as to whether the financial statements give a true and fair view and whether the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Energy Act 2004 and Secretary of State directions made thereunder. I report to you whether, in my opinion, the information, which comprises the Financial Review, Directors' Report and Corporate Governance sections, included in the Annual Report is consistent with the financial statements. I also report whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

In addition, I report to you if the Nuclear Decommissioning Authority has not kept proper accounting records, if I have not received all the information and explanations I require for my audit, or if information specified by HM Treasury regarding remuneration and other transactions is not disclosed.

I review whether the Statement on Internal Control reflects the Nuclear Decommissioning Authority's compliance with HM Treasury's guidance, and I report if it does not. I am not required to consider whether this statement covers all risks and controls, or form an opinion on the effectiveness of the Nuclear Decommissioning Authority's corporate governance procedures or its risk and control procedures.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. This other information comprises the Chairman's Report, Chief Executive's Review, Directors and Executives, HSSE, Operating Units and the unaudited part of the Remuneration Report. I consider the implications for my report if I become aware of any apparent misstatements or material inconsistencies with the financial statements. My responsibilities do not extend to any other information.

#### **Basis of audit opinions**

I conducted my audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. My audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements and the part of the Remuneration Report to be audited. It also includes an assessment of the significant estimates and judgments made by the Nuclear Decommissioning Authority and Accounting Officer in the preparation of the financial statements, and of whether the accounting policies are most appropriate to the Nuclear Decommissioning Authority's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements and the part of the Remuneration Report to be audited are free from material misstatement, whether caused by fraud or error, and that in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions

conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements and the part of the Remuneration Report to be audited.

#### **Opinions**

In my opinion:

- the financial statements give a true and fair view, in accordance with the Energy Act 2004 and directions made thereunder by Secretary of State, of the state of the Nuclear Decommissioning Authority's affairs as at 31 March 2008 and of its deficit for the year then ended
- the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Energy Act 2004 and Secretary of State directions made thereunder
- information, which comprises the Financial Review, Directors' Report and Corporate Governance sections, included in the Annual Report is consistent with the financial statements.

#### **Opinion on regularity**

In my opinion, in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

#### **Emphasis of matter – uncertainties in the nuclear provisions balance**

In forming my opinion on the financial statements, which is not qualified, I have considered the adequacy of the disclosures made in note 25 of the financial statements concerning the uncertainties inherent in estimating the likely costs of the nuclear liabilities. As explained in note 25, the

lengthy timescales, final disposition plans for waste and spent fuel, timing of final site clearance and the confirmation of site end states mean that the ultimate liability will vary as a result of subsequent information and events, and may result in significant adjustment over time to the value of the provision, which currently stands at £44 billion.

**Report**

I have no observations to make on these financial statements.

T J Burr  
Comptroller and Auditor General  
National Audit Office  
151 Buckingham Palace Road  
Victoria  
London  
SW1W 9SS

14 July 2008

## Consolidated Income & Expenditure Account

Year ended 31 March 2008

	Note	31 Mar 2008 £m	31 Mar 2007 £m
<b>Income</b>	3	1,458	1,206
<b>Expenditure</b>			
Operating costs and expenses	4	(7,764)	(7,249)
<b>Total operating costs</b>		(7,764)	(7,249)
<b>Deficit from ordinary activities before financing</b>		(6,306)	(6,043)
Net financing charges	6	(2,165)	(1,765)
<b>Deficit from ordinary activities before taxation</b>		(8,471)	(7,808)
Tax on deficit from ordinary activities	7	-	-
Notional cost of capital credit	8	1,401	1,160
<b>Deficit from ordinary activities after taxation and notional cost of capital</b>		(7,070)	(6,648)
Reversal of notional cost of capital credit	8	(1,401)	(1,160)
<b>Deficit for the year</b>		(8,471)	(7,808)

All amounts derive from continuing operations.

## Consolidated Statement of Recognised Gains and Losses

Year ended 31 March 2008

	Note	31 Mar 2008 £m	31 Mar 2007 £m
Unrealised surplus on revaluation of tangible fixed assets	11	4	12
Actuarial loss on pension schemes	28	(2)	(3)
Recognised gains and losses relating to the year	29	2	9

The related notes numbered 1 to 38 form part of these accounts.

## Balance Sheet as at 31 March 2008

	Note	NDA Group		Authority	
		31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
<b>Fixed assets</b>					
Intangible assets	10	1	1	1	1
Tangible assets	11	3,495	4,009	3,315	3,862
Investments	12	-	-	197	197
		<u>3,496</u>	<u>4,010</u>	<u>3,513</u>	<u>4,060</u>
<b>Current assets</b>					
Stocks	14	171	153	168	151
Debtors: amounts falling due within one year	15	312	434	425	517
Debtors: amounts falling due after more than one year	15	79	50	79	50
Customer recoverable relating to nuclear liabilities falling due within one year	16	347	12	347	12
Customer recoverable relating to nuclear liabilities falling due after more than one year	16	4,684	4,068	4,684	4,068
Investments	17	250	235	-	-
Cash at bank and in hand	18	477	82	453	56
		<u>6,320</u>	<u>5,034</u>	<u>6,156</u>	<u>4,854</u>
<b>Creditors: amounts falling due within one year</b>	19	(1,003)	(946)	(967)	(915)
<b>Net current assets</b>		<u>5,317</u>	<u>4,088</u>	<u>5,189</u>	<u>3,939</u>
<b>Total assets less current liabilities</b>		<u>8,813</u>	<u>8,098</u>	<u>8,702</u>	<u>7,999</u>
<b>Creditors: amounts falling due after more than one year</b>					
Creditors	20	(4,786)	(4,809)	(4,784)	(4,807)
Nuclear liabilities	25	(44,095)	(37,036)	(44,045)	(36,982)
Other provisions for liabilities and charges	26	(3,134)	(2,634)	(3,118)	(2,619)
<b>Total creditors due after more than one year</b>		<u>(52,015)</u>	<u>(44,479)</u>	<u>(51,947)</u>	<u>(44,408)</u>
<b>Net liabilities before pension asset</b>		<u>(43,202)</u>	<u>(36,381)</u>	<u>(43,245)</u>	<u>(36,409)</u>
Pension asset/(liability)	28	(1)	1	-	-
<b>Net liabilities including pension asset</b>		<u>(43,203)</u>	<u>(36,380)</u>	<u>(43,245)</u>	<u>(36,409)</u>
<b>Reserves</b>					
Transfer reserve	29	(23,066)	(23,066)	(23,071)	(23,071)
Revaluation reserve	29	19	15	13	13
General reserve	29	(20,156)	(13,329)	(20,187)	(13,351)
<b>Total government funds</b>		<u>(43,203)</u>	<u>(36,380)</u>	<u>(43,245)</u>	<u>(36,409)</u>



Dr Ian Roxburgh  
Chief Executive and Accounting Officer  
7 July 2008

The related notes numbered 1 to 38 form part of these accounts. Authority refers to the balances within the NDA itself, with NDA Group balances incorporating the Authority and its subsidiaries.

## Consolidated Cash Flow Statement

Year ended 31 March 2008

	Note	31 Mar 2008 £m	31 Mar 2007 £m
<b>Net cash outflow from operating activities</b>	30	(821)	(850)
<b>Net cash inflow from returns on investment and servicing of finance</b>			
Investment income		2	13
Interest received		18	5
<b>Taxation</b>		-	2
<b>Net cash inflow/(outflow) from capital expenditure</b>			
Purchase of tangible fixed assets		(438)	(368)
Sale of tangible fixed assets		3	-
<b>Net cash inflow/(outflow) from management of liquid resources</b>			
Investment in short term deposits		(15)	(34)
<b>Financing</b>			
Grant-in-Aid received		1,646	1,108
<b>Increase/(decrease) in cash in the year</b>	31	<u>395</u>	<u>(124)</u>

The related notes numbered 1 to 38 form part of these accounts.

## Notes to the Accounts

Year ended 31 March 2008

### 1. Principal Accounting Policies

#### a) Basis of Preparation

These financial statements have been prepared under the accounts direction issued by the Secretary of State for the Department for Business, Enterprise and Regulatory Reform (BERR) in accordance with section 26 of the Energy Act 2004. The accounts direction requires compliance with HM Treasury's Financial Reporting Manual (FRoM) and any other guidance which HM Treasury may issue. The NDA has a specific direction in respect of the accounting for Modified Historical Cost Accounting (MHCA). This treatment is explained more fully under the relevant accounting policies in sections 1(e) below. The financial statements also comply with generally accepted accounting practices in the United Kingdom (UK GAAP) to the extent that it is meaningful and appropriate in the public sector context. The financial statements have been prepared under the historical cost convention modified to account for the revaluation of intangible and tangible fixed assets, except waste management assets, at their value to the business.

The consolidated balance sheet at 31 March 2008 shows net liabilities of £43,203 million. This reflects the inclusion of liabilities falling due in future years which, to the extent that they are not to be met from the NDA's other sources of income, may only be met by future grants or Grants-in-Aid from the NDA's sponsoring department, BERR. Under the normal conventions applying to parliamentary control over income and expenditure, such grants may not be issued in advance of need. Grant-in-Aid for 2008/09, taking into account the amounts required to meet the NDA's liabilities falling due in this year, has already been included in BERR's estimates, which have been approved by Parliament. There is no reason to believe that BERR's future sponsorship and future parliamentary approval will not be forthcoming. It has accordingly been considered appropriate to adopt a going concern basis for the preparation of these financial statements.

#### b) Basis of Consolidation

The consolidated income and expenditure account, consolidated statement of recognised gains and losses, balance sheets, consolidated cash flow statement and notes 1 to 38 form the accounts of the NDA and of its subsidiary undertakings for the period ended 31 March 2008. Intra-group transactions and profits are eliminated fully on consolidation.

All consolidated entities in the NDA Group follow UK GAAP, applied in accordance with the FRoM or where noted the Accounts Direction.

**c) Intangible Fixed Assets**

Intangible fixed assets comprise software licences and patents and are valued at historical cost less any required impairment adjustment and are amortised over their useful economic life, unless material, in which case MHCA principles are applied.

**d) Goodwill**

Goodwill arising on acquisitions represents the difference between the fair value of the consideration at acquisition and the fair value of the identifiable net assets acquired. Goodwill is capitalised as an intangible asset on the consolidated balance sheet and is amortised over 20 years.

**e) Tangible Fixed Assets**

Tangible fixed assets include assets purchased directly by the NDA and assets for which the legal title transferred to the NDA under Transfer Scheme arrangements pursuant to the Energy Act 2004.

In accordance with the requirements of the Government Financial Reporting Manual, tangible fixed assets should be valued at the lower of replacement cost and recoverable amount, which is the higher of net realisable value or value in use.

In accordance with the Secretary of State's Accounts Direction, waste management assets are excluded from this requirement as there is no reliable and cost effective revaluation methodology. Waste management assets are therefore stated at historical cost, less accumulated depreciation and any impairment charges.

Assets used to support commercial activities are valued at their value in use to the relevant activity. Properties outside the site licence boundary, other than strategic assets, are re-valued periodically. Strategic assets are not re-valued in line with the treatment of waste management assets.

For economic facilities that have been commissioned, decommissioning provisions are recognised in full and the discounted costs are capitalised as part of the costs of the asset and depreciated over the life of the plant.

Depreciation is calculated so as to write off the cost or valuation of fixed assets, less their estimated residual values, on a straight-line basis over the expected useful lives of the assets as follows:

Land	Not depreciated
Buildings	10 to 60 years

Fixtures and fittings	3 to 10 years
IT equipment	3 years
Plant and equipment	10 to 20 years
Transport equipment	4 to 14 years

Commercial and waste management assets are depreciated over the programme life of each specific asset.

Assets under construction are not depreciated until brought in to use.

The carrying values of tangible fixed assets, including assets under construction, are reviewed for impairment if events or changes in circumstances indicate that a provision for impairment may be required. Residual values are calculated at the prices prevailing at the date of acquisition or revaluation.

#### **f) Fixed Asset Investments**

Fixed asset investments comprise investments in subsidiaries and quasi-subidiaries. Investments are stated at cost less provision for any impairment. The carrying values of investments are reviewed for impairment if events or changes in circumstances indicate that a provision for impairment may be required.

#### **g) Current Asset Investments**

Current asset investments are stated at market value, which is calculated using mid-market prices at the balance sheet date. The gains or losses on the change in market values and on disposal of investments are taken to the income and expenditure account. Gains in market values are only recognised to the extent that they represent reversals of previous impairment losses.

#### **h) Stocks**

Stocks are valued at the lower of cost and net realisable value. Net realisable value is the actual or estimated selling price (net of trade but before settlement discounts) less all further costs to completion and all costs to be incurred in marketing, selling and distributing. Work in progress is valued at cost, less the cost of work invoiced on incomplete contracts and less foreseeable losses. Cost includes materials, direct labour and an attributable proportion of manufacturing overheads based on normal levels of activity. Where necessary, provision is made for obsolete, slow moving and defective stocks. Reprocessed plutonium and uranium stocks are held at nil value. The destination of nuclear waste and materials cannot be confirmed, nor costs estimated, until the Government's reviews of long-term policy around waste disposal have been completed. Long-term options for the disposition of wastes, uraniums, plutonium and Advanced Gas-Cooled Reactor (AGR) spent fuel are being developed, along with their associated cost estimates.

**i) Pension Costs**

Authority employees are covered by the provisions of the Principal Civil Service Pension Scheme (PCSPS), a defined benefit scheme that is unfunded and largely non-contributory. The NDA recognises the expected cost of providing pensions on a systematic and rational basis over the period during which it benefits from employees' services by payment to the PCSPS of amounts calculated on an accruing basis. Liability for payment of future benefits is not the responsibility of the NDA.

Employees of the subsidiary Direct Rail Services Limited (DRS) are members of the BNFL Group Pension Scheme. This has been accounted for under FRS17 as a defined benefit scheme.

Employees of the subsidiary UK Nirex Limited were members of the Nirex Pension Scheme. The UK Nirex Limited employees have subsequently transferred to the NDA and are now members of the PCSPS for their future service. Residual liabilities have been accounted for under Financial Reporting Standard (FRS) 17 as a defined benefit scheme.

Employees of the subsidiary Pacific Nuclear Transport Limited (PNTL), classified as a subsidiary are members of the Merchant Navy Officers Pension Scheme or Merchant Navy Ratings Pension Scheme. These have been accounted for under FRS17 as defined benefit schemes.

Pension scheme assets are recognised to the extent that they are recoverable and pension scheme liabilities are recognised to the extent that they reflect a legal or constructive obligation.

**j) Income**

Income represents the total value, excluding VAT, electricity purchases relating to short-term balancing and hedging activities and intra-group sales, of products delivered and services rendered to customers, rental income receivable and the value of long term contract work completed during the year. Income received in advance of work performed is held on the balance sheet and released to the income and expenditure account when the work is completed and the liability extinguished.

**k) Long-term Contracts**

Income on long-term contracts is recognised according to the stage reached in the contract by reference to the value of work done. A prudent estimate of the profit attributable to work completed is recognised once the outcome of the contract can be assessed with reasonable certainty. Full provision is made for losses on contracts in the year in which they are first identified (note 26). Amounts recoverable on long-term contracts (which are included in debtors) are stated at the net sales value of work done less amounts received as progress payments on account and any associated contract loss provisions. The amount by which payments on account exceed turnover is shown under creditors as payments on account (see notes 19 and 20) and is presented net of amounts recoverable on contracts and any associated contract loss provisions.

**l) Foreign Currency**

All transactions denominated in foreign currencies are translated into sterling at the exchange rate ruling on the date the transaction takes place or at the contracted rate if the transaction is covered by a forward exchange contract. Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the exchange rate ruling at the balance sheet date. All foreign exchange differences are taken to the income and expenditure account in the year in which they arise. Forward exchange contracts are used to reduce exposure to foreign exchange risk. The NDA does not hold forward exchange contracts for speculative purposes.

**m) Derivatives and other Financial Instruments**

The NDA enters into contracts to sell electricity generated by its power stations. The principal contracts for physical delivery are accounted for either on the spot or forward price, depending on the nature of the contract. Gains and losses are recognised when the hedged transaction takes place. For more details on derivatives and other financial instruments see note 33.

**n) Leases**

Costs in respect of operating leases are charged on a straight-line basis over the life of the lease in accordance with Statement of Standard Accounting Practice 21 'Accounting for leases and hire purchase contracts'.

Assets held under finance leases, which are leases where substantially all the risks and rewards of ownership of the asset have passed to the company, and hire purchase contracts are capitalised as tangible fixed assets in the balance sheet and are depreciated over the shorter of the lease term and their useful lives. The capital element of future obligations under leases and hire purchase contracts are included as creditors in the balance sheet net of the interest charge allocated to future periods. The interest elements of the obligations are charged to the profit and loss account over the periods of the leases and the hire purchase contracts and represent a constant proportion of the balance of capital repayments outstanding.

**o) Provisions**

**Non-Nuclear Provisions**

Provisions are recognised when the NDA has a present obligation as a result of a past event, and it is probable that the NDA will be required to settle that obligation. Provisions are measured at the directors' best estimate of the expenditure required to settle the obligation at the balance sheet date, and are discounted to present value where the effect is material.

## Nuclear Provisions

The accounts include provisions for the NDA's obligations in respect of nuclear liabilities, being the costs associated with the nuclear decommissioning of designated sites. These provisions are based on the Lifetime Plan (LTP) for the designated sites, being the latest available technical assessments of the processes and methods likely to be used in the future and represent best estimates of future required work. The NDA's obligations are reviewed on a continual basis and estimates and hence provisions are updated accordingly. Where some or all of the expenditure required to settle a provision is expected to be recovered from a third party, in accordance with FRS 12 'Provisions, Contingent Liabilities and Contingent Assets', the recoverable amount is treated as a fixed or current asset. In the income and expenditure account, the provisions charges are net of recoveries from customers. Full provision is made for the NDA's nuclear liabilities and changes are accounted for in the year in which they arise.

The provision and recoverable balances are expressed at current price levels and discounted at 2.2%, (2006/07 2.2%) the rate specified by HM Treasury, to take account of the time value of money for the very long timescales over which work will be carried out, currently expected to be over 100 years. The financing charges in the income and expenditure account include the adjustments to amortise one year's discount and restate the liabilities to current price levels.

### p) Research and Development Expenditure

Research and development expenditure on projects not specifically recoverable directly from customers is charged to the income and expenditure account in the year in which it is incurred (note 4).

### q) Taxation

#### Current tax

UK corporation tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

#### Deferred tax

Deferred tax is recognised in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events that result in an obligation to pay more tax in the future or a right to pay less tax in the future have occurred at the balance sheet date. Timing differences are differences between the Group's taxable surplus and its results as stated in the financial statements that arise from the inclusion of gains and losses in tax assessments in periods different from those in which they are recognised in the financial statements.

A net deferred tax asset is regarded as recoverable and therefore recognised only when, on the basis of all available evidence, it can be regarded as more likely than not that there will be

suitable taxable surplus from which a future reversal of the underlying timing differences can be deducted.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the timing differences are expected to reverse based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is measured on a non-discounted basis.

#### **Value Added Tax (VAT)**

VAT is accounted for in the accounts, in that amounts are shown net of VAT except:

- i. Irrecoverable VAT is charged to the income and expenditure account, and included under the heading relevant to the type of expenditure
- ii. Irrecoverable VAT on the purchase of an asset is included in the capitalised purchase cost of the asset

The net amount due to, or from, HM Revenue & Customs in respect of VAT is included within the debtors and creditors within the Balance Sheet.

#### **r) Cost of Capital**

Treasury guidance requires that Non Departmental Public Bodies (NDPB) disclose the full cost of their activities, and therefore the income and expenditure account includes any notional costs as well as those actually incurred. A notional charge or credit is made for the cost of capital, which is calculated at 3.5% (the rate set by HM Treasury) of the average capital employed. For this purpose, capital employed is defined as comprising capital loans (including the current portion of capital loans included in creditors: amounts falling due within one year), reserves and income and expenditure account. The notional cost of capital is abated by any actual interest incurred or received during the year.

Any cash balance held with the Office of Paymaster General is at nil rate.

#### **s) Grant-in-Aid**

In accordance with Government's Financial Reporting Manual the NDA prepares its accounts showing Grant-in-Aid received from BERR as credited to income and expenditure reserves as financing.

## 2. Acquisition of INS Rokkasho KK

On 19 September 2007 the NDA acquired 66% of the shares in INS Rokkasho KK for £582. As a result of control exercisable by the NDA, it has been classified as a subsidiary in the NDA's 2007/08 accounts and accounted for using acquisition accounting. In the opinion of the Directors the acquisition of INS Rokkasho KK is not material to the results or net liabilities of the Group.

## 3. Income

	31 Mar 2008 £m	31 Mar 2007 £m
Operating income	1,456	1,204
Rental income	2	2
	<u>1,458</u>	<u>1,206</u>

## 4. Other Operating Costs and Expenses

	Note	31 Mar 2008 £m	31 Mar 2007 £m
Contractor costs (net)		2,181	2,192
Less: Contractor costs capitalised		(433)	(362)
Trading costs		177	171
M&O contractor fees		97	128
Staff costs	5	53	50
Skills & socio-economic development programme		15	23
Administration costs		38	25
Rentals under operating leases		1	-
Insurance		14	20
Auditors' remuneration - audit fees*		1	1
Research and development costs		18	13
Other operating costs		52	33
Depreciation of tangible fixed assets	11	329	419
Impairment of tangible fixed assets (excluding capitalised decommissioning costs)	11	356	36
Nuclear liability charge	25	4,512	3,842
Non-nuclear provision charge	26	353	658
		<u>7,764</u>	<u>7,249</u>

\*The fee payable to the National Audit Office (NAO) in respect of the external audit for the NDA and the NDA Group for 2007/08 is £840,000 (2006/07 - £800,000).

## 5. Staff Costs

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Wages and salaries	39	36	24	16
Social security costs	4	4	3	2
Pension costs (see note 28)	7	6	4	3
Total permanent staff	50	46	31	21
Interim and contracted staff	3	4	2	3
Total staff costs	53	50	33	24

Directors' emoluments can be seen in the Remuneration Report on page 57.

The average full-time equivalent NDA staff during the year was:

	NDA Group		Authority	
	31 Mar 2008 No.	31 Mar 2007 No.	31 Mar 2008 No.	31 Mar 2007 No.
Directors	5	5	5	5
Other staff	726	645	297	198
Subsidiaries	12	13	-	-
Total staff	743	663	302	203
Interim and contracted staff	42	42	38	31
	785	705	340	234

Nirex staff were shown as a subsidiary for financial year 2006/07 and have now been transferred to the Authority.

## 6. Net Financing Charges

	31 Mar 2008 £m	31 Mar 2007 £m
<b>Financing charges</b>		
<b>Revalorisation of nuclear liabilities:</b>		
- Changes in price levels	1,190	976
- Unwinding of one year's discount	673	535
	1,863	1,511
- Top up of advance payments	161	155
	2,024	1,666
<b>Revalorisation of other provisions:</b>		
- Changes in price levels	106	78
- Unwinding of one year's discount	55	40
	2,185	1,784
<b>Interest receivable and other income</b>		
Investment income	(2)	(13)
Interest receivable and other income	(18)	(6)
	2,165	1,765

## 7. Taxation

There was no tax charge arising during the year (2006/07 nil).

The explanation for the tax charge in the year is set out below.

	31 Mar 2008 £m	31 Mar 2007 £m
Deficit on ordinary activities before tax	(8,471)	(7,808)
Deficit on ordinary activities before tax at the UK standard rate of corporation tax of 30% (2007: 30%)	(2,541)	(2,342)
Effects of:		
Income which qualifies for statutory exemptions	2,411	2,198
Capital allowances for the year in excess of depreciation	(128)	(111)
Unutilised losses	258	255
Current tax charge for the year	-	-

The NDA does not pay tax on any profits arising from its activities in relation to decommissioning, and similarly losses are not deductible in relation to decommissioning. A deferred tax asset has not been recognised in respect of any non-decommissioning losses incurred by the NDA as the NDA does not anticipate suitable taxable surplus arising in the foreseeable future.

There were outstanding corporation tax balances of £2,000 at 31 March 2008.

## 8. Notional Cost of Capital Credit

	31 Mar 2008 £m	31 Mar 2007 £m
Notional cost of capital credit	1,401	1,160

Notional interest is calculated at 3.5% on the average capital employed during the year as required by HM Treasury.

## 9. Deficit Attributable to the Authority

As a consolidated income and expenditure account is included in these accounts, the Authority's individual income and expenditure account has not been included in accordance with Section 230 of the Companies Act. The result for the financial year of the Authority was a deficit of £8,481 million (see note 29).

## 10. Intangible Fixed Assets

	NDA Group and Authority £m
<b>Cost</b>	
At 31 March 2007	35
Additions	-
At 31 March 2008	35
<b>Amortisation</b>	
At 31 March 2007	(34)
Charge	-
At 31 March 2008	(34)
<b>Net book value</b>	
At 31 March 2008	1
At 31 March 2007	1

**11. Tangible Fixed Assets**

NDA Group	Land & Buildings – Freehold £m	Land & Buildings – Short Leasehold £m	IT Equipment £m	Fixtures & Fittings £m	Plant & Equipment £m	Transport Equipment £m	Construction £m	Assets Under Construction £m	Capitalised Decommissioning costs £m	Total £m
<b>Cost or valuation</b>										
At 1 April 2007	3,562	59	8	117	4,859	12	1,818	4,351	14,786	
Additions	1	-	1	2	8	-	426	314	752	
Reclassifications	2	-	2	(1)	29	27	(59)	(205)	(205)	
Disposals	(3)	-	(1)	(3)	(48)	-	(7)	(74)	(136)	
Revaluations	3	-	-	-	4	-	-	(3)	4	
At 31 March 2008	3,565	59	10	115	4,852	39	2,178	4,383	15,201	
<b>Depreciation and impairment</b>										
At 1 April 2007	(2,525)	(23)	(5)	(113)	(3,867)	(11)	(575)	(3,658)	(10,777)	
Charge in year	(141)	(1)	(2)	(2)	(182)	(1)	-	-	(329)	
Reclassification	(1)	-	(1)	-	3	(13)	12	(328)	(328)	
Disposals	3	-	-	3	48	1	4	71	130	
Impairments	(338)	-	1	-	2	-	(21)	(46)	(402)	
Revaluations	(3)	-	-	-	-	-	-	3	-	
At 31 March 2008	(3,005)	(24)	(7)	(112)	(3,996)	(24)	(580)	(3,958)	(11,706)	
<b>Net book value</b>										
At 31 March 2008	560	35	3	3	856	15	1,598	425	3,495	
At 31 March 2007	1,037	36	3	4	992	1	1,243	693	4,009	
Net book value at 31 Mar 2008 represented by										
Valuation	512	30	-	-	3	-	359	425	904	
Cost	48	5	3	3	853	15	1,239	425	2,591	
	560	35	3	3	856	15	1,598	425	3,495	

Authority	Land & Buildings Freehold	Land & Buildings – Short Leasehold	IT Equipment	Plant & Equipment	Fixtures & Fittings	Transport Equipment	Assets Under Construction	Capitalised decommissioning costs	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m
<b>Cost or valuation</b>									
At 1 April 2007	3,562	53	8	4,657	114	12	1,774	4,297	14,477
Additions	1	-	1	7	1	-	384	314	708
Reclassifications	2	2	1	54	1	-	(55)	(205)	(200)
Disposals	(3)	-	(1)	(27)	(3)	-	(4)	(74)	(112)
Revaluations	3	-	-	-	-	-	-	(3)	-
At 31 March 2008	3,565	55	9	4,691	113	12	2,099	4,329	14,873
<b>Depreciation and impairment</b>									
At 1 April 2007	(2,524)	(20)	(5)	(3,711)	(111)	(11)	(576)	(3,657)	(10,615)
Charge in year	(141)	(1)	(2)	(173)	(2)	-	-	-	(319)
Reclassification	(2)	(2)	1	(8)	-	-	10	(328)	(329)
Disposals	3	-	-	25	3	-	4	72	107
Impairments	(338)	-	-	2	-	-	(21)	(45)	(402)
Revaluations	(3)	-	-	-	-	-	-	3	-
At 31 March 2008	(3,005)	(23)	(6)	(3,865)	(110)	(11)	(583)	(3,955)	(11,558)
<b>Net book value</b>									
At 31 March 2008	560	32	3	826	3	1	1,516	374	3,315
At 31 March 2007	1,038	33	3	946	3	1	1,198	640	3,862
Net book value at 31 Mar 2008 represented by									
Valuation	512	30	-	-	-	-	359	-	901
Cost	48	2	3	826	3	1	1,157	374	2,414
	560	32	3	826	3	1	1,516	374	3,315

(a) Through the application of Modified Historical Cost Accounting (MHCA) principles the NDA's assets used to support commercial activities have been revalued at 31 March 2008 by our property agent. The exception is the valuation of the Thermal Oxide Reprocessing Plant (THORP) where this represents the NDA's best estimate of the value in use of that asset. In accordance with the Secretary of State's Accounts Direction waste management assets have not been revalued.

(b) Non-strategic assets outside the site licence boundary have been valued at current open market value, as defined by the International Standards Committee and outlined by the Royal Institute of Chartered Surveyors Appraisal and Valuation Manual, with any surplus on the revaluation taken to the revaluation reserve. The valuation was carried out by David M Atkinson who is the NDA Property Manager and a Member of the Royal Institute of Chartered Surveyors.

(c) Of the £314 million capitalised decommissioning additions £225 million relates to increases in nuclear provisions and a further £41 million relates to financing charges.

(d) The negative impairment relates to the reversal of previously recorded impairments.

(e) Of the £328 million reclassification charge, £465 million relates to increases in customer recoverable netted against movements in capitalised decommissioning costs.

## 12. Fixed Asset Investments

Shares in subsidiaries:

	Authority	
	31 Mar 2008	31 Mar 2007
	£m	£m
<b>Cost and net book value</b>	197	197

### Subsidiary undertakings

Rutherford Indemnity Limited, incorporated in Guernsey, is a wholly owned subsidiary of the NDA. The principal activity of this company is nuclear insurance.

Direct Rail Services Limited (DRS) is wholly owned by the NDA. Its purpose is to provide rail transport services within the UK and it is incorporated in the UK.

The entire share capital of United Kingdom Nirex Limited, a company registered in the UK, was acquired on 30 November 2006 following a direction issued by the Secretary of State. The economic activities of this entity have been transferred to the NDA and the process of winding up commenced in 2007. This process has included the transfer of ownership of a number of dormant subsidiaries of the company to the NDA during the year. In the opinion of the Directors, these subsidiaries did not materially affect the profit or assets of the group and accordingly no further details are provided.

On 1 April 2008 the NDA acquired the remaining 51% of International Nuclear Services Limited (INS) having previously acquired a 49% share on 2 October 2006. As a result of control exercisable by the NDA, it had been classified as a subsidiary in the NDA's 2006/07 and 2007/08 accounts. INS, incorporated in the UK, is involved with the management of the transportation of spent fuel, reprocessing products and waste and has a 62.5% shareholding in Pacific Nuclear Transport Limited (PNTL) which is also accounted for as a subsidiary. The company also has two wholly owned subsidiaries, International Nuclear Services Japan KK (INS Japan KK) and International Nuclear Services France SA (INS France SA), registered in Japan and France respectively, and both involved in fuel transportation.

On 19 September 2007 the NDA acquired a 66% share in INS Rokkasho KK, a company registered in Japan which provides technical support to the nuclear industry. As a result of control exercisable by the NDA, it has been classified as a subsidiary in the NDA's 2007/08 accounts.

### 13. Quasi-Subsidiaries

Ownership of the two quasi-subsiidiaries identified at the beginning of the year, being INS Japan KK (formerly BNFL Japan KK) and INS France SA, was transferred from Sellafield Limited to INS Limited during the year. These companies are now subsidiaries, rather than quasi-subsiidiaries, and consolidated into the accounts.

### 14. Stocks and Work in Progress

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Nuclear fuels	29	32	28	32
Finished goods	10	8	10	8
Raw materials and consumables	52	54	50	52
Work in progress	80	59	80	59
	<u>171</u>	<u>153</u>	<u>168</u>	<u>151</u>

### 15. Debtors

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
<b>Amounts falling due within one year:</b>				
Trade debtors	146	222	138	215
Prepayments and accrued income	89	105	209	190
VAT	68	96	68	96
Other debtors	9	11	10	16
	<u>312</u>	<u>434</u>	<u>425</u>	<u>517</u>
<b>Debtors falling due after more than one year</b>	79	50	79	50

Details of related party and intra-government balances are included within notes 35 and 36.

### 16. Customer Recoverable Relating to Nuclear Liabilities

The NDA Group and the Authority have commercial agreements in place under which some or all of the expenditure required to settle nuclear liabilities will be recovered from third parties. The movements in amounts recoverable during the year are detailed in the table below.

Revalorisation reflects the change in price levels in the year and the unwinding of one year's discounting.

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Customer recoverable relating to nuclear liabilities				
Falling due within one year	347	12	347	12
Falling due after more than one year	4,684	4,068	4,684	4,068
	<u>5,031</u>	<u>4,080</u>	<u>5,031</u>	<u>4,080</u>

	NDA Group £m	Authority £m
At 31 March 2007	4,080	4,080
Revalorisation	260	260
Increase in year	533	533
Discharge in year	<u>(307)</u>	<u>(307)</u>
	4,566	4,566
Reclassification from fixed assets (see note 11)	465	465
Amounts recoverable under long term contract at 31 March 2008	<u>5,031</u>	<u>5,031</u>

### 17. Investments

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Investments	250	235	-	-

These funds are held by both the Captive Insurance subsidiary and Pacific Nuclear Transport Limited (PNTL) and investments at 31 March 2008 were in a combination of property investments and bank deposits.

The rate of return during the year on investments was 4.94% (2006/07 5.74%).

At the year end the following amounts were held in commercial banks on deposit:

31 Mar 2008		31 Mar 2007	
£m	Interest Rate	£m	Interest Rate
10	5.32%	4	5.22%
16	5.35%	1	5.30%
5	5.40%	8	5.27%
4	5.66%		
100	5.71%		
100	5.72%		

### 18. Cash at Bank and in Hand

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Office of Paymaster General	447	55	447	55
Balances held in commercial banks	30	27	6	1
	<u>477</u>	<u>82</u>	<u>453</u>	<u>56</u>

### 19. Creditors: Amounts Falling Due Within One Year

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Payments received on account	(447)	(290)	(447)	(290)
Trade creditors	(395)	(494)	(386)	(485)
Other taxes and social security	(2)	(2)	(1)	-
Accruals and deferred income	(155)	(155)	(131)	(137)
Other creditors	(3)	(4)	(1)	(2)
Grants	(1)	(1)	(1)	(1)
	<u>(1,003)</u>	<u>(946)</u>	<u>(967)</u>	<u>(915)</u>

## 20. Creditors: Amounts Falling Due After More Than One Year

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Obligations under finance leases	(1)	-	-	-
Payments received on account*	(4,781)	(4,804)	(4,781)	(4,803)
Minority interests	-	(1)	-	-
Grants	(4)	(4)	(3)	(4)
	<u>(4,786)</u>	<u>(4,809)</u>	<u>(4,784)</u>	<u>(4,807)</u>

Repayable as follows:

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Between one and two years	(409)	(453)	(409)	(453)
Between two to five years	(1,041)	(1,606)	(1,041)	(1,606)
After five years	(3,336)	(2,750)	(3,334)	(2,748)
	<u>(4,786)</u>	<u>(4,809)</u>	<u>(4,784)</u>	<u>(4,807)</u>

\* Payments received on account

This relates to payments on account which customers had paid to BNFL and subsequently the NDA, for the provision of services under long-term contracts. These will be released to the income and expenditure account and hence recognised as income as the services are provided.

## 21. Capital Commitments

At 31 March 2008 there were capital commitments to construct assets totalling £264 million (2006/07 £221 million).

## 22. Commitments Under Leases

### Commitments Under Operating Leases

At 31 March 2008 the NDA was committed to make the following payments under non-cancellable operating leases:

	Land & Buildings 31 Mar 2008 £m	Other 31 Mar 2008 £m	Land & Buildings 31 Mar 2007 £m	Other 31 Mar 2007 £m
Expiring within one year	2	1	-	2
Expiring between two and five years	2	1	-	2
Expiring after five years	4	-	-	2
	<u>8</u>	<u>2</u>	<u>-</u>	<u>6</u>

### Commitments Under Finance Leases

At 31 March 2008 the NDA was committed to make the following payments under finance leases:

	31 Mar 2008 £m	31 Mar 2007 £m
Expiring within one year	-	-
Expiring between two and five years	-	-
Expiring after five years	2	-
	<u>2</u>	<u>-</u>
Less: finance element of future payments	(1)	-
	<u>1</u>	<u>-</u>

## 23. Other Commitments

The NDA also has the following commitments in respect of its socio-economic development programme:

	31 Mar 2008 £m	31 Mar 2007 £m
West Cumbrian Cottage Hospitals *	7	7
Drigg Communities Trust Fund	5	-
Skills initiatives	3	-
	<u>15</u>	<u>7</u>

These commitments are due as follows:

	31 Mar 2008 £m	31 Mar 2007 £m
Due within one year	10	7
Due between one and five years	5	-
	<u>15</u>	<u>7</u>

\* The NDA has a statutory duty to provide support to activities that benefit the social and economic lives of communities near our sites. To this end the NDA provided funding to support cottage hospitals in West Cumbria that were threatened by closure.

#### 24. Provisions for Liabilities and Charges

	NDA Group		Authority	
	31 Mar 2008 £m	31 Mar 2007 £m	31 Mar 2008 £m	31 Mar 2007 £m
Nuclear provisions (see note 25) *	(44,095)	(37,036)	(44,045)	(36,982)
Other provisions (see note 26)	(3,134)	(2,634)	(3,118)	(2,619)
	<u>(47,229)</u>	<u>(39,670)</u>	<u>(47,163)</u>	<u>(39,601)</u>

\* Of which recoverable under commercial agreement £5,031 million (2007: £4,080 million). See note 16.

#### 25. Nuclear Liabilities

		Discounted NDA Group £m	Authority £m
<b>Provision at 31 March 2007</b>		(37,036)	(36,982)
<b>Financing charges</b>	(a)		
Changes in price levels		(1,388)	(1,388)
Unwind of one year's discount		<u>(776)</u>	<u>(776)</u>
		(2,164)	(2,164)
<b>Changes in future cost estimates</b>	(b)	(6,671)	(6,671)
<b>Liabilities discharged in the year</b>	(c)	<u>1,776</u>	<u>1,772</u>
<b>Provisions at 31 March 2008</b>		(44,095)	(44,045)

Changes in nuclear liability charge and changes in future cost estimates	2007/08	
	£m	£m
Changes in future cost estimates		(6,671)
Less: increase in customer recoverable (see note 16)	533	
Less: increase in customer recoverable reclassification from fixed assets (see note 16)	465	
Less: increase in nuclear provisions for capital costs (see note 11)	225	
Add: discharge from customer recoverable (see note 16)	(307)	
Add: reclassification relating to capital costs (see note 11)	(533)	
Net changes in future cost estimates		(6,288)
Less: Liabilities discharged in the year		1,776
<b>Nuclear liability charge in note 4</b>		<b>(4,512)</b>

Reconciliation of financing charge	2007/08	
	£m	£m
Financing charges		(2,164)
Less: revalorisation of customer recoverable (see note 16)	260	
Less: financing element of fixed asset additions (see note 11)	41	
<b>Financing charge in note 6</b>		<b>(1,863)</b>

(a) The discount implicit in recognising the nuclear liability is unwound over the life of the provision. The part of the discount unwind attributable to the NDA is included in the income statement as a financing item and the parts recoverable from customers and representing FRS 12 fixed assets are included as additions to Customer Recoverable Relating to Nuclear Liabilities and Fixed Assets respectively.

(b) The changes in estimates of the future cost for discharging nuclear liabilities based on an updated technical evaluation of the costs at each site required to discharge nuclear liabilities.

(c) Liabilities discharged in the year represent work undertaken in the year that has reduced the nuclear liability.

The NDA's nuclear provisions are based upon the Lifetime Plan (LTP) estimates prepared by each site, discounted at 2.2% per annum in line with HM Treasury guidance.

These plans are extremely detailed but are necessarily based on assumptions derived from detailed technical assessments of the processes and methods likely to be used to discharge the obligations. These assumptions reflect a combination of the latest technical knowledge available, the timescale involved and the requirements of the existing regulatory regime, Government policy and commercial agreements.

The nuclear liabilities recorded are the best estimate from the information available. However, there remains a significant degree of inherent uncertainty in the future cost estimates, examples of which include:

- site end states, which define the physical condition of the site when the programme of work has been completed, are being reviewed in consultation with local stakeholders
- the timing of final site clearance is not yet finalised and amendments to this will impact on the provision
- there is a lack of detailed information held on the design of the legacy ponds and silos and the exact quantities and chemical composition of the historical wastes held in them. This means treatment is more difficult and uncertainty exists around the dismantling processes that will be required
- gaining an understanding of the extent of the contaminated land requires significant site investigation. This will enable sites to estimate the costs based on more accurate quantities. There remain some areas of uncertainty, which could affect the estimates (both up and down), notably the high hazards at Sellafield and the uncertain state of some of the infrastructure underpinning commercial operations, but across most of the NDA's estate the scope of the work is now clear
- additional Magnox final site clearance costs have not yet been included in the provision as they could not be underpinned
- the NDA's funding profile can also cause plans to vary
- a better understanding is required about the phasing of work and risks arising from programme inter-dependencies, whereby delays to one project can cause significant knock-on delays and cost increases
- future Government policy positions and future regulatory change
- technological advances which may occur to facilitate the work undertaken to decommission and clean up the sites

The NDA continues work to improve the robustness of these estimates where possible, and therefore to reduce the uncertainty inherent in the provision.

Certain expenditure required to discharge nuclear liabilities is recoverable from third parties under commercial agreements, the amounts recoverable are set out in note 16.

## 26. Other Provisions for Liabilities and Charges

NDA Group	Restructuring £m	Contract loss provisions £m	Other £m	Total £m
At 31 March 2007	(158)	(2,397)	(79)	(2,634)
Financing charges	(9)	(149)	(3)	(161)
Reclassification	(2)	16	-	14
Increase in provisions	(1)	(363)	(73)	(437)
Utilised in year	14	68	2	84
At 31 March 2008	(156)	(2,825)	(153)	(3,134)

Authority	Restructuring £m	Contract loss provisions £m	Other £m	Total £m
At 31 March 2007	(158)	(2,397)	(64)	(2,619)
Financing charges	(9)	(149)	(3)	(161)
Reclassification	(2)	16	-	14
Increase in provisions	(1)	(363)	(72)	(436)
Utilised in year	14	68	2	84
At 31 March 2008	(156)	(2,825)	(137)	(3,118)

(a) The restructuring provisions have been made to cover continuing annual payments to be made under early retirement arrangements to individuals working for the SLCs who had retired early, or had accepted early retirement, before 31 March 2008. These payments continue at least until the date at which the individual would have reached normal retirement age. Lump sums paid to individuals on retirement are held as debtors, since they are refundable to the NDA from the appropriate pension scheme at or after the date on which the individual concerned would have reached normal retirement age. Provisions for other areas are now minimal and are based on the NDA's best judgement of the level and cost of the restructuring which will be needed.

(b) In accordance with the requirements of Statement of Standard Accounting Practice 9 'Stocks and long-term contracts', the NDA has made full provision now for the anticipated shortfall between future income and future costs. The increase in the provision is largely due to the charge in relation to the MOX contract losses.

(c) Other provisions include provisions for insurance claims and early retirements not covered by the restructuring funding arrangements with BERR. These provisions are not discounted as the impact of discounting would not be material. The increase is to include the pension deficit of Magnox ESPS to which NDA has the obligation to restore.

## 27. Deferred Taxation

A deferred tax asset in respect of non-decommissioning activities has not been recognised in respect of any losses incurred by the NDA as the NDA does not anticipate suitable taxable surplus arising in the foreseeable future. The estimated value of the deferred asset not recognised, measured at the standard rate of 28% (2006/07 – 30%), is £318 million (2006/07 - £255 million).

## 28. Pensions

### Principal Civil Service Pension Scheme (PCSPS)

NDA employees have pension benefits provided through the PCSPS which is an unfunded multi-employer defined benefit scheme. Details of the latest actuarial valuation of the scheme can be found in the resource accounts of the Cabinet Office: Civil Superannuation.

In accordance with guidance issued by HM Treasury, the scheme is accounted for as a defined contribution scheme in these accounts. The total contributions paid by the NDA during the year were £3,909,998 (2006/07 - £2,724,882). No contributions were outstanding at this or the previous year end.

### Pension Summary Information

The following table summarises the net pension asset or liability for each of the schemes where the NDA Group is the lead employer and which are accounted for using FRS17 as defined benefit schemes.

	Scheme Asset/(Liability) 31 March 2008 £'000	Recoverable from Third Party 31 March 2008 £'000	Asset/(Liability) Attributable to NDA Group 31 March 2008 £'000	Scheme Asset/(Liability) 31 March 2007 £'000	Recoverable from Third Party 31 March 2007 £'000	Asset/(Liability) Attributable to NDA Group 31 March 2007 £'000
Group Pension Scheme (Direct Rail Services section)	(29)	-	(29)	(1,332)	1,332	-
UK Nirex Pension Scheme	27	-	27	675	-	675
Merchant Navy Officers Pension Fund (New Section)	(6,325)	5,640	(685)	(6,959)	6,230	(729)
Merchant Navy Ratings Pension Fund	(4,257)	3,797	(460)	(2,939)	2,622	(317)
	(10,584)	9,437	(1,147)	(10,555)	10,184	(371)

### Direct Rail Services Limited section of the BNFL Group Pension Scheme

DRS participates in the BNFL Group Pension Scheme, which is a defined benefit (final salary) funded pension scheme and was available to all DRS employees until 31 March 2008. The company contributes to the scheme at a rate of 14.9% recommended by the scheme's professionally qualified actuaries. The defined benefit section was closed to new entrants on 1 April 2008 and a defined contribution section opened on the same date, available to all new employees.

The BNFL Group Pension Scheme is sectionalised in nature and defined benefit in nature. A full actuarial valuation was carried out at 31 March 2007 using the projected unit method and updated approximately to 31 March 2008 by a qualified independent actuary. The major assumptions used by the actuary in the valuation were:

	31 Mar 2008 % pa	31 Mar 2007% pa
Rate of increase in salaries	5.60	5.10
Rate of increase of pensions in payment	3.60	3.10
Discount rate	6.00	5.20
Price Inflation	3.60	3.10

On 31 March 2007, the BNFL Group Pension Scheme was sectionalised and the FRS 17 assets and liabilities split across the various sections, including a section relating to the Company.

A pension deficit of £1,332,000 was identified in respect of the Company as at 31 March 2007 on the basis of approximate sectional assumptions, and in accordance with FRS 17 this was recognised as a pension liability on the balance sheet. A corresponding charge was included within other operating costs and expenses in the profit and loss account. During the year, the approximate sectional assumptions were finalised resulting in a revised deficit of £1,415,000 as at 31 March 2007.

As part of the finalisation of the former Group under the Energy Act 2004, British Nuclear Fuels plc committed to fully funding the Company's section of the pension scheme to FRS 17 levels at 31 March 2008. As a result, an amount equal to the pension deficit at 31 March 2007 was recorded within debtors to reflect this commitment from British Nuclear Fuels plc. A corresponding credit was included within other operating costs and expenses in the profit and loss account.

The fair value of the assets and liabilities for the Company's section of the scheme and the expected rates of return for each of the schemes are as follows:

		31 March 2008 £000		31 March 2007 £000
	%pa		%pa	
Equities	7.00	7,760	7.00	5,915
Bonds	4.60	3,155	4.70	4,175
Other	6.00	5,481	5.30	1,508
Market value of assets		16,396		11,598
Actuarial value of liability		(16,425)		(12,930)
Deficit in the section		(29)		(1,332)
Recoverable from related party		-		1,332
Pension liability attributable to Group		(29)		-

The amounts charged to operating profit:

	31 Mar 2008 £000	31 Mar 2007 £000
Actuarial adjustment to opening position	83	-
Corresponding adjustment to related party debtor	(83)	-
Current service costs	2,231	-
Total included within operating profit	2,231	-

The amounts charged to other finance costs:

	31 Mar 2008 £000	31 Mar 2007 £000
Net return on pension section	(5)	-
Cost to related party arising from difference between cost of pension scheme and contributions paid	(196)	-
Total included within operating profit	(201)	-

The analysis of the net return on the pension section is as follows:

	31 Mar 2008 £000	31 Mar 2007 £000
Expected return on pension section assets	805	-
Interest on pension liabilities	(800)	-
Net return	5	-

Analysis of amount recognised in statement of recognised gains and losses (SRGL) is as follows:

	31 Mar 2008 £000	31 Mar 2007 £000
Actual return less expected return on assets	(606)	-
Experience losses arising on liabilities	(2)	-
Changes in assumptions (demographic)	-	-
Changes in assumptions underlying the present value of the scheme liabilities	1,207	-
Actuarial gain/(loss) recognised in SRGL	599	-
Reduction in related party commitment to meet deficit	(599)	-
Net pension gain/(loss) recognised	-	-

Movement in deficit during the year is as follows:

	31 Mar 2008 £000	31 Mar 2007 £000
Opening deficit in section	(1,332)	-
Actuarial adjustment to opening position	(83)	-
Adjusted deficit in section	(1,415)	-
Current service cost	(2,231)	-
Past service cost	-	-
Contributions	2,030	-
Net return on pension section	5	-
Actuarial gain	599	-
Contribution by related party	983	-
Closing deficit in section	(29)	-

The history of experience gains and losses is as follows:

	Financial year ending 31 March 2008
Difference between expected and actual return on section assets:	
amount (£000)	(606)
percentage of section assets	-4%
Experience gains and losses arising on the section liabilities:	
amount (£000)	(2)
percentage of section liabilities	0%
Total amount recognised in statement of total recognised gains and losses:	
amount (£000)	599
percentage of section liabilities	-4%

The history of experience gains and losses for the scheme prior to sectionalisation is set out in the group accounts of British Nuclear Fuels plc. The consolidated accounts of this company are available to the public and may be obtained from 1100 Daresbury Park, Daresbury, Warrington, WA4 4GB.

The total DRS pension costs for the year were £2,108,000 (2007: £1,925,000). The balance of pension scheme contributions outstanding at the year end was £166,000 (2007: £137,000).

#### Combined Nuclear Pension Plan (CNPP)

The CNPP was established in September 2006. It is a sectionalised multi-employer scheme. The NDA is the lead company. The NDA does not employ any members of the CNPP and therefore the pension obligation and expense is accounted for under FRS12.

#### United Kingdom Nirex Limited Pension Scheme

The NDA acquired 100% of the share capital of United Kingdom Nirex Limited (Nirex) on 30 November 2006. Nirex sponsored a defined benefit pension arrangement, the United Kingdom Nirex Limited Pension Scheme (the Nirex scheme). Sponsorship has now transferred to the NDA. All but one of the active members have transferred to the PCSPS for their future service (19 September 2007). The last triennial valuation of the Nirex scheme was 31 March 2007. A market

related projected unit method was adopted to determine the past service funding level and the future service contribution rates.

The long term assumptions adopted were:

	% pa
Investment return	
- Pre retirement	7.00
- Post retirement	4.50
Rate of increase in salaries	3.90
Rate of increase of pensions in payment	2.80
Price inflation (RPI)	2.90

The market value of the Nirex Scheme's assets (including AVCs) at 31 March 2007 was £28.73 million with a 95% level of funding, but any deficit was eliminated by a significant contribution made in April 2007. The NDA increased its contribution rate from 12.3% to 32.0% of pensionable salary from 1 April 2008. The Company pays the expenses of running the Scheme in addition. The Company and Trustees are committed to discuss contribution rates.

The actuarial valuation has been updated at 31 March 2008 by a qualified actuary using assumptions that are consistent with the requirements of FRS 17. Investments have been valued, for this purpose, at fair value.

The major assumptions used by the actuary were:

	2008 % pa	2007 % pa	2006 % pa
Rate of increase in salaries	5.10	4.65	4.00
Rate of increase of pensions in payment	3.60	3.05	2.90
Discount rate	6.10	5.35	5.00
Inflation assumption (RPI)	3.60	3.15	3.00

The fair value of the assets in the scheme, the present value of the liabilities in the scheme and the expected rate of return at the Balance Sheet date were:

	March 2008 %pa	March 2008 £000	March 2007 %pa	March 2007 £000	March 2006 %pa	March 2006 £000
Equities	6.60	11,632	6.75	17,420	7.00	16,616
Bonds	4.70	9,852	4.75	9,839	4.25	9,672
Cash	4.25	493	4.25	546	4.00	291
AVC		534		798		891
Market value of the assets		22,511		28,603		27,470
Actuarial value of liability		(22,484)		(30,892)		(26,973)
Surplus/(deficit) in the scheme		27		(2,289)		497
Contribution due from NDA within one year		0		2,964		0
Surplus in the scheme		27		675		497
Related deferred tax liability		(8)		(183)		(149)
Net pension surplus		19		492		348

The movement in the deficit during the year is:

	March 2008 £000	March 2007 £000
Opening surplus (before deferred tax)	675	497
Current service cost	(144)	(780)
Contributions - special	-	10
Contributions - normal	126	402
Past service costs	-	(10)
Net finance charges	240	256
Actuarial deficit	(731)	(2,664)
Special contribution by the NDA	-	2,964
Loss on curtailment	(139)	-
Surplus at end of year (before deferred tax)	27	675

Analysis of amount charged to operating profit

	March 2008 £000	March 2007 £000
Current service cost	144	780
Past service costs	-	10
Loss on curtailment	139	-
Total	283	790

Analysis of amounts charged to other finance cost

	March 2008 £000	March 2007 £000
Expected return on scheme assets	1,666	1,599
Interest on scheme liabilities	(1,426)	(1,343)
Net return	240	256

Analysis of amount recognised in SRGL

	March 2008 £000	March 2007 £000
Actual return less expected return on scheme assets	(445)	(821)
Experience gains and (losses) arising on the scheme liabilities	(1,458)	(689)
Changes in assumptions underlying the present value of the scheme liabilities	1,172	(1,154)
<b>Actuarial loss recognised in SRGL</b>	<b>(731)</b>	<b>(2,664)</b>

History of experience gains and (losses)

	12 Months ending				
	March 2008 £000	March 2007 £000	March 2006 £000	March 2005 £000	March 2004 £000
Difference between expected and actual return on scheme assets:					
Amount	(445)	(821)	3,909	311	1,819
Percentage of scheme assets	2%	3%	15%	1%	12%
Experience gains and losses arising on the scheme liabilities					
Amount	(1,458)	(689)	1	149	(90)
Percentage of the present value of the scheme liabilities	6%	2%	0%	1%	0.5%
Total amount recognised in SRGL:					
Amount	(731)	(2,664)	489	(1,599)	(18)
Percentage of the present value of the scheme liabilities	(3%)	(9%)	2%	(7%)	(0.1%)

**Merchant Navy Pension Plans - Pacific Nuclear Transport Ltd (PNTL)**

The Company participates in two industry wide defined contribution schemes: the Merchant Navy Officers' Pension Plan (MNOPP) and the Merchant Navy Ratings' Pension Plan (MNRPP). The Company also participates in two industry wide defined benefit pension schemes: The Merchant Navy Officers' Pension Fund (MNOPF) and the Merchant Navy Ratings' Pension Fund (MNRPF).

**Merchant Navy Officers Pension Plan and Merchant Navy Ratings Pension Plan**

The MNOPP is available to officers who are not eligible for the MNOPF but wish to participate in an industry scheme. The MNRPP was set up on closure of the MNRPF and is available to all ratings who wish to participate in an industry scheme. The Company's contributions to the MNOPP and MNRPP for the year were £18,000 and £33,000 respectively (2007: £19,000 and £37,000 respectively). Contributions totalling £1,000 were outstanding for the MNOPP and £2,000 for the MNRPP as at the Balance Sheet date (2007: £2,000 and £2,000 respectively).

**Merchant Navy Officers Pension Fund**

The MNOPF Old section was closed in April 1978 and replaced by the New section which has subsequently been closed to new members from 1 November 1996. Benefits for the Old section were capped in April 1978 and those for existing employees of the New section continue to accrue with increasing years in service. The scheme is funded by payments to trusts, which are independent of the participating employers.

The Company's contributions to the MNOPF for the year totalled £865,000 (2007: £468,000). Agreed contribution rates for this scheme are currently 11.9%. The shortfall in the scheme is expected to be recovered in 2014. The Company's annual contribution to fund its share of the deficit is expected to be £555,000.

The pension costs are determined with the advice of independent qualified actuaries on the basis of triennial valuations using the projected unit credit method. The latest actuarial valuation at 31 March 2006 indicated that the MNOF New section was underfunded by £151 million with recovery expected by 2014. At 31 March 2006, the MNOF, New and Old sections were 93% and 107% funded respectively (previously 86% and 115%).

The results of the 31 March 2006 valuation were as follows:

	New	Old
Rate of increase in salaries (% pa)	4.50	Nil
Rate of increase in pension payments (% pa)	3.00	3.00
Discount rate (% pa)	7.00	4.50
Market value of scheme's assets (£million)	1,931	1,473

### Merchant Navy Ratings Pension Fund

The MNRPF was closed from 31 May 2001. The liabilities of the scheme have been capped at the level of benefits accrued to employees at the closure date, subject to adjustment for future actuarial valuations. The scheme is funded by payments to trusts, which are independent of the participating employers. The Company's contributions to the MNRPF for the year totalled £247,000 (2007: £247,000).

The pension costs are determined with the advice of independent qualified actuaries on the basis of triennial valuations using the projected unit credit method. The latest actuarial valuation at 31 March 2005 indicated that the scheme was 86% funded (previously 84%) with underfunding of £94 million. £1 million has been paid since 2001, with the deficit expected to be fully funded by 2014.

The results of the 31 March 2005 valuation were as follows:

	MNRPF
Rate of increase in salaries (% pa)	4.20
Rate of increase in pension payments (% pa)	Nil to 2.70
Discount rate (% pa)	5.50
Market value of scheme's assets (£million)	592

### FRS 17 valuations for MNOF (New section) and MNRPF

i) The valuations for each of the schemes have been updated on a basis consistent with FRS 17 by an independent professionally qualified actuary. The figures have been based on the actuarial calculations which were prepared for the trustees to the schemes and then adjusted to allow for the proportions of the assets and liabilities which the Company has been informed are attributable to it and to allow for the differences between the actuarial assumptions used for funding purposes and those which are compliant with FRS 17. The nature of this process means that the calculations and the resulting deficits are estimates only. However, in the opinion of the Directors, the deficits recognised are the best estimates based on information available at the date of approving these accounts.

The table below summarises the FRS 17 valuations as at 31 March 2008.

	MNOPF (New) £000	MNRPF £000	Total £000
Net deficit	(6,325)	(4,257)	(10,582)
Amount recoverable	6,325	4,257	10,582
Net pension liability	-	-	-

The major financial assumptions used for both schemes are:

	2008 %	2007 %	2006 %
Rate of increase in salaries	5.10	4.60	4.40
Rate of increase in pensions	3.60	3.10	2.90
Inflation assumption	3.60	3.10	2.90
Discount rate	6.10	5.20	4.90

The fair value of the Company's share of the assets and liabilities for each of the schemes are as follows:

	MNOPF (New)			MNRPF		
	2008 £000	2007 £000	2006 £000	2008 £000	2007 £000	2006 £000
Equities	10,733	15,441	11,303	2,718	3,227	3,170
Fixed interest gilts	5,360	1,700	1,208	2,847	2,044	1,804
Corporate bonds	1,689	2,414	1,363	5,001	5,807	6,076
Property	1,534	1,910	1,311	788	872	764
Cash	354	239	2,071	412	511	714
Market value of assets	19,670	21,704	17,256	11,766	12,461	12,528
Actuarial value of liability	(25,995)	(28,663)	(22,402)	(16,023)	(15,400)	(14,568)
Net deficit on scheme	(6,325)	(6,959)	(5,146)	(4,257)	(2,939)	(2,040)
Amount recoverable	5,640	6,230	4,606	3,797	2,622	1,819
Net pension liability	(685)	(729)	(540)	(460)	(317)	(221)

In line with existing contractual arrangements, all costs relating to the pacific vessels are recoverable under contract from customers and hence an equal recoverable amount is recognised to offset the pension deficit.

The expected rates of return for the schemes are as follows:

	2008 %pa	2007 %pa	2006 %pa
Equities	7.50	7.50	7.00
Fixed interest gilts	4.60	4.70	4.30
Corporate bonds	6.10	5.40	4.90
Property	6.50	6.50	6.00
Cash	5.25	5.25	4.50

The movements in the deficit in the year ended 31 March 2008 are as follows:

	MNOPF (New) £000	MNRPF £000	Total £000	Amount recoverable £000
Opening (deficit in scheme)/amount recoverable	(6,959)	(2,939)	(9,898)	8,852
Current service cost	(315)	-	(315)	281
Contributions	865	247	1,112	(979)
Expected return on scheme assets	1,374	633	2,007	(1,808)
Interest on scheme liabilities	(1,484)	(788)	(2,272)	2,007
Actuarial gains/(losses):				
Actual return less expected return on assets	(2,259)	(1,068)	(3,327)	2,967
Experience gains and losses on liabilities	2,529	-	2,529	(2,255)
Changes in assumptions underlying the present value of pension scheme liabilities	(76)	(342)	(418)	372
Closing (deficit in scheme)/amount recoverable	(6,325)	(4,257)	(10,582)	9,437

The movements in the deficit in the year ended 31 March 2007 are as follows:

	MNOPF (New) £000	MNRPF £000	Total £'000	Amount recoverable £000
Opening (deficit in scheme)/amount recoverable	(5,146)	(2,040)	(7,186)	6,425
Current service cost	(409)	-	(409)	365
Contributions	468	247	715	(629)
Expected return on scheme assets	983	546	1,529	(1,364)
Interest on scheme liabilities	(1,092)	(702)	(1,794)	1,600
Actuarial gains/(losses):				
Actual return less expected return on assets	320	(357)	(37)	33
Experience gains and losses on liabilities	(1,070)	-	(1,070)	954
Changes in assumptions underlying the present value of pension scheme liabilities	(1,013)	(633)	(1,646)	1,468
Closing (deficit in scheme)/amount recoverable	(6,959)	(2,939)	(9,898)	8,852

Analysis of amount charged to net operating expenses

	2008 £000	2007 £000
Current service cost	315	409
Net operating charge	315	409

Analysis of amount credited/(charged) to other finance income

	2008 £000	2007 £000
Expected return on pension scheme assets	2,007	1,529
Interest on pension scheme liabilities	(2,272)	(1,794)
Net expense	(265)	(265)

Analysis of amount recognised in SRGL

	2008 £000	2007 £000
Actual return less expected return on scheme assets	(3,327)	(37)
Experience gains and losses on liabilities	2,529	(1,070)
Changes in assumptions underlying the present value of pension scheme liabilities	(418)	(1,646)
Movement in amount recoverable from customer	1,216	2,753
Actuarial gain recognised in SRGL	-	-

**History of experience gains and losses**

The history of experience gains and losses, excluding the impact of the amount recoverable under customer contract are shown below:

MNOPF (New Section)	2008	2007	2006	2005	2004
Actual return less expected return on scheme assets (£000)	(2,259)	320	2,354	475	1,625
Percentage of scheme assets	11%	1%	14%	3%	12%
Experience gains and losses on liabilities (£000)	2,529	1,070	-	-	-
Percentage of scheme liabilities	10%	4%	-	-	-
Total amount recognised in SRGL (£000)	194	1,763	816	66	1,525
Percentage of scheme liabilities	1%	(6%)	4%	-	8%

MNRPF	2008	2007	2006	2005	2004
Actual return less expected return on scheme assets (£000)	(1,068)	(357)	1,090	498	585
Percentage of scheme assets	9%	3%	9%	4%	6%
Total amount recognised in SRGL (£000)	(1,410)	(990)	44	211	509
Percentage of scheme liabilities	9%	6%	0%	2%	4%

**29. Reserves**

NDA Group	General £m	Revaluation £m	Transfer £m	Total £m
At 31 March 2007	13,329	(15)	23,066	36,380
Surplus arising on revaluation of tangible fixed assets	-	(4)	-	(4)
Actuarial loss on pension schemes	2	-	-	2
Grant-in-Aid received	(1,646)	-	-	(1,646)
Deficit for the year	8,471	-	-	8,471
At 31 March 2008	20,156	(19)	23,066	43,203

Authority	General £m	Revaluation £m	Transfer £m	Total £m
At 31 March 2007	13,351	(13)	23,071	36,409
Surplus arising on revaluation of tangible fixed assets	-	-	-	-
Actuarial loss on pension schemes	1	-	-	1
Grant-in-Aid received	(1,646)	-	-	(1,646)
Deficit for the year	8,481	-	-	8,481
At 31 March 2008	20,187	(13)	23,071	43,245

The opening Transfer Reserve comprises the net liabilities transferred to the NDA at 31 March 2005 and any subsequent machinery of Government transfers.

### 30. Reconciliation of Operating Deficit to Net Cash Outflow from Operating Activities

	NDA Group	
	31 Mar 2008 £m	31 Mar 2007 £m
Operating deficit	(6,306)	(6,043)
Depreciation of tangible fixed assets	329	419
Impairment	356	36
Pension funding	(1)	-
(Increase) in stocks and work in progress	(18)	(2)
Decrease in debtors	94	154
Increase in creditors due less than one year	57	87
Increase in nuclear provisions	4,512	3,919
(Decrease)/increase in deferred income	(199)	(79)
Increase in non-nuclear provisions	355	659
<b>Net cash outflow from operating activities</b>	<b>(821)</b>	<b>(850)</b>

### 31. Reconciliation of Net Cash Flow to Movement in Net Funds

	NDA Group	
	31 Mar 2008 £m	31 Mar 2007 £m
Increase/(decrease) in cash in the year	395	(124)
Cash outflow from management of liquid resources	15	34
<b>Change in net funds</b>	<b>410</b>	<b>(90)</b>
Net funds at 1 April 2007	317	407
Net funds at 31 March 2008	727	317

Net funds comprise current asset investments and short-term deposits excluding deposits repayable on demand.

### 32. Analysis of Net Funds

	Note	NDA Group	
		31 Mar 2008 £m	31 Mar 2007 £m
<b>Analysis of net funds</b>			
Current asset investment	17	250	235
Cash at bank and in hand	18	477	82
		<u>727</u>	<u>317</u>

### 33. Financial Instruments

FRS13 'Derivatives and Other Financial Instruments' (FRS 13) requires disclosure of the role that financial instruments have had during the year in creating or changing the risks an entity faces in undertaking its activities.

#### Financial Risks

Due to the way in which it is financed by a combination of Government funding and commercial activities, the NDA is not exposed to the degree of financial risk faced by other business entities, although it does experience some degree of risk due to the variability of commercial income. Moreover, financial instruments play a more limited role in creating or changing risk than would be typical of the companies to which FRS 13 mainly applies.

The primary financial risks faced by the NDA are commodity price risk and foreign currency risk. Liquidity risk and interest rate risk are not considered to be significant risks for the NDA.

The NDA is funded through its commercial income, augmented by way of Grant-in-Aid. Grant-in-Aid is shown as financing in the Cash Flow Statement.

The NDA applies for top-up funding via Grant-in-Aid from the Spending Review in three-year cycles, effectively fixing the grant for those three years. The nature of the NDA's activities exposes the NDA to substantial variability in the commercial income and site expenditure and the NDA is required to manage these fluctuations in income and expenditure. This requires the use of extensive reporting and control mechanisms, and the SLCs have made significant investments in IT systems which have allowed the NDA to maintain a clear view of its financial position, and enabled the NDA to make funding decisions consistent with its prioritisation of work.

To assist in the understanding of financial and operational risks, the NDA is undertaking an extensive programme to embed risk management practices across all its functions and to provide contractual mechanisms to obtain assurance of good risk management practices from the SLCs.

To assist in understanding the programme of works required and to provide a firm basis for the Grant-in-Aid requirements the NDA has made progress in establishing the framework for the management of the nuclear legacy. Work is continuing to improve the processes for estimating costs over long periods and monitoring and managing the risks inherent in the programme.

The NDA has committed itself to creating the controls, systems, resources and contractual bases to raise standards of financial discipline and risk reporting and to reduce uncertainties over the decommissioning cost.

### **Commodity Price Risk**

The most significant financial risk facing the NDA relates to commodity prices.

The NDA has two types of contract, commodity and British Energy supply and reprocessing contracts.

A commodity contract is a contract that provides for settlement by receipt or delivery of a commodity. The risk is primarily that market prices for commodities will move adversely between the time that sales prices are fixed or tariffs are set and the time at which the purchase cost is fixed, thereby potentially reducing expected margins.

Previously commodity contracts were entered into by Magnox Electric Limited and managed by Energy Sales and Trading Limited to control electricity price risk. However, the effect of the service contracts between the NDA and the SLC, was to transfer the economic exposures of both the underlying business transactions and the commodity contracts from Magnox Electric Limited to the NDA. Therefore, whilst not being a legal counterparty to the commodity contracts the NDA was considered in substance to be transacting as such and the contracts were accounted for on this basis.

During the year the commodity contracts were assigned directly to the NDA, and are now managed by British Energy, thereby passing any legal obligation under the contract to the NDA. As the NDA previously considered itself to, in substance, be transacting and disclosed the associated risk within this note this change in contract assignment is not considered to significantly affect its risk profile.

The British Energy contract is for the supply and reprocessing of nuclear fuel. Commodity price risk arises on these contracts due to the pricing being linked to electricity pricing. Movements in the pricing of electricity will directly affect the value of the contract to the NDA, creating a commodity exposure linked to electricity prices.

### **Commodity Contracts**

The NDA's objective is to reduce commodity price risk. In order to do this a number of commodity contracts are entered into, in order to take trading positions in the market. The fair value of these instruments at 31 March 2008 is £46 million (£5 million 2006/07) negative credit exposure. The estimate is based on a comparison between the contracted price (specified at the date of the deal) and the price for a similar contract at the year end (based on available market data).

These hedged transactions are expected to occur up to 2009/10.

### British Energy Contracts

The NDA manages contracts with British Energy for the supply and reprocessing of nuclear fuel that includes elements that are dependent on the market price of electricity. Although Sellafield Limited and Springfields Fuels Limited remain the respective counterparties, the NDA has full economic risk as the costs of discharging the contractual obligations are allowable costs under the Management and Operation (M&O) contracts and all the income received by the contractors is passed to the NDA. Therefore via its financing of the SLCs, the NDA is an economic owner, but not legal counterparty to these contracts.

The elements of the contract dependent on the market price of electricity are effectively financial derivatives.

The table below shows the maximum annual exposure to movements in the market price of electricity.

For the year ended 31 March 2008			Maximum Annual Exposure/ Upside £m
	Ceiling £/MWH	Floor £/MWH	
British Energy fuel supply contract			
Drop in market price below (a)	n/a	21.13	(18)
British Energy fuel reprocessing contract			
Market price of electricity exceeds (b)	24.68	17.39	123
Market price of electricity drops below (c)	24.68	17.39	(123)

For the year ended 31 March 2007			Maximum Annual Exposure/ Upside £m
	Ceiling £/MWH	Floor £/MWH	
British Energy fuel supply contract			
Drop in market price below (a)	n/a	20.31	(17)
British Energy fuel reprocessing contract			
Market price of electricity exceeds (b)	22.08	17.16	130
Market price of electricity drops below (c)	22.08	17.16	(130)

(a) Under the fuel supply contract, the income the NDA receives is reduced if the market price of electricity drops below this level. The exposure is calculated by adjusting the £15 million discount stated in the 2003 contract by the rate of inflation, as per the contract.

(b) Under the fuel reprocessing contract the NDA receives additional monies if the market price of electricity exceeds this amount. A ceiling and maximum annual exposure is also stipulated. The exposure is reached by calculating the amount of income the NDA would lose based on forecast activity if electricity prices were at or below the floor price in the contract.

(c) Similarly, income is reduced if the market price of electricity drops below this level. A floor and maximum annual exposure is also stipulated.

### **Foreign Currency Risk**

Foreign currency risk is the risk that the value of a financial instrument will fluctuate because of changes in foreign exchange rates.

The NDA is exposed to foreign currency risk through its operations as it receives a proportion of its income in foreign currency. Foreign currency contracts are held in relation to sales of MOX fuel and purchases of various components. The SLCs, on behalf of the NDA, manage the exposure to exchange risk and implement a policy of purchasing forward where appropriate to minimise the exposure to fluctuations in foreign currency. These contracts relate to transactions expected to occur over the next three years.

### **Liquidity Risk**

Liquidity risk (also referred to as funding risk) is the risk that an entity will encounter difficulty in realising assets or otherwise raising funds to meet commitments associated with financial instruments. The NDA is primarily financed by income from other public sector bodies, along with commercial income, and there is therefore no exposure to significant liquidity risks. Although the NDA is somewhat vulnerable to movements in commercial income, it always has the option to apply for increased funding from the Government.

### **Interest Rate Risk**

Interest rate risk is the risk that the value of a financial instrument will fluctuate because of changes in market interest rates. Interest rate risk will occur due to mismatches of interest rates across financial assets and financial liabilities. All cash balances on deposit are held in highly rated short term fixed rate deposits and the NDA has no debt instruments, the NDA considers the exposure to interest rate risk to be minimal and is appropriately managed.

### **Credit Risk**

Counterparty credit risk is the risk that the financial benefits of the contract with a specific counterparty will be lost if a counterparty defaults on their obligations under the contract. This includes any cash amounts owed to the NDA by those counterparties, less any amounts owed to the counterparty by the NDA where a legal right of set-off exists and also includes the fair values of contracts with individual counterparties which are recorded in the Financial Statements.

The NDA's income is generated primarily from British Energy contracts. Due to the size of British Energy, the NDA's exposure to credit risk is low. In addition the NDA sells electricity to a number of counterparties. The credit risk of each counter-party and the amount of permitted credit for each counter-party is reviewed monthly by the Electricity and Output Trading Committee. Credit limits set at a low level preventing any significant losses in the unlikely event of a default.

### Derivative Financial Instruments

The fair value of the derivatives within the commodity and British Energy contracts are as follows:

	2008 £m	2007 £m
Commodity contracts (d)	(46)	(5)
British Energy fuel supply contracts (e)	Nil	Nil
British Energy fuel reprocessing contract (e)	Nil	Nil
<b>Net total</b>	<b>(46)</b>	<b>(5)</b>

(d) The estimate is based on a comparison between the contracted price (specified at the date of the deal) and the price for a similar contract at the year end (based on available market data). The increase to £46 million (2006/07 £5 million) is due to higher electricity prices and a number of long-term contracts now having one less year to run.

(e) It is not possible to calculate a fair value for the derivative element of the contracts with British Energy as they are not traded on an organised market. The fuel supply and reprocessing contracts are unique and no comparable contracts exist.

As a result of these contracts the NDA now shares part of the risk of fluctuating electricity prices with British Energy. The Board has considered this risk but, based on its view of medium-term electricity prices, has concluded that the costs of hedging the risk would outweigh the potential benefits.

The fair value of the foreign exchange contracts are as follows:

	2008 £m	2007 £m
Euro denominated foreign exchange forward contracts (a)	-	1
<b>Net total</b>	<b>-</b>	<b>1</b>

a) The valuation of the forward contracts is based upon the mark to market value of the transaction, using forward rates applicable at the balance sheet date.

### Financial Assets and Liabilities

Generally, financial assets and liabilities are generated by day-to-day operational activities and are not held to change the risks facing the NDA in undertaking its activities.

The NDA, in accordance with the FReM's guidelines, has taken advantage of the exemption in FRS13 not to give disclosures in respect of short-term debtors and creditors. In addition to the long term debtor balances referred to in notes 15 and 16, the NDA's financial assets comprised current asset investments held by the wholly owned subsidiary Rutherford Indemnity Limited and cash at bank and in hand.

### Fair Value of Assets and Liabilities

The fair value of financial instruments represents the amount at which the instruments could be exchanged in a current transaction between willing parties, other than in a forced sale or liquidation. Where market values are not available, fair values have been calculated by discounting cashflows at prevailing rates. Significant differences can arise between the fair value and the carrying amount of financial instruments that are recognised at historical cost amounts.

	Book Value 31 Mar 2008 £m	Fair Value 31 Mar 2008 £m	Book Value 31 March 2007 £m	Fair Value 31 March 2007 £m
<b>NDA Group</b>				
Cash at bank and in hand	477	477	82	82
Current asset investments	250	250	235	235
Foreign exchange contracts	-	-	1	1
Amounts recoverable on long-term contracts	79	79	50	50
Customer recoverable relating to nuclear liabilities	4,684	4,684	4,068	4,068
Commodity contracts	(46)	(46)	(5)	(5)

	Book Value 31 Mar 2008 £m	Fair Value 31 Mar 2008 £m	Book Value 31 March 2007 £m	Fair Value 31 March 2007 £m
<b>Authority</b>				
Cash at bank and in hand	453	453	56	56
Foreign exchange contracts	-	-	1	1
Amounts recoverable on long-term contracts	79	79	50	50
Customer recoverable relating to nuclear liabilities	4,684	4,684	4,068	4,068
Commodity contracts	(46)	(46)	(5)	(5)

The NDA re-values its current asset investments at the end of every financial year and hence the book value is always the fair value.

### 34. Contingent Liabilities

Under the transfer scheme of 1 April 2005, the NDA has assumed responsibility for all occurrences relating to the designated sites that took place up to that date.

(a) Debtors include £67 million (£74 million 2006/07) of funds which are held by Sellafield Limited within charge over deposit accounts (CODAs). These represent funds provided by customers which are held in accounts controlled and owned by Sellafield Limited, over which the customer has a legal charge until the associated work has been completed. These funds will become payable to the NDA once the work is completed and the charge released. Interest on the accounts accrues to the benefit of the NDA. The balances will transfer to the NDA as part of the INSL transfer.

(b) Bank guarantees of £37 million (£51 million 2006/07) have been issued as collateral to support electricity trading.

(c) A contingent liability exists in relation to the costs of clean-up of Sandside Beach in Caithness, the liability is subject to resolution.

**Contingent liabilities not required to be disclosed under FRS12 but included for parliamentary reporting and accountability purposes:**

The NDA has a non-quantifiable contingent liability arising from an indemnity given as part of the contract for the management of the Low Level Waste Repository. The indemnity is in respect of the uninsurable residual risk that courts in a country which is not party to the Paris and Brussels Conventions on third party liability in the field of nuclear energy may accept jurisdiction to determine liability in the event of a nuclear incident. This is not treated as a contingent liability within the meaning of FRS12 since the possibility of a transfer of economic benefit in settlement is considered too remote.

### **35. Related Parties**

#### **Government bodies**

The NDA is an Executive NDPB sponsored by BERR, which is regarded as a related party. During the year, the NDA has had various material transactions with BERR and with other entities for which BERR is regarded as the responsible department, mainly BNFL. The NDA receives Grant-in-Aid financing from BERR.

In addition, the NDA has a small number of material transactions with other Government Departments and other central Government bodies. Most of these transactions have been with the UK Atomic Energy Authority (UKAEA) and Ministry of Defence (MoD).

On 1 April 2007 a new contract between British Energy (a Public Corporation) and the NDA came into effect for the marketing of the output of NDA's power stations. The agreement was entered into on an arm's length basis. The NDA also enters into contracts with British Energy for the purchase and sale of electricity. In addition the NDA has transactions with British Energy via its M&O contracts with the SLCs as described in note 33.

The NDA is the parent of its subsidiaries Rutherford Indemnity Limited, Direct Rail Services Limited (DRS), United Kingdom Nirex Limited, International Nuclear Services Limited (INS), Pacific Nuclear Transport Limited (PNTL) and INS Rokkasho KK.

During the year, no Board member, key manager or other related party has undertaken any material transaction with the NDA.

### 36. Intra-Government Balances

Intra-government balances NDA Group	Debtors: amounts falling due within one year £m	Debtors: amounts falling due after one year £m	Creditors: amounts falling due within one year £m	Creditors: amounts falling due after one year £m
Balances with other central government bodies	80	-	(52)	-
Balances with NHS trusts	-	-	-	-
Balances with public corporations and trading funds	73	-	(205)	-
	153	-	(257)	-
Balances with bodies external to government	159	79	(746)	(4,786)
At 31 March 2008	312	79	(1,003)	(4,786)
Balances with other central government bodies	98	-	(46)	-
Balances with NHS trusts	-	-	(7)	-
Balances with public corporations and trading funds	-	-	(452)	-
	98	-	(505)	-
Balances with bodies external to government	336	50	(441)	(4,809)
At 31 March 2007	434	50	(946)	(4,809)

### 37. Losses and Special Payments

The disclosures in this note are in accordance with 'Managing Public Money', and the purpose of this note is to report on losses and special payments of particular interest to Parliament.

Total losses during the year were £545,000, of which £386,000 was the result of writing off expenditure on capital and revenue projects, none of which individually exceeded £250,000.

### 38. Post Balance Sheet Events

- a) The Accounts were authorised to be issued for publication on 14 July 2008.
- b) A transfer scheme for certain UKAEA assets were successfully implemented on 1 April 2008.
- c) On 1 April 2008, INS became a wholly owned subsidiary when the NDA acquired the remaining 51% of its ordinary shares. Prior to that date, INS, and its subsidiary companies (including PNTL), were already being consolidated within the NDA group financial statements. Following the acquisition of INS, the employment contracts of 143 staff, previously seconded from Sellafield Limited, have been transferred into INS and consequently from 1 April 2008 the staff note disclosures for the NDA group will include details of the new group of employees. The employees are members of the fully funded Group Pension Scheme (GPS), their pension liabilities being held in a separate section of that scheme.

- d) The Government published its White Paper on Managing Radioactive Waste Safely (MRWS) in June 2008
- e) NDA became lead employer for the Group Pension Scheme (GPS) on 1 April 2008.
- f) On 1 April 2008, the NDA acquired BNFL Properties Limited under a Section 39 nuclear transfer scheme. At the same transfer date the lease associated with Southmoor House was also transferred to the NDA. The transactions will be treated as a Machinery of Government transfer in accordance with the FReM, and accounted for under the merger accounting principles of FRS6 'Acquisitions and Mergers'. The 2008 Balance Sheet showed net assets of £5 million, which will be incorporated as at 31 March 2009.
- g) On 31 March 2008, UK Nuclear Waste Management Limited (UKNWM), a consortium led by URS Washington Division, was awarded the contract for the management and operation of the LLWR. The new M&O contract came into effect with the transfer of shares in the SLC from British Nuclear Group to UK Nuclear Waste Management Limited on 1 April 2008.
- h) On 1 April 2008 a number of trading contracts, previously held by site licensee companies on behalf of the NDA, have been novated into the name of the NDA. The principal contracts relate to waste reprocessing and transport.
- i) The Board announced that after more than three and half years of leading the NDA, Dr Ian Roxburgh will step down as CEO on 31 July 2008. From 1 August 2008, Richard Waite, Divisional Director, Strategy and Technology, will be acting Chief Executive until a successor is appointed.

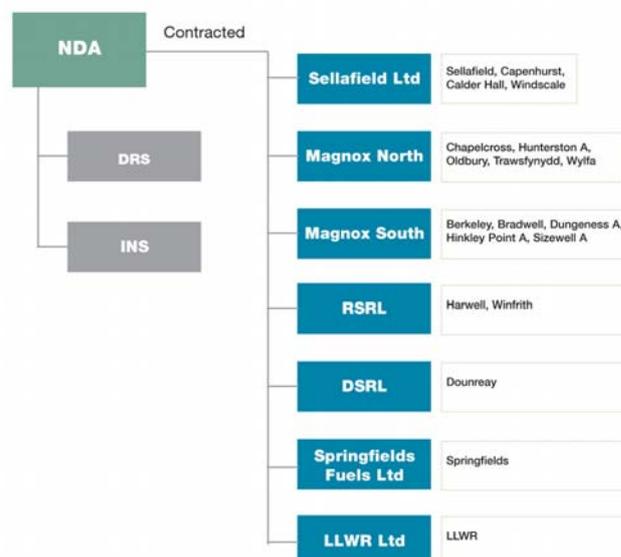
## Operating Unit Reports

The following pages give a brief report on each of the NDA's operating units, which are grouped into NDA owned operating subsidiaries and site licensees. Within the Operating Unit Reports there are also summary breakdowns from each site.

The reports cover progress towards delivering key milestones and activities from the 2007/08 NDA Annual Plan, key earned value performance data and an overview of the safety and environmental performance of each site licensee.

Income and expenditure data are included within this Annual Report and Accounts. The subsidiary companies that are reported on are those that we consider to be our key operating units and do not, therefore include Rutherford Indemnity Limited.

Due to the approval of plans to extend the Joint European Torus (JET) operations at Culham, the start of decommissioning work has been deferred from 2008 until the end of 2010. The NDA does not intend to report on activities at the Culham JET facilities in its Annual Report and Accounts until a decision is taken to designate the facilities to the NDA.



## How to Read This Section

**Below are some definitions of key concepts and terminology that are used throughout this section of the Annual Report and Accounts.**

### **Earned value performance data**

'Earned value' refers to the positive variance of work delivered by our contractors against the original budgeted cost and planned schedule of work. To help us measure earned value data, the following key concepts are used:

- **Original Budgeted Cost of Work Scheduled (BCWS)**  
BCWS is the budgeted cost of the work that our contractors set out to complete at the beginning of the year
- **Budgeted Cost of Work Performed (BCWP)**  
BCWP is the budgeted cost of work actually completed during the year
- **Actual Cost of Work Performed (ACWP)**  
ACWP is the actual cost of work completed in the year

To determine the earned value of our contractors' performance, the following formulae are used:

- **Cost Variance (CV)**  
 $= BCWP - ACWP$

- **Schedule Variance (SV)**  
 $= BCWP - BCWS$

- **Cost Performance Index (CPI)**  
 $= BCWP/ACWP$

- **Schedule Performance Index (SPI) = BCWP/BCWS**

For example, when the BCWP is higher than the BCWS, this means that more work has been completed than planned. When the ACWP is lower than the BCWP, then the work has been completed at a lower cost than planned.

Key among the tools that the NDA employs to ensure that our contractors deliver work in line with our strategic priorities and for better value is portfolio management – that is, the reallocation of funds from one site or site licensee to another site or site licensee in order to bring forward work planned from future years. This sometimes results in an adjustment to the original BCWS to reflect the revised funding levels. Where appropriate, these revised BCWSs are used throughout this report in order to determine the earned value of our contractors' performance.

### **Summary of health, safety, security & environmental performance**

The reports on the NDA's operating units provide an overview of the health, safety and environmental incidents reported at each NDA site in 2007/08.

The following points define the different types of reportable

incidents at a nuclear licensed site, as well as other health, safety and environmental information:

- **RIDDOR** stands for the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 1995. It applies to all work activities but not to all incidents that may occur
- **The International Nuclear Event Scale (INES)** is a scale for communicating the safety significance of events reported at nuclear installations. There are seven levels on the INES scale, ranging from an anomaly (Level 1), which indicates the least serious incident on the INES scale, to a major accident (Level 7), which represents the maximum credible accident on the INES scale. The data provided in this section indicates the frequency of incidents reported rather than the severity of the incidents
- **Environmental non-compliance** is a breach of a permit condition set by the Environment Agency (EA) or the Scottish Environment Protection Agency (SEPA) that prevents or controls the risk of pollution to the environment
- **The Royal Society for the Prevention of Accidents (RoSPA)** is a UK charity that aims to promote safety in all fields by providing information, advice, resources and training. RoSPA holds an annual occupational health and safety awards ceremony at which medals are awarded to organisations that have demonstrated excellent health and safety performance
- Security arrangements are agreed between site operators and the **Office for Civil Nuclear Security (OCNS)**, which is the independent security regulator for the civil

nuclear industry. Detailed security arrangements at nuclear licensed sites are not discussed in this report

- **Total Recordable Incident Rate and Days Away Case Rate** are standardised measures that we use for industrial health and safety performance from OSHA (OSHA is the US Department of Labor's Occupational Safety and Health Administration)

#### Key milestones and deliverables

Key milestones are agreed at the start of each financial year to enable the effective measurement of progress against objectives through agreed reporting procedures. The milestones and activities listed for each site are taken from the 2007/08 NDA Annual Plan.

- **Achieved** – the key milestone or activity has been completed during the financial year (2007/08)
- **Not Achieved** – the key milestone or activity was due for completion during the financial year (2007/08), however this was not completed
- **On Track** – the key milestone or activity was due for completion after 31 March 2008 and as at that date was on track to be completed to schedule
- **Behind Schedule** – the key milestone or activity was due for completion after 31 March 2008 and as at that date there had been a delay to the schedule
- **Deferred** – Activity deferred due to re-prioritisation and/or reallocation of funding

#### Other site information

- **Site Licensee or Site Licence Company (SLC)**  
This is the entity that holds the nuclear site licence and discharge

authorisations in respect of a nuclear licensed site and which is directly responsible for day-to-day site management and operations

- **Parent Body Organisation (PBO)**  
In the NDA's contracting structure a Parent Company bids to own a Site Licence Company (SLC). The Parent Company may form a holding company to hold the shares in that SLC. This Parent Company then parachutes in a management team to run the SLC.

### Status of Operations

The following categories are used to describe the stage in the lifecycle of each nuclear site:

- **Operational**  
This indicates that commercial operations, which include fuel manufacturing, electricity generation, spent fuel reprocessing and waste management services, are undertaken on the site
- **Defuelling**  
Defuelling indicates the removal of spent nuclear fuel from reactors at the Magnox stations, following the cessation of electricity generation in preparation for site care and maintenance
- **Decommissioning and Termination**  
Decommissioning and termination is the final stage in the lifecycle of a nuclear site and refers to the clean-up of radioactive and other material and progressive dismantling of the site
- **Administrative**  
These 'virtual sites' provide management oversight, strategic direction and central coordination of activities

## Sellafield Limited

**Sellafield Limited is the Site Licence Company (SLC) responsible for the management and operation of Sellafield, Calder Hall, Capenhurst and, from 1 April 2008, Windscale.**

**A new contract has recently been awarded in respect of the Low Level Waste Repository near Drigg (LLWR) to UK Nuclear Waste Management Limited and the LLWR site now operates as an independent site from Sellafield.**

**A competition is currently underway to select a new Parent Body Organisation (PBO) for Sellafield Limited. The contract will be awarded in 2008/09.**

### Key developments in 2007/08

- demolition of the former uranium purification facility has been completed. This now provides a large area of space adjacent to the legacy ponds and silos for construction of support facilities for this key hazard reduction work
- progress continues in legacy ponds and silos with the commissioning of the Local Effluent Treatment Plant (LETP). The in-pond sludge corral in B29 has also been installed. In addition, refurbishment of the gantry supports for B30 - a key enabler for return to service of the skip handling machine - is now complete. Progress has also been made with the design and construction of buffer storage tanks for the storage of mobile sludges to be retrieved from both legacy pond facilities. Design and fabrication work continues to progress on retrieval and treatment systems for both legacy silos

- characterisation work with respect to contaminated land is progressing with contracts in place and initial boreholes drilled
- the Thermal Oxide Reprocessing Plant (THORP) re-started operations and sheared some 51 tonnes of fuel in the year
- four cooling towers at Calder Hall were demolished successfully in September and all waste removed from the site
- good progress was made on the restoration of evaporative capacity for Highly Active Liquors (HAL) with two evaporators returned to service and work well under way to return the third. Progress is also being made on the design for a fourth HAL evaporator

### Forward look

- the contract for a PBO for Sellafield Limited will be awarded in 2008/09
- securing appropriate capacity at the Highly Active Liquor Evaporation and Storage (HALES) facility will remain a top priority with a third evaporator being returned to service. Evaluations are taking place on the design and construction of additional HAL storage capacity
- support will continue to be given to the Magnox Operating Programme (MOP), with the continued receipt and storage of fuel from British Energy's Advanced Gas-Cooled Reactors (AGRs)

## Calder Hall



Calder Hall is located on the Sellafield site in Cumbria. It was the world's first commercial nuclear power station and started generating electricity in 1956. Generation ceased in 2003. (See the entry on Sellafield for further information about the site and surrounding area).

**Location:** Cumbria

**Type of Site:** Reactor Site

**Status of Operation:** Defuelling, Decommissioning and Termination

**Site Licensee:** Sellafield Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Work will continue to remove asbestos lagging from the heat exchangers and turbine halls.	On Track	Project scope planned for 2007/08 completed on schedule. The project planned completion is on schedule for 2009/10.
Removal of plant and decommissioning and demolition of non-essential plant and buildings, along with removal of fuel elements from Reactor 4.	Demolitions Achieved  Defuelling Deferred	Building demolitions planned for 2007/08 completed ahead of schedule.  Removal of fuel from Reactor 4 has been deferred.
Pilot scheme to remove 2 heat exchangers from Reactor 2, place them in temporary lay down area and characterise metals and treatment options in order to exploit the opportunities to reduce the impact on disposals to the Low Level Waste Repository (LLWR).	Deferred	Programme of work deferred to release funds to high hazard work at Sellafield.
Removing waste from the site and implementing a waste management plan in conjunction with the regulators and Sellafield Limited.	On Track	Planned work mostly completed.

### Regulatory Matters

**The key issue remains: the safe removal of the fuel from the reactors and asbestos from the heat exchangers and turbine halls**

- Approval to remove fuel from Reactor 4 was not granted by the Nuclear Installations Inspectorate (NII) due to the changed MOP strategy. The reactor is, however, ready for defuelling
- The asbestos project has continued with no regulatory issues arising

### Key Performance Indicators

<b>Decommissioning and demolition</b>	All buildings planned for demolition completed. The demolition of the Calder Hall cooling towers which was work carried over from the previous financial year was successfully completed on 29 September 2007.
<b>Hazard removal and control</b>	Most of the planned hazard removal was completed. Significant progress has been made to dispose of asbestos.

### Safety and Environmental Performance

Issue	Number
Total Recordable Incident Rate	1.72
Days Away Case Rate	0.86
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	2
RIDDOR Dangerous Occurrence	0
INES incidents	1
Environmental non-compliance	0

### Non Accounting Financial Measures (Earned Value)

Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
<b>34.7</b>	<b>34.3</b>	<b>31.6</b>
The Original BCWS was £36.1 m		

## Capenhurst



Capenhurst is located near Ellesmere Port in Cheshire, adjacent to Urenco (the Uranium Enrichment Company), and has an area of 32 hectares covered by the nuclear site licence. It was home to a uranium enrichment plant and associated facilities that ceased operation in 1982.

**Location:** Cheshire

**Type of Site:** Uranium Facility

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** Sellafield Limited

### Key Activities

2007/08 Annual Plan Activities	Status	Progress Report
Demolition of redundant buildings.	Achieved	B200/400 complex and B100A demolition projects completed.
Decontaminate, Post Operational Clean Out (POCO) and commencement of B300 demolition.	Demolitions Deferred	B300 demolition work deferred.
Project for accelerating the management of uranium hexafluoride (UF <sub>6</sub> ).	On Track	Accelerated activities in support of hazard reduction of UF <sub>6</sub> have been completed.
Land characterisation and borehole monitoring.	On Track	All programmed tasks completed.
Removal and processing of non-standard waste (NSW) residues.	Achieved	All residues within NSW Project repackaged and all waste processing activities completed.
Management and operation of incinerator.	Achieved	Incinerator facility has been placed into a safe mothballed state.
Waste management, packaging and disposal operations.	Achieved	Over 1,500m <sup>3</sup> with an activity of over 18 GBq successfully disposed.
Hex bottle-washing processing operations.	Not Achieved	Delays in active commissioning start-up.

### Regulatory Matters

#### Accelerated removal of the uranium hexafluoride from the site.

Regulators, as part of the stakeholder community for Capenhurst site, are satisfied with progress on hex tails management for both early hazard reduction and in support of future management of the material, that the level of consultation has been good and there is continuing support for the current strategy to be maintained.

Key Performance Indicators	
Waste disposals	To dispose of 18 GBq (939m <sup>3</sup> ) contaminated waste: Achieved.
Repackaging of NSW uranic residues	Repackage 9m <sup>3</sup> residues: Achieved.
Uranic storage	<ul style="list-style-type: none"> <li>• Incinerator options: Achieved.</li> <li>• MDU (Magnox Depleted Uranium) receipt: Achieved.</li> </ul>
Resource rundown	Achieved.
Accelerated site strategy options	Achieved.
UF6 tails management	<ul style="list-style-type: none"> <li>• LTP underpinning for hex deconversion plant: Achieved.</li> <li>• Commercial optioneering scope document: Achieved.</li> <li>• Material characterisation report: Achieved.</li> </ul>
Regulatory and stakeholder engagement	Achieved.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	1.56
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
24.5	23.7	21.4
The Original BCWS was £22.0 m		

## Sellafield



Sellafield is located in Cumbria and has an area of 262 hectares covered by the nuclear site licence. It is a large, complex nuclear chemical facility that has supported the nuclear power programme since the 1940s, and has undertaken work for a number of organisations including UKAEA, Ministry of Defence (MoD), British Energy (BE) and overseas customers. Operations at Sellafield include reprocessing of fuels removed from nuclear power stations; Mixed Oxide (MOX) fuel fabrication; and storage of nuclear materials and radioactive wastes. The area around the site is environmentally sensitive.

**Location:** Cumbria

**Type of Site:** Nuclear Chemical Site

**Status of Operation:** Operations and Decommissioning

**Site Licensee:** Sellafield Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Retrieval of wastes from legacy ponds and silos.	More detail is given in specific sections below.	Work continues on all four facilities to prepare for retrievals.
Completing the size reduction and decommissioning of the Prototype Fast Reactor (PFR) fuel fabrication gloveboxes.	On Track	Size reduction and decommissioning on 25 glove boxes has been completed. Work on the remaining two glove boxes is in on target for completion in 2008/09.
Decontaminating plant, equipment and the main shaft of the Windscale Pile Chimney, subject to necessary regulatory approvals being secured and access to the base of the shaft permitted.	On Track	Base clearance completed. Assessment work in support of the shaft decontamination has identified the need to utilise an alternative approach to that identified in the March 2007 submission. This will require development and trialling of different options thus extending the project duration but mitigating previously identified significant project risks.
Solid waste storage cells: completion of main construction works and equipment installation activities and inactive commissioning.	Behind Schedule	Ring beams and cell covers installed. Main construction behind schedule.
Sellafield separation head end plant: completion of foam grouting of the main shaft of the highly active north outer cell.	Achieved	Work to stabilise the cell shaft by filling with foamed grout was successfully completed on schedule.

Commissioning of island security arrangements for a) Nine Acre and b) Legacy island sites within separation area.	a) Achieved b) Behind Schedule	Security improvements project for the Nine Acre site complete. Legacy island project scheduled for completion July 2008.
Plutonium Contaminated Material (PCM) retrievals: decommissioning of storage chambers, decontamination of 80 tubes.	Deferred	This work deferred as part of the funding constraint in 2007/08. Rescheduled for 2008/09.
Separation PFR plant: continuation of final phase of dismantling of fuel line (completes in 2008/09).	On Track	Work to reclassify the area to C3 status on schedule to complete by the end of 2008/09.
Continue construction of the Sellafield Product and Residue Store (SPRS), which will extend the provision of safe and secure storage of nuclear materials.	On Track	Main civil structure complete, installation of P&E (Plant & Equipment) underway.
Complete the design of the Magnox plutonium residue store.	On Track	Manufacturing and works testing is underway and progressing to plan.
Continue Advanced Gas-Cooled Reactor (AGR) fuel interim storage project: to select options for pursuing the long-term storage of AGR fuel.	Deferred	Project was deferred in 2007/08 due to funding constraints. Work has recommenced and the deferred work is being planned in 2008/09.
Construction of Sludge Packaging Plant 1 (SPP1).	Behind schedule	Contract awarded, site mobilisation of contractor completed, enabling work commenced.
Complete the construction and inactive commissioning of the vitrified products residue store export facility, which is needed to return vitrified waste to customers.	Achieved	Main construction work complete and contractor demobilised, term contractor working through outstanding snagging list. Inactive testing is more than 95% complete. Final preparations ongoing for the plant to be taken active.
Continue the work associated with Evaporator D. This is a significant construction activity and will allow ageing assets to be safely retired.	Behind Schedule	Project has passed through FEL gate 2 (Project Stage Review), design work continues to progress to FEL gate Level 3 which is anticipated later this year.
Managing liquid High Level Waste (HLW) and making it passively safe through vitrification in line with regulatory commitments and reprocessing demands.	On Track	Processing of Highly Active Liquor (HAL) throughout the year has reduced the stocks by over 300m <sup>3</sup> . The present HAL stock level is 1045m <sup>3</sup> , this is against a NII HAL volume limit of 1190m <sup>3</sup> . Engineering work has been completed and a licence instrument received to allow restart of Evaporator A. This will allow for greater support to Waste Vitrification Plant (WVP) operations to further reduce the HAL stock volume.

Producing and transferring vitrified product containers to store.	Behind Schedule	Production rates were maintained within the vitrification plant despite some significant outages for key engineering work. Container production totalled 314 against a target of 355, of which 274 containers have been transferred to store. Container incorporation rates have exceeded the targets set by an average of 2.82kg per container.
Preparing for legacy waste retrieval, including asset management activities to reduce hazard potential, provide retrieval operations infrastructure and maintain safe waste storage.	On Track	There has been a focus on improving nuclear safety management in the legacy plants following a number of events that occurred in 2007. The SLC has worked with the regulator to improve confidence in the condition of the assets and the management systems that are in place to assure nuclear safety.
Continuing preparations for retrievals within B38.	On Track	Good progress in year with completion of compartment-7 project.
Continuing design and manufacturing work on mobile caves for retrieval of B38 sludge.	On Track	Work is progressing well on the mobile caves and support equipment. Development of grabs and systems to allow deployment to the edges of the silos has been demonstrated to the NDA.
Completing the construction of the local sludge treatment plant.	Behind Schedule	Following a significant delay to the project following safety case and design configuration issues construction work is again progressing.
Start recovering sludge from the legacy ponds.	Behind Schedule	The Retrievals project contract has been placed and the contractors programmes agreed following due diligence to deliver the systems to allow retrievals to take place.
Continuing recovery of skips and other beta gamma wastes from the pile fuel storage pond.	Behind Schedule	Work has been delayed as a consequence of problems in commissioning the LETP.
Start site works for the retrieval of solid wastes from the fuel cladding storage silo.	On Track	A contract for site works has been approved and placed and work is progressing.
Continuing legacy floc retrieval as part of hazard potential reduction in legacy plants.	On Track	Progress made with the recovery and processing of over 350m <sup>3</sup> historic floc from the old sea tank fleet. This work is key in mitigating risks associated with the storage of floc in ageing tanks.
Waste treatment and storage of liquid effluents and solid waste.	On Track	Supported site operations in waste treatment and storage of liquid and solid waste forms.
Ongoing re-equipping of the inlet facility for B30 to enable future export of solid material from the pond.	On Track	Project ongoing. Good progress has been made in stripping redundant equipment out of the cells.
Receiving and treating Magnox and THORP highly radioactive liquors.	On Track	Continued evaporative support to both reprocessing and historic stock liquors. Engineering work completed to allow Evaporator A to be brought back into service. Significant engineering work undertaken on Evaporator B has made good progress against programme.
Processing consignments of Miscellaneous Beta-Gamma Waste (MBGW).	On Track	Plant availability has remained high throughout the year. Production targets are lower than anticipated, 345 consignments processed against a target of 500 consignments. Throughput is reliant on consigning plants delivering waste. This has been lower due to plant outages.

Treated medium active bulk liquors and liquor concentrates.	On Track	Continued support to site operations in line with upstream plant demand.
Processing waste solvent.	On Track	Medium Active (MA) Solvent processed within STP (Solvent Treatment Plant) to upstream plant requirements. Processed solvent fell well below set targets, 153m <sup>3</sup> against 409m <sup>3</sup> . This was due to a lower than planned reprocessing throughput.
Encapsulating and storing drums of ILW.	On Track	Excellent work undertaken within MEP (Magnox Encapsulation Plant) to recover and process historic waste drums that have been held within the plant for up to 10 years. This releases valuable operating and buffer storage for the plant. General drum throughput has been lower than originally planned due to decreased reprocessing throughput.
Treating drums of PCM and transferring to store.	On Track	Following an event in the treatment plant for PCM a thorough technical and operational review was undertaken to re-establish appropriate standards. This year's production targets were adversely affected but clearly if the plant safety had shortfalls with respect to PUWER (Provision and Use of Work Equipment) then these did need to be addressed. This work resulted in several plant enhancements and operator training improvements being implemented. The facility has since returned to active commissioning where people, plant and procedures can be tested and throughput ramped up at a predetermined rate.
Retrieving and transporting PCM in 'Gemini' crates from the LLWR to Sellafield.	Complete	Good progress has been made in this area with the PCM retrievals now being completed. Furthermore equipment used for the transfer work has been assessed and can be reused on Sellafield site giving NDA savings in out years.
Receiving International Standards Organisation (ISO) containers of LLW from off site for compaction prior to transfer to the LLWR.	On Track	A number of plant enhancement activities have progressed in the compaction plant and external LLW has been successfully treated on site. Packing fractions have exceeded predicted outcomes this year by over 3.5%.
Characterising, segregating, sorting and processing LLW arising from the Sellafield site.	On Track	The Waste Management Hierarchy continues to be embedded at Sellafield. Characterisation has made great progress with the Data Quality Objective approach. Hard examples include the 1,500 tonnes of metal recycled from the site that historically would have been dispatched as LLW; a second example is the continued sorting and measuring of soft bagged waste in the Separation area.
Discharging low active liquid effluent that has been treated to meet authorised discharge limits.	On Track	Continuing to discharge within authorised limits.
Caesium extraction plant: retrieval of waste from cell 3.	On Track	Work is progressing and all major plant and equipment has been removed from the cell. The remaining debris will be removed and the cell will be subjected to final radscan and clean down prior to decontamination of the Upper Module Cell to permit transfer of the mobile module (B212.1) to Lobby Box 1 in preparation for the breach of B212 west wall and subsequent Feed and Effluent cell waste retrieval activities during 2008/09.

Reprocessing spent nuclear fuel, including shearing and dissolving spent fuel and reprocessing the fuel.	Behind Schedule	THORP restarted in the year, a total of 51 tonnes processed against a plan of 80 tonnes. The initial 33 shear campaign was completed and the plant shut down in a planned manner. The second campaign was delayed by the failure of the pond elevator. This has been successfully replaced and shearing recommenced. THORP is currently operating.
Production and storage of uranium trioxide (UO <sub>3</sub> ): processing uranium arisings from the Magnox reprocessing programme and producing UO <sub>3</sub> product drums for storage to customer specification requirements.	On Track	UO <sub>3</sub> lines have operated as necessary through the year to support the reprocessing plants. The plutonium finishing lines have operated as necessary to support reprocessing.
Production and storage of plutonium dioxide (PuO <sub>2</sub> ) from Magnox and THORP - processing plutonium arisings from the Magnox reprocessing programme and producing product cans per customer specification for storage.	On Track	Magnox reprocessing 454 tonnes against a MOP8 target of 728 tonnes. Production was impacted by MEP availability issues, Combined Heat and Power (CHP) steam outage and safety case issues associated with swarf bins from decanning.
Exporting UO <sub>3</sub> to customers.	Behind Schedule	Preparation of UO <sub>3</sub> for export has taken place. Final export awaits export licences.
Manufacturing MOX nuclear fuel assemblies.	Behind Schedule	Around 2 te fuel produced which falls significantly below plan.
Assessment of advanced decommissioning works for operational plants.	On Track	Planned mandates completed which will feed into the site strategic review.

### Regulatory Matters

#### Highly Active Liquor (HAL) stock reduction - NII specification

- HAL stocks are being reduced in line with NII licence instrument 343. They are now at their lowest level since 1982.

**Delivery of NII specifications with respect to legacy ponds and silos. This is extremely challenging, both technically and financially. The site is currently in discussions with the regulators to agree on what specifically is considered to be an acceptable way forward in the medium to long-term (a detailed 'Regulatory Milestones Schedule' is set out in the Sellafield Lifetime Plan)**

- Delivery of NII specifications in regard to legacy ponds and silos remains challenging. The site is doing everything So Far As Is Reasonably Practicable to achieve specifications but it is likely that at least one of the required milestones will not be achieved.

#### Plutonium contaminated material inventory management

- Licence instrument 326, in respect of PCM inventory management is being progressed and improvements have been put in place in regard to the sites processing capability. Confidence remains high that the requirements of the specification can be delivered by 2020 as required, but it is recognised to still be challenging.

Key Performance Indicators	
Integrated waste strategy	On track for delivery in June 2008.
Windscale transition	Achieved.
Procurement process efficiency improvements	Good progress made with monthly reports now issued.
Safety case process improvement programme	Achieved.
Manage and operate the international transport business on behalf of the NDA	The business has been managed in line with customer and NDA expectations and as part of the transfer of INS was transferred to the NDA on 1 April 2008.
Manage and operate the recycling contracts agency on behalf of the NDA	Revenues this year exceeded budget despite significant operational difficulties. The majority of these contracts have now transferred to the NDA and INS has become a subsidiary of the NDA. This transfer will rightly strengthen the bond between the NDA and INS as its sales agency.
Progress remediation of contaminated land and groundwater at Sellafield	Behind Schedule.
Progress decommissioning works within the SEP head end plant, MOX demonstration facility and SEP research and development facility	SEP head end plant Highly Active North Outer (HANO) cell project work and waste strategies: Achieved. SEP head end ventilation work: Behind Schedule. MOX demonstration facility: Behind Schedule. SEP research and development facility: On Track.
Advance the site demolition programme including asset B6	Demolition of redundant occupational health, research and development, HP&S building (south) achieved. B6 work deferred.
Wetted uranium metal fuel	On Track.
Effective management of high level waste	On Track.
Prepare for return of overseas vitrified residues	Behind Schedule.
Effective management of Sellafield LLW	On Track.
Effective management of the effluent and encapsulation plants	On Track.
Effective management of Sellafield PCM	On Track.
Meet Magnox flask and skip availability requirements in Fuel Handling Plant (FHP) to support the MOP8	On Track.
Interim Pu storage capability	On Track.
SMP capacity enhancement	On Track.
Work to underpin capability for continued receipt of British Energy AGR fuel into THORP receipt and storage	On Track.
Acceleration of the Medium Active Salt-Free Evaporator (MASFE) project to remove a major risk to THORP operations	Behind Schedule.
Provision of additional HA evaporative capacity	Behind Schedule.
Vitrified Residues Return (VRR)	Behind Schedule.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0.50
Days Away Case Rate	0.32
RIDDOR Major Injury	2
RIDDOR Lost Time Accident	25
RIDDOR Dangerous Occurrence	2
INES incidents	5
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
1,298	1,213	1,217
The Original BCWS was £1,329 m including INS and carryover		

## Windscale



Windscale is a separate licensed site located on the Sellafield site in Cumbria. The site area is 14 hectares. It comprises three reactors, two of which were shutdown in 1957. The third was closed in 1981. One of these reactors was damaged by fire in 1957, making its decommissioning a significant challenge. On 1 April 2008 Windscale site was relicensed from UKAEA to Sellafield Limited, and now forms an integral part of Sellafield Limited's responsibilities.

**Location:** Cumbria

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** UKAEA

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Intrusive surveys of the fire affected zone of Pile 1 core.	Achieved	159 fuel channel endoscope surveys completed in the Pile 1 Fire Affected Zone (FAZ). Completed for a number of areas.
Design development for removal of fuel and isotopes from Pile 1.	On Track	Removal equipment design.
Completion of the removal of the reactor pressure vessel from the Windscale Advanced Gas-Cooled Reactor (WAGR).	On Track	Release of final section of the reactor pressure vessel barrel section has been achieved.
Engineering improvements in B13.	On Track	91 out of 95 key activities completed.
Condition and store B52 ILW in the WAGR ILW store.	On Track	All scheduled activities associated with B52 ILW removal were completed.
Obtain approval of integrated waste strategy.	On Track	Integrated waste strategy delivery has been aligned with Sellafield Limited timescales.
Directing, controlling and managing the operations undertaken by the tenant in B13.	Achieved	Elements implemented to support facility.
Providing management of the B13 safety case, Authority to Operate (ATO) support, health physics services and emergency management.	On Track	Implemented a full integrated ATO function.

### Regulatory Matters

#### Re-licensing of the Windscale site to Sellafield Limited was successfully achieved to schedule

The Environment Agency (EA) has issued a warning letter to the Windscale Site following up on issues relating to reporting of discharges from the site early in the year. Actions have been identified to address these issues and communicated to the EA, who are satisfied with the proposed action and will keep it under review.

### Key Performance Indicators

<b>Retrieval of Pile 1 fuel and isotopes</b>	All Performance Based Incentive (PBI) milestones achieved on or ahead of schedule.
<b>B13 engineering improvements</b>	All PBI milestones achieved on or ahead of schedule.
<b>Make progress towards decommissioning WAGR</b>	All PBI milestones achieved on or ahead of schedule.
<b>Windscale site transition</b>	All PBI milestones achieved on or ahead of schedule.

### Safety and Environmental Performance

Issue	Number
Total Recordable Incident Rate	0.22
Days Away Case Rate	0.22
RIDDOR Major Injury	1
RIDDOR Lost Time Accident	1
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	1

### Non Accounting Financial Measures (Earned Value)

Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
42.5	42.1	38.6
The Original BCWS was £35.5 m		

## LLW Repository Limited

### **This is the Site Licence Company (SLC) responsible for the management and operation of the Low Level Waste Repository (LLWR).**

**The site was separated from Sellafield Limited during the summer of 2007 to become a stand alone SLC.**

**Following the conclusion of the NDA's first Parent Body Organisation (PBO) competition a contract was awarded on 1 April 2008 to UK Nuclear Waste Management Limited (UKNWM) to manage the LLW Repository SLC. UKNWM Limited is a multi-national consortium comprising URS Washington Division, Areva, Studsvik and Serco Assurance.**

#### **Key developments in 2007/08**

- the West Cumbria Community Fund was endorsed by Treasury early in January 2008. The fund comprises a dowry to recognise historical support from the West Cumbrian Community and annual donations will be made once Vault 9 work starts in 2008/09
- planning permission for Vault 9 was granted in January 2008 and construction is scheduled to commence in early summer 2008
- excellent progress has been made on the Lifetime Project, (formerly known as the Post Closure Safety Case (PCSC)), with all deliverables achieved in line with the Schedule 9 requirements
- the last of the Plutonium Contaminated Material (PCM) was removed from the site in July 2007. Post Operational Clean Out (POCO) and decommissioning has been completed on the PCM drum store and initial POCO activities have started on the magazine facilities

- the Grout Facility's mode of operation has been modified to allow removal of grouted International Standards Organisation (ISO) containers prior to grout curing. This facility enhancement allows for an increased throughput of containers
- finally, efficiency targets in line with government directives were realised at LLWR

#### **Forward look**

- construction work on Vault 9 is set to commence in 2008
- the Lifetime Project will progress in line with Schedule 9 requirements during 2008/09
- LTP08 Rev B will be completed by autumn 2008. This will balance UKNWM bid commitments with funding availability

## Low Level Waste Repository (LLWR)



The Low Level Waste Repository (LLWR) is located near Drigg in Cumbria and has an area of 98 hectares covered by the nuclear site licence. It has operated as a disposal facility since 1959. Wastes are compacted and placed in containers before being transferred to the facility. The area around the site is environmentally sensitive and is designated as a Special Area for Conservation (SAC) and Site of Special Scientific Interest (SSSI).

**Location:** Cumbria

**Type of Site:** Waste Repository

**Status of Operation:** Operational

**Site Licensee:** LLW Repository Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Focus on development and implementation of the Lifetime Project (including work packages in support of the Operational, Environmental and PCSC).	On Track	Progress has been made in this area with all milestones/deliverables achieved, in line with requirements.
Remediation of empty PCM facilities.	On Track	The last of the PCM was removed from the site in July 2007.
Remediation of redundant LLW facilities (eg backlog waste facility).	Achieved	
Clean up of contaminated land and remnants of royal ordnance facilities.	On Track	Progress has been made on the removal of the contaminated base slab.
Receipt, grouting and disposal of LLW in ISO containers.	Behind Schedule	A total of 440 ISO containers were disposed into Vault 8 in 2007/08. This was significantly below the forecast of circa 650 containers. This was due to reduced funding (decommissioning and efficiencies), but also through improved packaging arrangements.
Receipt of large items that cannot be delivered in ISO containers directly in the vault and grouted in situ.	On Track	3 containers from Outokumpu have been disposed of at LLWR during 2007/08. One further container remains to be transferred in 2008/09.

Plant enhancement projects to improve operational efficiency.	On Track	The grout facility's mode of operation has been modified.
Optimising storage at the LLWR pending new LLW disposal capacity.	On Track	Vault 8 operational life has been extended. Vault 9 should now be available before Vault 8 is full.
Routine maintenance of plant and equipment.	On Track	Achieved in accordance with site maintenance plans.
Provision of vehicles to support waste receipt, treatment and disposal.	On Track	The number of vans on site has been reduced and bicycles provided for on-site usage as an efficiency measure.
Procurement and supply of containers direct to UK consignors for disposal of LLW.	On Track	Improved procurement arrangements have been implemented to provide a more cost effective service.
UK consignors return containers filled with LLW for treatment and subsequent placement in the vault.	On Track	Work is ongoing to improve forecast waste arisings.
Modular vaults work.	Achieved	Design work for modular vaults has now been completed.
Vault 9 scheme work.	Achieved	Vault 9 planning permission was granted in January 2008. Construction is scheduled to commence early summer 2008.
Bulk material handling facility work.	Achieved	Progress on the Vault 9 project has enabled cancellation of this work as an efficiency measure.

Key Performance Indicators	
<b>Receipt of LLWR consignments</b>	All receipts have been disposed of in Vault 8.
<b>Facilities decommissioning</b>	Achieved in line with the Lifetime Plant (LTP).
<b>Vault 9 projects</b>	All in-year milestones achieved.
<b>PCSC</b>	All in-year milestones achieved.
<b>PBO transition</b>	The new PBO Transition Agreement was signed on 18 March 2008 with the new management and operations contracts coming into effect on 1 April 2008.

Regulatory Matters
<b>PCM retrievals</b>
- The last of the PCM was removed from LLWR during 2007/08.
<b>Discharge re-authorisations</b>
- None required. Discharge levels have again been well within authorised limits.
<b>Overarching site safety report</b>
- Delivered in 2006/07.
<b>LTP project – formerly the PCSC</b>
- The project remains in good shape. Excellent levels of dialogue/engagement with Environment Agency have continued throughout 2007/08 giving high levels of confidence in the SLC's ability to deliver Schedule 9 requirements.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	1

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
40.1	39.8	31.6
The Original BCWS was £36.7 m		

## Magnox North

**Magnox Electric Limited is the Site Licence Company (SLC) responsible for the management and operation of the Magnox sites. Magnox is operating as two separate divisions, Magnox North and Magnox South. The Magnox North sites are Chapelcross, Hunterston A, Oldbury, Trawsfynydd and Wylfa.**

**The Parent Body Organisation (PBO) for Magnox during 2007/08 was Reactor Sites Management Company which is wholly owned by EnergySolutions, Inc.**

**In line with the restructuring of the industry, the formal separation of Magnox Electric Limited into two separate SLCs will take place during 2008. In addition to the five nuclear sites, Magnox North comprises Maentwrog hydroelectric power station and the Magnox North Support Office.**

### Key developments in 2007/08

- the successful demolition of Chapelcross cooling towers in May 2007
- the construction of two new Intermediate Level Waste (ILW) stores at Hunterston A and Trawsfynydd
- significant progress on hazard reduction on a number of sites including: a design, manufacture and installation contract placed for ILW sludge/solid retrieval/recovery plants at Hunterston A; plant removal activities in Trawsfynydd safestore
- ongoing workforce restructuring to match resources to the Magnox Operating Programme (MOP8)

- ongoing identification and delivery of opportunities to maximise execution of high value scope for the NDA

### Forward look

- Wylfa will continue to generate electricity until the scheduled cessation date
- subject to regulatory approval of the Core Graphite Safety Case (CGSC), it is anticipated that Oldbury Reactor 1 will restart in 2008/09. Oldbury will continue to generate electricity until the scheduled cessation date
- commence construction of the reactor building capping roofs height reduction project at Trawsfynydd site (a major visible demonstration of decommissioning in Snowdonia National Park)
- Magnox Electric Limited will continue to work towards achieving a complete separation into two SLCs, Magnox North Limited and Magnox South Limited
- progression of major hazard reduction projects across the decommissioning sites: solid ILW encapsulation at Hunterston A, Fuel Element Debris (FED) retrieval and passivation at Trawsfynydd
- commence defuelling operations at Chapelcross site in accordance with MOP8
- complete removal of the asbestos hazard from first heat exchanger at Chapelcross

## Chapelcross



Chapelcross power station is located near Dumfries in southwest Scotland and has an area of 96 hectares covered by the nuclear site licence. It was the first nuclear power station in Scotland. Electricity generation started in 1959 and ceased in June 2004.

**Location:** Dumfries and Galloway

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** Magnox Electric Limited

### Key Activities

2007/08 Annual Plan Activities	Status	Progress Report
Removal of plant and demolition of main site areas.	Deferred	Planning and enhancement of the out years scope, cost and scheduling has been completed.
Removal of plant and demolition of north site.	Deferred	Planning and enhancement of the out years scope, cost and scheduling has been completed.
Asbestos removal.	On Track	The scope of work for 2007/08 was successfully completed.
Chapelcross Production Plant (CXPP) waste operations: transfer of ILW flasks to Miscellaneous Beta Gamma Waste Store (MBGWS) at Sellafield.	Behind Schedule	15 flasks of CXPP ILW were successfully shipped to Sellafield from a planned target of 60 flasks. Programme has undergone a temporary embargo due to Scottish Environment Protection Agency (SEPA) required documentation improvements. Shipments are planned to resume later in 2008.
Low Level Waste (LLW) storage operations: transfer of LLW ISO containers to the Low Level Waste Repository (LLWR) near Drigg.	On Track	LLW successfully exported to the LLWR near Drigg as per plan in 2007/08.
Nuclear materials storage operations: transfer of Magnox Depleted Uranium (MDU) drums to Capenhurst.	On Track	Drums of MDU were successfully exported to Capenhurst as per plan.
Improvements to site discharge pipeline.	Deferred	Cleaning operations had to be deferred due to concerns over pipeline integrity and requirements to put the pipeline back into service.

### Regulatory Matters

#### Defuelling of reactors 1 and 3 – provide underpinned safety case for regulatory approval

- Complete with safety case ready for approval by Independent Nuclear Safety Assessment (INSA).

#### Operation of reactor stack beta monitors. Discharge authorisations approved by Scottish Environment Protection Agency (SEPA)

- SEPA satisfied with conditions concerning the reactor stack beta monitors and there are no further identified regulator issues at this time in relation to them.

Key Performance Indicators	
<b>Defuelling reactors</b>	Reactor defuelling deferred but is now aligned to the MOP8. Defuelling operations from reactors 1 and 3 scheduled to commence later in 2008.
<b>Fuel route transition programme</b>	Achieved with Reactor 3 inactive commissioning complete.
<b>Waste management</b>	Achieved with exception of shortfall in ILW shipments to Sellafield (15 out of 60 flasks).
<b>Asbestos removal and weather containment</b>	Achieved. Work now in progress to plan and proceeding to schedule.
<b>Repack and export MDU drums</b>	Achieved with 1,802 MDU drums exported from a planned figure of 1,800.
<b>Effluent line clean out</b>	Achieved with effluent line clean deferred and replaced with scope on remediation of contaminated land.
<b>Resource transition</b>	Achieved in line with resource strategy plan.
<b>Cooling tower demolition</b>	Achieved with the successful demolition of the four 300ft cooling towers on 20 May 2007.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0.17
Days Away Case Rate	0.17
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	2

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
<b>60.4</b>	<b>59.9</b>	<b>52.4</b>
<p>The original BCWS was increased from £57.0 million to £60.4 million. Additional work during the year used funds that were made available through the SLC portfolio management process, these included cooling tower infill (approximately £2.2 million value), acceleration of LTP improvement scope (approximately £0.7 million value) and emergent scope for effluent line improvements (approximately £0.5 million value).</p>		

## Hunterston A



Hunterston A power station is located in Ayrshire, southwest Scotland and has an area of 15 hectares covered by the nuclear site licence. It started electricity generation in 1964 and ceased production in 1989. The surrounding area of coastal mudflats is designated as a Site of Special Scientific Interest (SSSI).

**Location:** Ayrshire

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Modular Active Effluent Treatment Plant (MAETP) commissioning and entry into service.	On Track	Plant has commenced active commissioning as per the plan.
Installation of pond sludge retrieval plant.	On Track	Design contract placed and ongoing.
ILW sludge retrieval plant.	On Track	Design, manufacture and installation contract placed, in line with the plan.
ILW solid recovery plant.	On Track	Design, manufacture and installation contract placed, in line with the plan.
Continued decontamination of pond skips.	On Track	On-site team retrieving and processing skips through acid dipping process.
Completion of the Magnox encapsulation plant design.	On Track	Integrated project team set up to prepare design specifications and tender documentation.
ILW store will complete construction and enter into commissioning.	Behind Schedule	Store construction successfully completed. Inactive commissioning ongoing.

Regulatory Matters
<b>Compliance with Nuclear Installations Inspectorate (NII) directive to perform removal of solid ILW from storage bunkers within specified timescales</b>
- Solid active waste retrieval project is on target to commence retrievals early 2010. All operational waste retrieval scheduled for completion by 2013 in advance of NII specification.
<b>Encapsulation of solid intermediate level graphite and Magnox wastes prior to entry into storage</b>
- Solid active waste encapsulation project is on target to commence encapsulation early 2010. All operational waste encapsulation scheduled for completion by 2013 in advance of NII specification.
<b>Application for revised discharge authorisation</b>
- Work ongoing to prepare submission. Formal submission of application due in early May 2008.

Key Performance Indicators	
Solid active waste bunker retrieval	Contract awarded.
Temporary weather barrier	Demonstration area completed.
Modular active effluent treatment plant	Proving trials complete. Active commissioning ongoing.
Cartridge Cooling Pond (CCP) – sludges and resins	Contract awarded.
CCP skip disposal	56 skips out of a total of 200 have been processed in line with a revised plan.
LLW disposal	11 Half Height ISO's (HHISO's) and two Full Height ISO's (FHISO's) despatched from site. Equivalent of two HHISO's decontaminated and free released.
Repairs to sea defences	300m foreshore armouring completed.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0.35
Days Away Case Rate	0.35
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	1
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
40.3	39.9	36.1
<p>The Original BCWS was increased from £38.3 million to £40.3 million. Additional work during the year included scope to use funds that were made available through the SLC portfolio management process. This included acceleration of strontium abatement scope (approximately £2.0 million value), acceleration of ILW sludge retrieval scope (approximately £1.0 million value) and acceleration of foreshore protection scope (approximately £0.5 million value). This was offset by deferral of temporary weather barrier scope (approximately £2.5 million value) and deferral of orphan wastes retrieval scope (approximately £0.5 million value) as a result of programme and logic changes.</p>		

## Oldbury



Oldbury power station is located at Oldbury in south Gloucestershire and has an area of 51 hectares covered by the nuclear site licence. It started electricity generation in 1967. The area around the site is environmentally sensitive and has been designated as Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI).

**Location:** South Gloucestershire

**Type of Site:** Reactor Site

**Status of Operation:** Operating

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Carrying out the Environmental Impact Assessment for Decommissioning (EIAD) work and preparing relevant Town and Country Planning Act applications.	On Track	EIAD Consent to Decommission granted by the Health and Safety Executive (HSE). Town and Country Planning Act application work was deferred.
Designing an ILW store to house processed Oldbury waste until it can be disposed of at a UK repository.	Deferred	Design of an ILW store has been deferred as a result of NDA prioritisation process to assist funding of ongoing hazard reduction.
Application for revision of the authorisation to dispose of waste under the Radioactive Substances Act.	Achieved	Plant area activity levels vary over the lifetime of the station. In 2007/08 these levels were reanalysed and following this a successful application was made to vary the authorisation for the disposal of waste to the LLWR.
Continuing to dispose of its routine operational waste arisings. Typically these are: lightly contaminated redundant protective clothing, hazardous waste (eg oil and chemicals) and general non-hazardous waste.	On Track	The site continues to dispose of routine operational arisings.
Generating electricity.	Achieved	A total of 1.048 TWh has been generated by the site against a plan of 0.611 TWh.

Despatching spent fuel to Sellafield for reprocessing.	Achieved	19 fuel transport flasks have been despatched to Sellafield containing a total of 38.945 tonnes of uranium.
Delivering a planned statutory maintenance outage.	Deferred	Operational requirements allowed the planned statutory maintenance outage scheduled to commence in November 2007 to be deferred, by agreement with the NII, until January 2009. This will allow the benefits from a reduction in scope, schedule and costs commensurate with shutdown reactors to be realised.
Completing a comprehensive routine statutory maintenance programme.	On Track	All maintenance schedule tasks completed within tolerance period and all statutory routine maintenance tasks completed to plan.
Carrying out defuelling plant enhancements.	Behind Schedule	All 2007/08 projects complete with the exception of the fluoride dosing project, primarily due to Sellafield operational constraints which have delayed commissioning. Some activities will be carried over into 2008/09.
Further enhancing the Core Graphite Safety Case (CGSC).	On Track	CGSC has been strengthened by further channel inspections, further sample measurements and an extensive research and development programme.

### Regulatory Matters

#### Maintaining a robust CGSC for generation

- The NII are currently assessing the key references associated with the CGSC.

#### Post operational and defuelling safety case

- Significant work has been carried out on the post operational and defuelling safety case in 2007/08. MOP8 has been taken into consideration and it is expected that the safety case shall be presented to the NII in June/July 2008.

#### The 'Management of Change' justification document covering the workforce reorganisation for defuelling and decommissioning

- Submission of this document has been delayed due to MOP8 changes which results in defuelling starting in March 2011 for Oldbury.

#### The EIAD work and preparing applications under the Town and Country Planning Act

- EIAD Consent to Decommission received in January 2008. Applications under the Town and Country Planning Act have not yet been made.

#### Application for revision of the authorisation to dispose of waste under the Radioactive Substances Act

- Approval received for the revision to the authorisation.

Key Performance Indicators	
Electricity generation	1.048 TWh against a plan of 0.611 TWh.
Reactor 2 outage	Deferred: operational requirements allowed the planned statutory maintenance outage to be deferred, by agreement with the NII, until January 2009.
Graphite programme	On programme - including further channel inspections and an extensive research and development programme.
Spent fuel management	38.945 tonnes against a plan of 36.2 tonnes.
Defuelling preparations	On programme - Post Operational Safety Case to be issued to NII in June/July 2008. Plant modifications on schedule.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	2
RIDDOR Reportable Disease	1
INES incidents	1
Environmental non-compliance	1

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
75.5	75.2	63.4
<p>The Original BCWS was increased from £70.4 million to £75.5 million. Additional work during the year included scope to use funds that were made available through the SLC portfolio management process, for the emergent turbine alternator (TA2) eccentricity investigations and repairs (£2.2 million value), grid transformer (GT2) bushing failure replacement (£0.5 million value) and GT2 transformer no 2 exchange (£1.1 million value).</p>		

## Trawsfynydd



Trawsfynydd power station is located at Trawsfynydd in Gwynedd, North Wales and has an area of 15 hectares covered by the nuclear site licence. It started electricity generation in 1965 and ceased generating in 1991. The site is situated in the Snowdonia National Park near to a number of Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Special Areas for Conservation (SAC).

**Location:** Gwynedd

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Removal and packaging of concrete from the pond surface.	On Track	18 sealed waste containers of scabbled ponds surface concrete waste removed and packaged this year in accordance with the plan target.
Commencement of assessment and characterisation activities for removal of plant and demolition of pond services, pond structures, resin structures, resin plant and active workshops.	Deferred	Work deferred as a result of NDA prioritisation process to assist funding of ongoing hazard reduction.
Commencement of safety case development for demolition of pond structures and resin plant.	Deferred	Work deferred as a result of NDA prioritisation process to assist funding of ongoing hazard reduction.
Plant removal activities within both Safestores and completion of boiler removal activities in Safestore 2 – North.	On Track	Original 2007/08 scope was completed by November 2007 resulting in acceleration of two packages of scope from 2008/09.
Continue construction of North FED retrieval facility in preparation for processing and retrieval of FED.	On Track	All planned scope has been completed.
Commencement of work on Safestore capping roofs.	On Track	Safestore capping roof and internal modifications contract has been awarded and work commenced.

Continued retrieval of FED from the south FED plant.	On Track	Retrieval of FED and encapsulation in Boxes 6 and 7 has been completed this year.
Completing the installation and commissioning of the sludge-retrieval plant and equipment, commencing retrieval and processing operations.	On Track	The Transportable Radioactive Sludge Dewatering Unit (TRSDU) is installed in position on site; construction of the unit containment building is in progress,
Continuing resin recovery from Resin Vault (RV) 2, reconfiguring plant and completing removal of resin from RV 3 and decontaminating RV1 and RV 2.	On Track	RV1 - Waste is undergoing further analysis and characterisation to enable recovery. RV2 - Bulk retrieval of resin completed. RV3 - In use to meet ongoing operational requirements.
Completing retrieval and processing operations for Miscellaneous Activated Components (MAC).	On Track	Project progressed into the operational phase following completion of active commissioning.
Completing construction and commencing active commissioning of new retrieval and encapsulation plant (North FED).	Deferred	Work deferred as a result of NDA prioritisation process to assist funding of ongoing hazard reduction.

#### Regulatory Matters

No regulatory actions placed against the site during 2007/08

Four Licence Instruments have been issued

Engaged with the EA to conduct a joint review of the Compilation of Environment Agency Requirements

#### Key Performance Indicators

<b>Waste Management including Active Waste Vaults (AWV)</b>	20 ISO containers transported from site to the LLWR, as per the plan. AWW LLW recovery continues as a consequence of re-characterisation resulting in a substantial reduction in the ILW inventory.
<b>Decommissioning and termination including deplanting</b>	All hot gas ducts now deplanted to final care and maintenance location. 14 of 15 boiler sections have now been deplanted in Safestore 2 North, 14 sections have been completed during 2007/08 exceeding the original plan for three.
<b>ILW store and North FED</b>	ILW store construction completed and inactive commissioning in progress as per plan. North FED ventilation plant and west annex construction completed as per plan.
<b>Reactor building Safestore</b>	Capping roof project contract awarded; internal deplanting activities progressed to plan.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	1

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
54.1	53.7	46.6
<p>The Original BCWS was decreased from £55.3 million to £54.1 million. Additional work during the year included scope to use funds that were made available through the SLC portfolio management process. This included the acceleration of boiler section deplanting (£1.6 million value), acceleration of the reactor building roof repairs (approximately £0.7 million value) and the acceleration of the procurement of transportation equipment (approximately £0.3 million value). This was offset by scope deferral to accommodate emergent issues and release funding to the wider NDA portfolio.</p>		

## Wylfa



Wylfa power station is located on Anglesey in North Wales and has an area of 21 hectares covered by the nuclear site licence. Commencing electricity generation in 1971, it was the last and largest power station of its type to be built in the UK and consequently, radioactive doses during decommissioning are anticipated to be lower than at other sites. The area around the site includes several areas of environmental importance. The NDA also has designated powers to manage and operate the Maentwrog hydro-electric power station, which was opened in 1928 and is situated near the Trawsfynydd site.

**Location:** Anglesey

**Type of Site:** Reactor Site

**Status of Operation:** Operational

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Underpinning of the technical baseline for decommissioning.	On Track	All care and maintenance preparation documents have been reviewed and enhanced.
Continuation of work to produce the Post Generation Defuelling Safety Case (PGDSC).	Behind Schedule	The PGDSC supporting documents have been progressed with some scope elements slightly behind plan.
A review of opportunities to accelerate decommissioning (by review of current decommissioning plans).	Achieved	Interactive planning sessions held with operations and engineering staff.
Identification and delivery of opportunities to decommission redundant plant prior to end of generation (in accordance with risk and prioritisation process).	Achieved	All projects assessed using prioritisation process. Project benefit score used to identify top five projects for hazard removal. Opportunities have been identified within the LTP 08.
The safe and reliable generation of 5.34 TWh of electricity.	Not Achieved	An extended statutory outage and a significant number of plant outages have constrained the generating capability during July to December 2007 and as such the year end generation out-turn was 4.93 TWh.
The ongoing delivery and support of plant maintenance.	On Track	Maintenance activities continue to support the safe operation of the plant.
The management and operation of Maentwrog and production of 50 GWh of electricity.	Achieved	Plant availability and excessive rainfall have enabled the target to be exceeded with 61.2 GWh produced.

### Regulatory Matters

**The removal of 16 damaged fuel elements from the dry store and despatch to Sellafield for reprocessing. This is planned to be completed by December 2008 and during 2007/08 work will progress on a specific project to achieve this objective**

- During September 2007 a feasibility study was completed to investigate options. The project team subsequently engaged with its key stakeholders, including the NII and the Nuclear Safety Committee, to gain agreement to pause the project in order to explore more pragmatic and more cost effective means of recovering the fuel and to allow the project to be integrated into the site's overall strategy for defuelling. Further work has been completed which provides confidence in the adoption of a revised project strategy.

### Key Performance Indicators

<b>Electricity generation</b>	The site generated 4.93 TWh, against a target of 5.34 TWh due to an extended outage and other plant issues.
<b>Reactor 1 statutory outage</b>	All planned outage scope was successfully completed. However the duration was longer than scheduled due to emergent work identified during inspection and maintenance.
<b>Maentwrog plant availability</b>	Plant availability and rainfall such that in excess of target generation achieved at 61.2 GWh.
<b>TA1 failure mitigation</b>	Condenser re-tubing project successfully completed within the year.
<b>Spent fuel management</b>	95.5 tonnes were despatched to Sellafield during the year, below the target of 130 tonnes due to operational constraints at Sellafield.
<b>Dry Store Cell 4 (DSC4) fuel recovery</b>	Revised strategy being pursued in agreement with the regulator.
<b>Transfer machine refurbishment</b>	Work progressed, however programme delays have resulted in carryover of commissioning activities to 2008/09.
<b>Waste management feasibility study</b>	Delivered to plan.

### Safety and Environmental Performance

Issue	Number
Total Recordable Incident Rate	0.50
Days Away Case Rate	0.25
RIDDOR Major Injury	2
RIDDOR Lost Time Accident	1
RIDDOR Dangerous Occurrence	0
INES incidents	1
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
108.7	107.2	98.2
<p>The Original BCWS was increased from £107.6 million to £108.7 million. Additional work during the year included scope to use funds that were made available through the SLC portfolio management process. This included additional statutory outage emergent scope (of approximately £0.3 million value). This was offset by deferral of dry store cell scope (approximately £1.1 million value) as a result of the strategy review.</p>		

## MNSO



Magnox North Support Office (MNSO) provides management oversight to the operating sites at Wylfa, Maentwrog and Oldbury, the defuelling site at Chapelcross and the decommissioning sites at Hunterston A and Trawsfynydd. It ensures effective and efficient delivery of the lifecycle, safely and with care for the environment, to a care and maintenance state.

**Location:** Gloucestershire

**Type of Site:** Corporate Office

**Status of Operation:** Administrative

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Environmental, Health, Safety and Quality activities.	On Track	Magnox North Support Office local Site Environmental Enhancement Plan issued and progressed.
LTP08 improvement project.	On Track	LTP half year strategic review successfully completed in accordance with the plan. Underpinning of 2008 LTP costs completed and the LTP improvement project has been demonstrated through review as being achieved.
Completion of transfer of Electricity Sales Trading North staff to Oldbury training centre.	Deleted	No longer required due to available space within the Magnox North Support Office facility at Berkeley.
MOP – Delivery of MOP8.	Achieved	Following NDA approval MOP8 was published as an NDA document in March 2008.
Completion of shadow working to enable licensing of two separate SLCs.	Behind schedule	Entry into shadow working commenced in November 2007 delayed by approximately four months in response to NII change. As a result, completion of shadow working and legal separation is now scheduled for July 2008.
Implementation of the HR innovations strategy.	Achieved	Business case introducing a new employee agreement designed to secure a more flexible and fit for purpose system was approved and the strategy implemented.

### Regulatory Matters

#### Shadow working/legal separation process

- Entry to shadow working delayed from July 2007 to November 2007. Shadow working in progress towards legal separation of Magnox North and Magnox South.

### Key Performance Indicators

#### Safe and secure sites project

Project team initiated to investigate the feasibility of how to take a site to a safe and secure state with any hazard on site made static, to enable the NDA to optimise its funding demands.

### Safety and Environmental Performance

Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	N/A
Environmental non-compliance	N/A

### Non Accounting Financial Measures (Earned Value)

Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
31.4	31.4	27.2

The Original BCWS was increased from £18.7 million to £31.4 million. Additional work during the year included scope to use funds that were made available through the SLC portfolio management process. This included additional scope for the reactor sites safe and secure strategy project (£0.9 million value) and scope for the pensions deficit repair (£9.6 million value).

## Magnox South

**Magnox Electric Limited is the Site Licence Company (SLC) responsible for the management and operation of the Magnox sites. Magnox is operating as two separate divisions, Magnox North and Magnox South. The Magnox South sites are Berkeley, Bradwell, Dungeness A, Hinkley Point A and Sizewell A.**

**The Parent Body Organisation (PBO) for Magnox during 2007/08 was Reactor Sites Management Company which is wholly owned by EnergySolutions, Inc.**

**In line with the restructuring of the industry, the formal separation of Magnox Electric Limited into two separate SLCs will take place during 2008. Magnox South comprises the five Nuclear sites and the Magnox South Support Office at Bridgewater.**

### Key developments in 2007/08

- the successful completion of hazard reduction at Bradwell was achieved with the removal of 2,200 tonnes of asbestos waste
- at Hinkley Point A, 400 skips were retrieved, decontaminated in the ultra high pressure washing facility, reduced in size and removed from site
- solid Intermediate Level Waste (ILW) waste retrieval arm trials within the Fuel Element Debris (FED) vaults were commissioned at Hinkley Point A
- 6 tonnes of FED was safely dissolved at Dungeness A
- the construction of the new accommodation block at Dungeness A was completed and fully commissioned
- phase 3 passive cooling at Sizewell A was successfully achieved and acknowledged by the regulators
- ongoing workforce restructuring to align resources with Magnox Operating Programme (MOP8)
- ongoing identification and delivery of opportunities to maximise execution of high value scope for the NDA

### Forward look

- Dungeness A will continue to dissolve FED. The site expects to process 7.5 tonnes during 2008/09
- re-cladding of the reactor at Dungeness A will commence during 2008
- the removal of pipe bridges at Sizewell A will be completed during 2008/09
- Sizewell A will continue to prepare for bulk defuelling activities in accordance with MOP8
- Dungeness A will commence defuelling operations in accordance with MOP8 during 2008
- at Bradwell, hazard reduction through decontamination of the ponds complex and removal of plant will be ongoing during 2008/09
- Magnox Electric Limited will continue to prepare for a complete separation into two SLCs, Magnox South Limited and Magnox North Limited

## Berkeley



Located in Gloucestershire, this was one of the UK's first nuclear power stations. The power station operated from 1962 until 1989 when it ceased electricity generation. Defuelling was completed by 1992. Part of the nuclear site was delicensed in 2006/07 thereby reducing the nuclear site licence area from 27 to 16 hectares. The area around the site is environmentally sensitive and is designated a Special Protection Area (SPA), Special Area for Conservation (SAC), a wetland of international importance under the Ramsar Convention and a Site of Special Scientific Interest (SSSI).

**Location:** Gloucestershire

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** Magnox Electric Limited

### Key Activities

2007/08 Annual Plan Activities	Status	Progress Report
Active Waste Vault Retrieval (AWVR) – the recovery and processing of legacy ILW.	Deferred	Manufacture of Mobile Change Units (MCU) commenced. Following project deferral the completion of the MCU manufacture and installation will be carried out within the engineering function in 2008/09.
Decommissioning of the Caesium Removal Plant (CRP).	Deferred	All Aloxite (water filtration medium) removed from site. Pond Sludge Drums (PSD) characterisation and investigation completed and report issued. Sand Pressure Filter 2 successfully de-planted.
Decommissioning of the shielded area.	On Track	Removal of legacy waste from the shielded area continued with support from the Waste and Health Physics teams.
ILW Store construction.	Deferred	Planning permission granted 13 August 2007. Pre-construction safety case for ILW Store foundations issued to Independent Nuclear Safety Assessment (INSA). Technical specifications for civil construction complete. All close-out activities completed following deferral of project.

### Regulatory Matters

#### NII agreement to AWVR Pre-Construction Safety Report (PCSR) for waste retrieval and process facility

- Internal approval (INSA 5B) awarded for the Main Civil Construction PCSR. NII agreement no longer required.

Key Performance Indicators	
AWVR	Performance Base Incentive (PBI) Milestones achieved
CRP	PBI Milestones achieved
ILW Store	PBI Milestones achieved

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	1

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
33.7	33.5	31.8
The Original BCWS was £46.9 m		

## Bradwell



Bradwell is located in East Essex and has an area of 28 hectares covered by the nuclear site licence. To the west of the Bradwell site are the Blackwater Estuary and the Dengie Marshes. Under section 28 of the Wildlife and Countryside Act 1981 the Dengie Marshes are considered a Site of Special Scientific Interest (SSSI), they are part of a National Nature Reserve (NNR) and designated as a Special Area of Conservation (SAC) under the European Union Birds Directive. The Blackwater Estuary is a European Marine Site as defined by the Conservation (Natural Habitats) Regulations 1994 and is a Special Protection Area under the European Habitat Directive.

**Location:** Essex

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning

**Site Licensee:** Magnox Electric Limited

### Key Activities

2007/08 Annual Plan Activities	Status	Progress Report
Boiler house asbestos removal.	Achieved	Hazard reduction on the site was achieved by completing the removal of 2,200 tonnes of asbestos waste. The project utilised activity averaging to significantly reduce the quantity of materials to be sent to the Low Level Waste Repository (LLWR).
Completion of Vault 6B.	Achieved	The three phase plan for final disposition of the remaining 'heel' was successfully executed. The vessel has been emptied, inspected and signed off to meet the project closure criteria.
Commence station re-wire project.	Achieved	Completed design to schedule.
Optioneering for the management of FED.	Achieved	Delivered to schedule. The piled foundations were completed at the end of March 2008.
Continued emptying of pond skips and furniture.	Behind Schedule	Over the past year the ponds Defuelling and Decommissioning Team has successfully inspected all the pond complex equipment, of which 91% has had the activity removed to enable deplant. The remaining 9% is in progress. However, the fuel cooling pond is sufficiently clear of redundant plant so that the planned 2008/09 work for final debris clearance and sludge removal can proceed preparing for pond drainage.
Site characterisation.	On Track	18 entries to FED vaults have been completed. Samples have been taken for analysis. Small scale formulation trials of various inactive resins and FED sludges are 75% complete.
Continued disposal of site Low Level Waste (LLW).	Achieved	A total of 160m <sup>3</sup> of generated LLW was processed. 785 tonnes of material was dispatched to landfill which was predominately asbestos, together with 622 tonnes of material being dispatched for recycling.

Regulatory Matters
Engagement with regulators on possible options for FED dissolution.
Application for change to the Compilation of Environment Agency Requirements under the Radioactive Substances Act has been accepted.
<b>Action plan produced and being implemented to control active waste/materials off site.</b>
The Safety Case Management made one formal submission to the Nuclear Installations Inspectorate (NII), which was the Joint NII/EA Annual Regulatory Review Package.
The first draft of the Bradwell Re-baselined Post Defuelling Safety Case (RPDSC) was passed to NII for information.
Bradwell has assisted NII in their response to questions from local residents and local interested parties.

Key Performance Indicators	
Boiler House Asbestos Removal	Completed pending Final Certificate from Analytical firm
LLW Management	Completed
Concept Design for the Dissolution Process	Completed
Build LLW Management facility	Completed
Pond Complex Defuelling and Decommissioning	91% Completed

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0.64
Days Away Case Rate	0.64
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
38.8	38.6	33.1
The Original BCWS was £30.6 m		

## Dungeness A



Dungeness is located in Kent and with an area of 20 hectares covered by the nuclear site licence. Dungeness A power station started generating electricity in 1965. The area around the site is environmentally sensitive, is designated as a Special Protection Area (SPA), Special Area for Conservation (SAC), Site of Specific Scientific Interest (SSSI) and is proposed as a wetland of international importance under the RAMSAR convention and is home to the largest shingle peninsula in Europe.

**Location:** Kent

**Type of Site:** Reactor Site

**Status of Operation:** Defuelling

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Defuelling of both reactors in line with the MOP8.	On Track	MOP8 was formally issued in March 2008 and the NII gave permission to enter into bulk defuelling on 1 April 2008. 47 tonnes of fuel was removed from the Reactors in 2007/08.
Removal of the spent fuel to Sellafield.	On Track	31 irradiated fuel transport flasks were dispatched to Sellafield in 2007/08.
Construction of the new administration building.	On Track	The building structure was completed in March 2008 and taken over from the contractor. Occupation to commence in May 2008.
Radiological characterisation and survey of the site.	On Track	The radiochemistry laboratory was completed and commissioned. Procedures and training in place with characterisation self performed. The EGG01 Report was completed.
Continued operation of the Magnox Dissolution Plant (MXD).	On Track	Station staff are now fully trained to operate this plant
Electrical overlay system installation.	Behind Schedule	Construction of cable route support steelwork and the removal of the through-wall bushings in the substation in progress. Commissioning of package substation was carried over to 2008/09.
Disposal of LLW arisings to the Low Level Waste Repository (LLWR).	On Track	Reduction of LLW arisings through a rigorous sorting and monitoring regime which meant 340m <sup>3</sup> of active waste was reduced to 64.5m <sup>3</sup> and was sent to LLWR. Also 223m <sup>3</sup> was then free released.
Incineration of solid and liquid waste arisings.	On Track	Dungeness A incinerates for both A and B Stations. Solid arisings incinerated in 2007/8 were: Dungeness A 8,062 kg, Dungeness B 13,688 kg. Liquid waste was: Dungeness A 24,520 litres, Dungeness B 31,880 litres.
Retrieval and processing of 7.5 tonnes of Magnox debris through the MXD.	On Track	Target was reduced to 6.0 tonnes for FED retrieval and processing for 2007/08 due to sand filtration problems and this target was met during 2007/08. The 2008/09 target is 7.5 tonnes.
Supporting the activities of the Site Stakeholder Group (SSG).	On Track	There were 3 SSG meetings in 2007/08 keeping stakeholders informed about site activities.

Work on the skills development and maintenance strategy for the site to ensure that staff numbers and skills are matched to the changing needs of projects in supporting the decommissioning strategy.	On Track	Work and skills development through various HR and training strategies throughout the year including: CDM (Construction (Design and Management)) Regulations, NEBOSH (National Examination Board in Occupational Safety and Health), IOSH (Institution of Occupational Safety and Health), Defuelling & Decommissioning NVQ, Society of Trust and Estate Practitioners (STEP), Asbestos, Control & Supervision, Core Competency and Intelligent Customer, Restructuring of Departments and Lead Team, Graduate Training.
Maintaining relationships with other key local and national stakeholders.	On Track	Relationships maintained and improved through the SSG meetings involving: Dungeness Residents Association, NII, Office for Civil Nuclear Constabulary (OCNS), Environment Agency (EA), Fire, Police, Ambulance, NE and Local Councillors.

### Regulatory Matters

#### EA reauthorisation of discharge levels post-generation

- Reauthorisation has not yet been sought as authorisation will be required in the new Company name following the planned separation of the business into Magnox North and South. It is believed that this must be progressed by Magnox South. Compliance is currently maintained during the period of Shadow Working required to establish Magnox South.

#### NII agreement of the Post-Operational and Defuelling Safety Case and confirmation of the transition to a passive cooling configuration in the second half of the year

- Approval was obtained from the NII for Dungeness A to enter into Phase 3 (Passive Cooling) in March 2008.

### Key Performance Indicators

Passive Reactor Cooling	Complete
Proving of Defuelling Process	Complete
Spent Fuel Dispatch to Sellafield	Complete
Project Delivery	Complete

### Safety and Environmental Performance

Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
46.1	45.9	39.0
The Original BCWS was £39.8 m		

## Hinkley Point A



Hinkley Point A power station is located at Hinkley in Somerset and has an area of 19 hectares covered by the nuclear site licence. It started electricity generation in 1965 and ceased operations in 2000. Several Sites of Special Scientific Interest (SSSIs) and Special Protection Areas (SPAs) are situated around the site.

**Location:** Somerset

**Type of Site:** Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Ponds decommissioning – completion of removal of redundant pond furniture and progressing of sludge removal for fuel free verification.	Achieved	Redundant furniture in reactor 1 and 2 ponds removed and reactor 1 pond transit bay cleared of debris.
Pond skips – retrieval of skips from R1 and 2 ponds, decontamination in ultra high pressure washing facility and size reduction for despatch off site.	Achieved	400 skips retrieved from reactor 2 pond and size reduced.
Solid Intermediate Level Waste (SILWR) – waste retrieval arm trials for the FED vaults.	Retrieval Achieved	Waste retrieval arm commissioned.
Wet ILW – approval of the business case for a thermal vitrification plant for the wet wastes – innovative process to reduce encapsulation volumes by 50 times.	Achieved	Thermal vitrification process passed gate 1.
Continual development of key skills following the start of apprenticeships and graduate recruitment.	Achieved	Apprentices recruited continue training. Two new graduates commenced employment.
Continuation of the SSG as the primary forum for maintaining relationships with the community.	Achieved	SSG meetings maintain positive relationship with community.
The outcome of work on innovations will be delivered.	Achieved	For example, thermal vitrification for Wet ILW materials has been developed.

### Regulatory Matters

**OCNS approval of engineering proposals for Site Security Separation with B site. The action required is to work up plans, engage British Energy (BE) Limited and submit common proposals to OCNS**

- Proposals have been deferred to 2012. Plans in the short term will now be submitted on improving segregation between A and B Sites along the east interface to the foreshore 2008/09.

### Key Performance Indicators

<b>Solid ILW retrieval and processing</b>	Performance Based Incentive (PBI) Milestones achieved
<b>Pond decommissioning</b>	PBI Milestones achieved
<b>Pond skip decontamination</b>	PBI Milestones achieved
<b>Wet ILW retrieval and processing</b>	PBI Milestones achieved

### Safety and Environmental Performance

Issue	Number
<b>Total Recordable Incident Rate</b>	0.81
<b>Days Away Case Rate</b>	0.61
<b>RIDDOR Major Injury</b>	0
<b>RIDDOR Lost Time Accident</b>	1
<b>RIDDOR Dangerous Occurrence</b>	0
<b>INES incidents</b>	0
<b>Environmental non-compliance</b>	1

### Non Accounting Financial Measures (Earned Value)

Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
<b>44.4</b>	<b>43.9</b>	<b>40.1</b>
The Original BCWS was £35.7 m		

## Sizewell A



Sizewell is located in Suffolk and with an area of 14 hectares covered by the nuclear site licence, Sizewell A power station started generating electricity in 1966 and ceased on 31 December 2006. The area around the site is environmentally sensitive and is designated a Special Protection Area (SPA), Special Area for Conservation (SAC), a wetland of international importance under the Ramsar Convention, Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR).

**Location:** Suffolk

**Type of Site:** Reactor Site

**Status of Operation:** Defuelling

**Site Licensee:** Magnox Electric Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Defuelling of both reactors in line with the Magnox Operating Programme (MOP8).	On Track	Issues at Sellafield have caused the delay to the defuelling operations; plans are now in place to commence bulk defuelling in line with the MOP8 provisions.
Removal of spent fuel to Sellafield.	On Track	Issues at Sellafield have caused delay to the bulk defuelling operations; plans are now in place to commence removal of spent fuel to Sellafield in line with the MOP8 provisions. 51 tonnes of fuel was removed to Sellafield during 2007/08.
Ponds area plant enhancements.	Achieved	In accordance with the current planned schedule all activities are now complete.
Effluent and drains plant enhancement.	Achieved	In accordance with the current planned schedule all activities are now complete
The Site Stakeholder Group (SSG) will continue to meet quarterly and act as the focus for all in the local community and a liaison between the site operator, the NDA and the regulators.	On Track	All SSG meetings planned for the year have been met with good attendance from the group and the public. These meetings with the SSG and regulators are ongoing for the future.

### Regulatory Matters

#### Safety Case Review

A number of Category 1 & 2 safety case updates and changes were progressed during the year

Key Performance Indicators	
Spent fuel dispatch to Sellafield	Completed
Post Operation Defuelling Safety Case (PODSC)	Completed
Re-establish defuelling capability	Completed
Mechanical services – effluent and drains	Completed
Mechanical services – heating project	Completed

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
46.3	46.3	40.4
The Original BCWS was £37.8 m		

## MSSO



Magnox South Support Office (MSSO) provides management oversight, strategic direction, and central coordination of process for the decommissioning sites at Berkeley, Bradwell, Dungeness A, Hinkley A and Sizewell A sites. It ensures effective and efficient delivery of the lifecycle, safely and with care for the environment, to a care and maintenance state.

**Location:** Gloucestershire

**Type of Site:** Corporate Office

**Status of Operation:** Administrative

**Site Licensee:** Magnox Electric Limited

### Key Activities

2007/08 Annual Plan Activities	Status	Progress Report
Environmental Health, Safety and Quality activities.	On Track	Magnox South Support Office local site environmental enhancement plan issued and progressed.
Lifetime Plan (LTP08) improvement project.	On Track	LTP half year strategic review successfully completed.
MOP – Delivery of MOP8.	Achieved	Following NDA approval, MOP8 was published as an NDA document in March 2008.
Completion of shadow working.	Behind Schedule	Entry into shadow working commenced in November 2007 delayed by approximately four months. Shadow working in progress towards legal separation of Magnox North and Magnox South.
Implementation of the HR innovations strategy.	Achieved	Business case introducing a new employee agreement designed to secure a more flexible and fit for purpose system was approved and the strategy implemented.

### Regulatory Matters

#### Shadow working / legal separation process

- Entry to shadow working delayed from July 2007 to November 2007. Shadow working in progress towards legal separation of Magnox North and Magnox South.

### Key Performance Indicators – Magnox South

<b>Safe and secure sites</b>	Project team initiated to investigate the feasibility of how to take a site to a quiescent state with any hazard on site made static.
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Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	N/A
Environmental non-compliance	N/A

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
43.1	43.0	36.7
The Original BCWS was £36.4 m		

## Dounreay

### **The United Kingdom Atomic Energy Authority (UKAEA) was the site licensee for Dounreay during 2007/08.**

**During the year work was completed to transfer licensee status to a new company, Dounreay Site Restoration Limited (DSRL), which came into effect from 1 April 2008.**

#### **Key developments in 2007/08**

- more than 1,400 tonnes of bulk sodium was destroyed in the Prototype Fast Reactor (PFR) and the amount of material to be treated as residue was minimised. The Sodium Inventory Disposal Plant (SID) dealt with sodium in PFR pipework and other stored components. Some clean sodium was also destroyed at the Janetstown facility
- the Dounreay Fast Reactor (DFR) processed the first active sodium potassium batch in March 2008
- concept designs for dismantling the PFR reactor were completed and designs for a full size mock-up of part of the reactor and a dismantling machine undertaken
- construction of the Breeder Fuel Removal Plant for the DFR is complete and commissioning is in progress
- work was undertaken to develop the Waste Treatment Plant (WTP) concept design, including: updating the ventilation concept, reconfiguring the encapsulation lines, modelling of the Shaft Intervention Platform, removal of the WTP store and construction of a mock-up to include shredder, dewatering and drum filling
- the clean up of the Dounreay Cementation Plant (DCP) was completed and cementation of drums restarted in March 2008
- a former fuel production facility and the silo cover building was demolished along with a number of other redundant facilities including a laundry, visitor centre and the Viewfirth
- decommissioning continued in a number of facilities including the Materials Test Reactor (MTR) reprocessing plant, pond and several laboratories

#### **Forward look**

- completion of building D3900 reference design
- destruction of DFR bulk sodium potassium
- cementation of raffinates through DCP
- completion of the shaft isolation system is expected by the end of July 2008
- ongoing decommissioning of former fuel plants and laboratories
- placing Low Level Waste (LLW) facility planning application (for facility just outside Dounreay site boundary) before Local Authority for approval

## Dounreay



Dounreay is located in Caithness, Scotland, and has a total site area of 74 hectares. It was established in the mid-1950s as a research reactor site with fuel production and processing facilities. There were three reactors, the last of which ceased operation in 1994.

**Location:** Caithness

**Type of Site:** Former Research Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** UKAEA

### Key Activities

2007/08 Annual Plan Activities	Status	Progress Report
Demolishing a number of redundant buildings at the end of their useful life and demolishing three nuclear facilities.	Achieved	D1202 and the silo cover building have been demolished. Other demolition included buildings D8521, D9973, D1334, DN084, visitor centre, viewfirth and DFR seawater pumphouse.
Continue to decommission and remove process equipment from Fuel Cycle Area (FCA) facilities.	Achieved	Decommissioning continued in a number of facilities including: buildings D1204, D9814 pond, D1217, D1200 Lab 75 shielded cell.
Starting to destroy the sodium residues at the PFR.	Achieved	More than 1,400 tonnes of bulk sodium have already been destroyed.
Starting operation of the NaK (liquid metal alloy of sodium and potassium) destruction plant at the DFR.	Achieved	The first active NaK batch was processed in March 2008.
Initiating work to deal with dismantling of both PFR and DFR vaults.	Achieved for PFR	A PFR concept design for reactor dismantling is complete. Designs for a full size mock-up of part of the reactor and a dismantling machine have been undertaken and it is expected to start procurement of the mock-up in 2008/09. At DFR design of dismantling is not currently expected to start until 2012, and was not included in the 2007/08 plan.
Continue with the work to isolate the shaft from the surrounding environment.	Achieved	Shaft isolation work continued throughout the year and the construction work is currently expected to be complete by July 2008 – ahead of programme. The performance of the isolation is currently close to expectation.
Start the detailed design phase of the new facility (D3900) needed to solidify the liquid wastes in building D1208.	Not Achieved	A design authority has now been formed with NUKEM. The existing scheme design is being reviewed to generate a reference design, which is expected to be complete before July 2008. Subject to any necessary approvals, letting of contracts for detail design could then begin.

Complete the work on the new facility external to DFR to allow removal of the breeder fuel from the reactor.	Achieved	Construction of the breeder fuel removal plant is complete and commissioning is in progress.
Design for the shaft and silo retrieval will be further developed.	Achieved	Work has been undertaken to develop the concept design.
Completion of the clean-up within the DCP and continuing with cementation of liquid wastes into solidified drums.	Achieved	Clean-up complete and cementation of drums restarted in March 2008.
Initiation of work to refine the plans for completion of the decommissioning of the D1208 facility.	Achieved	A paper has been produced on D1208 Post Operational Clean Out (POCO) – the start of decommissioning. It has identified two major precursors to decommissioning the facility: (i) Ventilation system upgrade; (ii) Tank transfer system.
Continue with work to prepare the uranium recovery plant for clean-up and decommissioning.	Achieved	Completed POCO of solvent extraction plant in amber area. Repacked 70 bins of historical waste. Carried out POCO of two redundant gloveboxes associated with titanium evaporator.
Starting the construction of the new ventilation complex for the FCA which will allow for progressive decommissioning of the FCA complex.	Achieved	Preparatory work for the project, to install tee pieces at each plant to aid changeover to the new system, is nearing completion. Following an NDA review of the project, the contract for the main construction has also been awarded and scheme design is in progress and on programme.
Continuing to work with the lead agencies in the community to ensure that the decommissioning takes place with due regard to the socio-economic requirements of the area.	Achieved for 2007/08, but continues in subsequent years	Work has continued with many external agencies, including for example: Highlands & Islands Enterprise, Caithness & Sutherland Enterprise, Highland Council, Dounreay Stakeholder Group, local businesses, Highland College, marine energy companies, Caithness and North Sutherland Regeneration Partnership.
Shadow working of the new SLC (DSRL) will start as the site prepares for competition.	Achieved	Shadow working started October 2007, and was completed with the formation of DSRL on 1 April 2008.

### Regulatory Matters

**Nuclear Installations Inspectorate (NII) and Scottish Environment Protection Agency (SEPA) monitor the decommissioning progress of the site against specific milestones in the Lifetime Plan (LTP)**

- Status reports provided to NII on specific NII milestones. SEPA monitor against UKAEA milestones, which can be tagged as being of interest to SEPA.

**NII and SEPA concerns on the need to progress the major capital builds, particularly the plant to retrieve the wastes from the shaft and silo**

- A programme of capital build expenditure has been proposed, which includes a schedule for both D3900 and D3200.

### Key Performance Indicators

<b>Waste and nuclear materials management</b>	Contract for replacement of FCA ventilation
<b>FCA/balance of site structures decommissioning</b>	Dounreay MTR pond emptied
<b>Critical path major projects</b>	Re-start DCP
<b>Other major projects</b>	Complete import/export facility at DCP
<b>Hazard reduction throughput</b>	First batch of DFR sodium/potassium (NaK) destroyed
<b>Hazard reduction – other major paths of concern</b>	Construct breeder fuel removal plant
<b>Environmental restoration</b>	Continue to develop Best Practicable Environmental Option (BPEO) for dealing with off-shore and sea-bed particles.
<b>PFR decommissioning</b>	Destruction of PFR primary sodium and concept design for dismantling PFR.

### Safety and Environmental Performance

Issue	Number
<b>Total Recordable Incident Rate</b>	0.34
<b>Days Away Case Rate</b>	0.24
<b>RIDDOR Major Injury</b>	1
<b>RIDDOR Lost Time Accident</b>	1
<b>RIDDOR Dangerous Occurrence</b>	1
<b>INES incidents</b>	0
<b>Environmental non-compliance</b>	1

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
152.7	148.9	137.5
The Original BCWS was £148.6 m		

## Harwell and Winfrith

**The United Kingdom Atomic Energy Authority (UKAEA) is the site licensee for Harwell and Winfrith. UKAEA is also responsible for management of the fusion research facility at Culham.**

**Harwell and Winfrith will formally commence trading as Research Sites Restoration Limited (RSRL) when the Nuclear Installations Inspectorate (NII) issues new nuclear site licences for the two sites. This is expected to be towards the end of 2008.**

### Key developments in 2007/08

- a revised Lifetime Plan (LTP) was developed which requires substantially fewer staff and contractor resources in the early years. A significant restructuring of the workforce was therefore undertaken which has reduced the number of staff by about 25%. This was achieved by redeployment of staff to other parts of the UKAEA Group and by a voluntary release scheme. Preparations were also completed during the year to introduce a new management structure for the sites
- the second phase of decommissioning of the Steam Generating Heavy Water Reactor (SGHWR) at Winfrith was completed and the facility was prepared for a sustained period of surveillance and maintenance
- the first phase of decommissioning of the DRAGON reactor at Winfrith was completed and the facility was prepared for a lengthy period of surveillance and maintenance
- good progress was made on encapsulation of Intermediate Level

Waste (ILW) sludges from the SGHWR External Active Sludge Tanks at Winfrith

- a substantial part of the base slab and storage tubes of A59 (former Post Irradiation Examination (PIE)) building at Winfrith were removed
- at Harwell, construction of the Waste Encapsulation Plant (WEP) building was completed along with most of the mechanical and electrical installation
- the second waste retrieval machine was installed in B462.9 at Harwell and inactive commissioning was completed
- good progress was made on encapsulation of legacy ILW sludges in the Liquid Effluent Treatment Plant (LETP) at Harwell
- the quantities of ILW processed and Low Level Waste (LLW) disposed during the year exceeded those planned
- drop testing of the 2m<sup>3</sup> ILW box was completed satisfactorily

### Forward look

- completion of encapsulation of the SGHWR ILW sludges from the External Active Sludge Tanks at Winfrith
- completion of encapsulation of legacy ILW sludges in the LETP at Harwell
- completion of commissioning of the WEP at Harwell
- commencement of retrieval of legacy solid ILW waste cans using the second retrieval machine at Harwell
- completion of waste processing and repacking operations in B459 at Harwell

## Harwell



Harwell is located in Oxfordshire and was established in 1946 as Britain's first Atomic Energy Research Establishment. The campus, of which the designated site forms a part, is home to a wide range of research organisations and businesses. The NDA has responsibility for 110 hectares of land – approximately one third of the total area.

**Location:** Oxfordshire

**Type of Site:** Former Research Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** UKAEA

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Decontamination and grouting of the trade waste drain.	On Track	Due to the reduced allocation of funding for 2007/08 the scope of decommissioning work was reduced. However, the decontamination and grouting planned within the funding provided was completed.
Decommission the redundant groundwater containment plant at the Western Storage Area (WSA).	Achieved	The redundant groundwater containment plant was removed.
Continue decommissioning of redundant minor nuclear facilities.	On Track	Due to the reduced allocation of funding for 2007/08 the scope of work was reduced. B146 was removed to base slab.
Operate the soil vapour extraction equipment to remove contamination in the unsaturated zone at the WSA.	On Track	The planned programme of work for 2007/08 of soil vapour extraction to remove contamination in the unsaturated zone at the WSA was completed.
Continue processing and repackaging of LLW and ILW including wastes requiring additional treatment, radium cans, ripple crates and legacy sources.	On Track	In general, performance exceeded plan.
Completing the disposal of graphite waste arisings from decommissioning the Graphite Low Energy Experimental Pile (GLEEP) reactor.	Behind Schedule	11 of the 12 planned shipments of GLEEP graphite for disposal in 2007/08 were completed.
The WEP will be commissioned.	Behind Schedule	Construction of the WEP building and most of the mechanical and electrical installation is complete.
Waste Retrieval Machine installation will be completed.	On Track	The second waste retrieval machine was installed in B462.9 and inactive commissioning was completed.

### Regulatory Matters

The main regulatory issues relate to the approval of delicensing cases by the NII and the facilitation of transfer of contact-handled ILW from the site

- Approval is still awaited for the further delicensing cases submitted to the NII. The site LTP has been modified so that transfer of contact-handled ILW from the site is not urgent.

### Key Performance Indicators

<b>Build B462 WEP</b>	Construction of WEP and most mechanical and electrical installation is complete. Commissioning will commence in June 2008.
<b>B462.9 retrieval machine 2</b>	The second waste retrieval machine is installed and inactive commissioning complete.
<b>Operation of groundwater containment plant</b>	The new groundwater containment plant has exceeded design requirements.
<b>LETP sludge processing</b>	The encapsulation of legacy sludges in the LETP continues – the planned programme for 2007/08 is complete.
<b>B462 solid waste and nuclear waste processing</b>	The quantities of ILW processed and LLW disposed during the year exceeded those planned.
<b>B220 waste processing</b>	28 cans of ILW were encapsulated during the year - four more than planned.

### Safety and Environmental Performance

Issue	Number
Total Recordable Incident Rate	0.45
Days Away Case Rate	0.3
RIDDOR Major Injury	1
RIDDOR Lost Time Accident	1
RIDDOR Dangerous Occurrence	1
INES incidents	0
Environmental non-compliance	0

### Non Accounting Financial Measures (Earned Value)

Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
60.0	57.3	52.1
The Original BCWS was £47.9 m		

## Winfrith



Winfrith is located near Poole in Dorset and has a total site area of 88 hectares. It was established by UKAEA in 1958 as an experimental reactor research and development site. The coast south of Winfrith is a World Heritage Site and the surrounding heathland and chalk ridges are environmentally sensitive.

**Location:** Dorset

**Type of Site:** Former Research Reactor Site

**Status of Operation:** Decommissioning and Termination

**Site Licensee:** UKAEA

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Continuing the decommissioning of the SGHWR.	On Track	Due to the reduced allocation of funding for 2007/08 the scope of decommissioning work was reduced. However, the decommissioning planned within the funding provided was completed and the facility has been prepared for a sustained period of surveillance and maintenance.
Progressing the first phase of the decommissioning of the DRAGON reactor.	On Track	Decommissioning planned within the funding provided was completed and the facility has been prepared for a sustained period of surveillance and maintenance.
Preparation of the delicensing case for the east end of the site.	Deferred	Due to the reduced allocation of funding for 2007/08 this work was deferred
Continuing the remediation of minor facilities and drains.	On Track	Due to the reduced allocation of funding for 2007/08 the scope of work was reduced. The only significant work undertaken was the removal of a substantial part of the base slab and storage tubes of A59 (former PIE building).
Cementation of sludge waste in the waste treatment plant and transfer to the waste store.	Achieved	447 drums of sludge waste from the SGHWR External Active Sludge Tanks were encapsulated during the year and transferred to the ILW store. This exceeded the planned target.
Continued disposal of solid LLW to the LLWR and routine operation of the effluent discharge system.	Achieved	1,170m <sup>3</sup> of LLW was sent to the LLWR, slightly more than planned.
Management and oversight of the tenants on the Winfrith site.	Achieved	Management and oversight of the tenants continued.

Regulatory Matters	
<b>The approval by the NII of the pre-construction safety case for the interim storage of cemented ILW resulting from the decommissioning of the two reactors</b>	
- Due to the reduced allocation of funding for decommissioning work at Winfrith, the final decommissioning of the reactors has been deferred so this approval is not required in the short-term.	
<b>The agreement of the management structure resulting from the restructuring of UKAEA together with any forward programme changes necessary to remain compliant with funding</b>	
- Approval was received from the regulators to introduce the management structure required to manage RSRL. The lifetime plan was revised and the workforce restructured to remain compliant with indicated future funding.	

Key Performance Indicators	
<b>Progressive Decommissioning SGHWR</b>	Planned decommissioning is complete and the facility prepared for surveillance and maintenance.
<b>Progressive Decommissioning of DRAGON</b>	Planned decommissioning is complete and the facility prepared for surveillance and maintenance.
<b>Processing of SGHWR Sludge and Storage in the Treated Radwaste Store</b>	447 drums of sludge encapsulated during the year and transferred to the ILW store.
<b>Progress on the development of the ILW 2m box and A544 interim storage</b>	Box design and testing complete.
<b>A59 Decommissioning</b>	Building structure and substantial part of the base slab and storage tubes removed.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0.69
Days Away Case Rate	0
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	0
RIDDOR Dangerous Occurrence	0
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
45.4	43.1	41.5
The Original BCWS was £33.5 m		

## Springfields Fuels Limited

**Springfields Fuels Limited (SFL) is the Site Licence Company (SLC) responsible for the management and operation of Springfields. The site manufactures nuclear fuel and fuel products for the UK's Magnox and Advanced Gas-Cooled nuclear power stations as well as for international customers.**

**The Parent Body Organisation (PBO) is Westinghouse Electric Company (WEC). WEC became the NDA's first private sector management and operations (M&O) contractor following its acquisition by Toshiba Group in October 2006.**

seeking to explore opportunities for attracting new business and bringing in additional revenue for the NDA

- 2007/08 saw the extension of an intermediate products contract and smaller contracts signed with other international customers. These contracts will provide additional revenue for the NDA to utilise in the clean up of the UK nuclear sites
- in support of the NDA clean up work, a lifetime extension has been agreed with the NDA for the sites enriched residue processing facility. This extension provides an ongoing capability to provide further residue services to commercial customers and to NDA sites

### Key developments in 2007/08

- SFL has operated well in 2007/08, with most areas delivering product to cost and to schedule
- orders for Advanced Gas-Cooled Reactor (AGR) fuel for British Energy's power stations, Magnox fuel for the Magnox power stations and intermediate products for international customers were fulfilled
- the new contract to convert uranium hexafluoride has continued to have manufacturing problems, although production rates increased towards the year-end

### Forward look

- the future focus for the site is to continue to manufacture and deliver fuel products for existing customers while

## Springfields



Springfields is located near Preston in Lancashire and has an area of 81 hectares covered by the nuclear site licence. It manufactures nuclear fuel and fuel products for the UK's nuclear power stations and for international customers. Several environmentally sensitive and protected areas are situated close to the site, including the Ribble Estuary.

**Location:** Lancashire

**Type of Site:** Nuclear Fuel Manufacturing Site

**Status of Operation:** Operational

**Site Licensee:** Springfields Fuels Limited

Key Activities		
2007/08 Annual Plan Activities	Status	Progress Report
Start decommissioning work in the redundant areas of Magnox production facilities.	Achieved	Decommissioning of machine shop completed to plan.
Processing of 112 tonnes of enriched residues through wet and dry route processes.	Dry – On Track Wet – Behind Schedule	Good progress made overall with the different residue streams.
Processing 4,017 Sales and Operational Plan (SOP) units of natural residues.	Behind Schedule	Cat A residues were slightly behind target due to external factors outside of SFL's control. Cat B residues and other processes on or above target.
Disposal of 6,808 m <sup>3</sup> of operational and decommissioning waste to Clifton Marsh disposal site.	Behind Schedule	The majority of waste has been disposed of to plan.
Oxide fuel production targets: - 4,120 Advanced Gas-Cooled Reactor (AGR) fuel elements - 159,385 AGR fuel cans.	Achieved	All customer requirements for AGR fuel achieved in full.
Magnox fuel production: - 19,260 Magnox fuel elements - 16,120 Magnox fuel cans - end Magnox fuel can production by September 2007.	Achieved	All customer requirements met. Magnox fuel can production ended September 2007.
UO <sub>2</sub> intermediate products: - 264.5 tonnes of UO <sub>2</sub> powder and granules.	Achieved	All customer requirements for UO <sub>2</sub> powder and granules have been achieved as per the schedule.
Uranium hexafluoride (UF <sub>6</sub> ) production - 5,000 tonnes.	Behind Schedule	Due to some technical issues relating to the feed material, the scheduled throughputs for UF <sub>6</sub> production were not fully met.

Modifications to plant and equipment in support of increased UF <sub>6</sub> production required to fulfil the Cameco Hex Toll Conversion contract.	Achieved	Work has been carried out to introduce improvements to the processing facilities. This has led to an increase in production rates in the plant.
Upgrading obsolescent essential IT based site support systems for maintenance management and nuclear material accounting.	Achieved	This is a multi-year programme to upgrade those IT systems subject to obsolescence. The programme of work is on schedule and is due to continue for several more years.

### Regulatory Matters

**Decommissioning work must align with the programme agreed with the Health and Safety Executive (HSE) and Nuclear Installations Inspectorate (NII) under the site licence**

- Decommissioning work progressed to plan.

**Submission of a number of reports that are required to fulfil the improvement conditions that form part of the Environment Agency (EA) discharge authorisations**

- Improvement Condition reports (Condition 3, 4, 5, 6, 8 & 9) submitted to EA as planned.

**Submission of the Site Control of Major Accident Hazards (COMAH) Report to the HSE**

- COMAH report submitted to HSE on 30 March 2008.

<b>Key Performance Indicators</b>	
<b>Delivery of AGR fuel</b>	All customer requirements for delivery of AGR fuel have been achieved.
<b>Delivery of UO<sub>2</sub> powder and granules</b>	All customer requirements for delivery of UO <sub>2</sub> powder and granules have been achieved.
<b>Manufacture of Magnox fuel</b>	All requirements for manufacture and delivery of Magnox Fuel have been achieved.
<b>Production of UF<sub>6</sub></b>	Significant proportion of production met, despite problems with out of specification feed material.
<b>Improve maintenance performance and produce an obsolescence programme</b>	All maintenance has been delivered to plan. In addition to this, the obsolescence programme for IT was also produced.
<b>Customer satisfaction</b>	All customer satisfaction measures were met.
<b>Processing of uranic residues in Enriched Uranium Residues Recovery Plant (EURRP)</b>	Year end targets were not fully achieved, however due to process improvements and the efforts of the plant teams, production rates have increased throughout the year.
<b>Processing of natural uranic residues backlog to plan</b>	Progress has been made both in terms of processing the historic backlog and in identifying routes for materials. Year-end measures were slightly behind target due to external factors outside of SFL's control.
<b>Financial performance of Springfields commercial business</b>	The Oxide Business Profitability target was achieved, however the Hex Business target was not achieved due to out of specification feed material.
<b>Manage SFL's cash receipts and achieve the target facility cost</b>	The majority of targets have been achieved in this area.
<b>Progress/complete facility decommissioning as per Lifetime Plan (LTP)</b>	Decommissioning has progressed well against LTP requirements, with all targets being met
<b>Progress projects to plan</b>	Significant progress has been made in this area and the majority of targets were achieved. Schedule Performance Index (SPI) was behind target due to the reprioritisation of projects following a major breakdown.
<b>Financial performance of the trading account</b>	Targets were fully achieved in this area.

Safety and Environmental Performance	
Issue	Number
Total Recordable Incident Rate	0.13
Days Away Case Rate	0.07
RIDDOR Major Injury	0
RIDDOR Lost Time Accident	2
RIDDOR Dangerous Occurrence	1
INES incidents	0
Environmental non-compliance	0

Non Accounting Financial Measures (Earned Value)		
Revised BCWS (£m)	BCWP (£m)	ACWP (£m)
151.4	148.8	143.1
The Original BCWS was £144.2 m		

## NDA Owned Subsidiary Reports

### Direct Rail Services Limited

**Direct Rail Services Limited (DRS) is a wholly owned subsidiary of the NDA. The company was established in 1995 to provide a strategic rail transport service to British Nuclear Fuels Limited (BNFL), its parent company at the time.**

During 2007/08, the company continued to develop its business into new areas in order to secure income for the NDA. At the same time, it continued to ensure the transportation of spent nuclear fuel from the UK's nuclear power stations to Sellafield for reprocessing.

#### Health, safety, security and the environment

Despite the company increasing in size, the overall accident rate for DRS has continued to fall and DRS was found not to be at fault for the two accidents that did occur. In terms of signals passed at danger, which is the headline measure of safety in the rail industry, DRS had the best performance record of all freight train operators in the UK, with only one incident during the year.

#### Key performance developments

Overall performance against the company's high level Key Performance Indicators (KPIs) was good. Service delivery to nuclear customers was close to 100%, with on time delivery running at 94.5%.

The table below gives a more detailed breakdown of service delivery performance in 2007/08.

Company Objective		Target	Actual
Services requested v's delivered	Nuclear	98 – 99.5%	100.0%
	Non-Nuclear	98 – 99%	99.8%
% Arrivals on time	Nuclear	90 – 92.5%	94.5%
	Non-Nuclear	90 – 91%	91.1%
Flasks not delivered	Nuclear	<6	1

#### Other key developments in 2007/08 include:

- DRS successfully completed a lifting beam trial at the Berkeley railhead in preparation for the forthcoming Low Level Waste (LLW) transport from Berkeley to the Low Level Waste Repository (LLWR)
- DRS assisted all potential construction bidders for the LLWR Vault 9 programme and completed a rail trial to demonstrate the use of rail wagons for the aggregate material at the Port of Workington
- The new intermodal service contract with WH Malcolm to provide rail transportation for British Gypsum between Kirby Thore in Cumbria and Elderslie in Scotland commenced in August 2007. The service is running five days a week, using DRS' new low emission Class 66 locomotive and transporting 24 British Gypsum containers, which have been designed and purpose-built to support this contract

- DRS continued to provide price and service information to a number of parties for the provision of LLW transportation services

The company plans to continue to seek new business opportunities and actively promote the movement of freight on rail.

## NDA Owned Subsidiary Reports

### International Nuclear Services Limited

#### **International Nuclear Services Limited (INS) manages a large portfolio of high value international contracts with a wide range of customers.**

The company was jointly owned by Sellafield and the NDA until 1 April 2008 when the NDA acquired a 51% stake from Sellafield to make INS a wholly owned subsidiary of the NDA.

Preparations for the transfer of ownership, including legal due diligence, were undertaken during 2007/08. The transfer took place by way of nuclear transfer schemes made by the Secretary of State for Business, Enterprise and Regulatory Reform (BERR), pursuant to section 39 of the Energy Act 2004.

INS also operates its own subsidiary company, Pacific Nuclear Transport Limited (PNTL), which is the world's most experienced shipper of nuclear cargoes.

The activities of the INS business unit in Sellafield were transferred to INS on 1 April 2008. Safety and environmental performance statistics for INS are, therefore, reported in the Sellafield site report.

During 2007/08, INS continued to manage commitments and obligations with UK and overseas customers during a period of difficult operational performance both at the Thermal Oxide Reprocessing Plant (THORP) and at the Sellafield MOX Plant (SMP). Despite these difficulties, INS continued to develop and maintain customer relationships.

INS agreed substantial settlements for services relating to reprocessing contracts with multiple Japanese and European customers and, in total, secured revenue of some £915 million over the financial year.

PNTL safely undertook a programme of nuclear shipments throughout 2007/08. PNTL also took delivery of a new vessel, the Pacific Heron, and procured a further two vessels. The Pacific Teal was retired from service in preparation for recycling. In addition, a number of planned improvements were made to the Barrow Terminal facilities.

## Glossary

ACWP	Actual Cost of Work Performed
AGR	Advanced Gas Cooled Reactor
ATO	Authority to Operate
AWV	Active Waste Vaults
AWVR	Active Waste Vaults Recovery
BAA	British Airport Authority
BAE	British Aerospace Engineering
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BERR	Business, Enterprise and Regulatory Reform
BMB	Business Management Board
BNFL	British Nuclear Fuels Limited
BOM	Business Operating Model
C&AG	Comptroller and Auditor General
CASE	Caithness & Sutherland Enterprise
CCAB	Consultative Committee of Accounting Bodies
CCP	Cartridge Cooling Pond
CDM	Construction (Design and Management) Regulations, 1994
CEO	Chief Executive Officer
CETV	Cash Equivalent Transfer Value
CHP	Chemical Hazard Potential
CNPP	Combined Nuclear Pension Plan
CODA	Charge Over Deposit Accounts
COMAH	Control of Major Accident Hazards
CoRWM	Committee on Radioactive Waste Management
CPI	Cost Performance Index
CRP	Caesium Removal Plant
CSR	Comprehensive Spending Review
CV	Cost Variance
CXPP	Chapelcross Production Plant
D&D	Defuelling and Decommissioning
DACR	Days Away Case Rate
DCMS	Department of Culture, Media and Sport
DCP	Dounreay Cementation Plant
DEFRA	Department for Environment, Food and Rural Affairs
DFR	Dounreay Fast Reactor
DRS	Direct Rail Services Limited
DSC	Dry Store Cell
DSO	Departmental Strategic Objectives
DSRL	Dounreay Site Restoration Ltd
DTI	Department of Trade and Industry
EA	Environment Agency
EDRMS	Electronic Document Records Management System
EFQM	European Foundation of Quality Management
EHSQ	Environmental, Health, Safety and Quality
EIAD	Environmental Impact Assessment for Decommissioning
ESPS	Electricity Supply Pension Scheme

EURRP	Enriched Uranium Residues Reprocessing Plant
FAZ	Fire Affected Zone
FCA	Fuel Cycle Area
FED	Fuel Element Debris
FIEE	Fellow of the Institution of Electrical Engineers
FIMechE	Fellow of the Institution of Mechanical Engineers
FRC	Financial Reporting Council
FReM	Government Financial Reporting Council
FRS	Financial Supporting Standard
GCSC	Graphite Core Safety Case
GDF	Geological Disposal Facility
GLEEP	Graphite Low Energy Experimental Pile
GPS	Group Pension Scheme
HA	Highly Active
HAL	Highly Active Liquor
HALES	Highly Active Liquid Evaporation & Storage
HANO	Highly Active North Outer
HIE	Highlands and Islands Enterprise
HLW	High-Level Waste
HQ	Head Quarters
HR	Human Resources
HSE	Health and Safety Executive.
HSSE	Health, Safety, Security & Environmental
ICAEW	Institute of Chartered Accountants in England and Wales
iIP	Investors in People
ILW	Intermediate Level Waste
INES	International Nuclear Event Scale
INS	International Nuclear Services
INSA	Independent Nuclear Safety Assessment
IOSH	Institution of Occupational Safety and Health
ISO	International Standards Organisation
IT	Information Technology
ITSFT	Invitation to Submit Final Tenders
JET	Joint European Torus
KPI	Key Performance Indicators.
LETP	Local Effluent Treatment Plant
LLW	Low Level Waste
LLWR	Low Level Waste Repository
LRQA	Lloyds Register Quality Assurance
LTP	Lifetime Plan
MA	Medium Active
MAC	Miscellaneous Activated Components
MASFE	Medium-Active Salt-Free Evaporator
MBGW	Miscellaneous Beta-Gamma Waste
MDU	Magnox Depleted Uranium
MEP	Magnox Encapsulation Plant
MHCA	Modified Historical Cost Accounting
MNOPF	Merchant Navy Officers Pension Fund
MNOPP	Merchant Navy Officers Pension Plan
MNRPF	Merchant Navy Ratings Pension Plan

MNRPP	Merchant Navy Ratings Pension Plan
MNSO	Magnox North Support Office
MoD	Ministry of Defence
MOP	Magnox Operating Programme
MOX	Mixed Oxide
MRWS	Managing Radioactive Waste Safely
MSSO	Magnox South Support Office
MTR	Materials Test Reactor
MXD	Magnox Dissolution Plant
NAO	National Audit Office
NDA	Nuclear Decommissioning Authority
NDPB	Non Departmental Public Body
NEA	New Employee Agreement
NEBOSH	National Examination Board in Occupational Safety and Health
NIA	Nuclear Industry Association
NII	Nuclear Installations Inspectorate
NLFA	Nuclear Liabilities Funding Agreement
NNA	National Nuclear Archive
NNR	National Nature Reserves
NSAN	National Skills Academy for Nuclear
NSSE	Nuclear Safety, Security, Safeguards, Environmental and Health
NSW	Non-standard Waste
NVQ	National Vocational Qualifications
NWRF	Nuclear Waste Research Forum
OCNS	Office for Civil Nuclear Security
OGC	Office of Government Commerce
OSHA	US Department of Labour's Occupational Safety and Health Administration
OSPAR	The Oslo-Paris convention
PBI	Performance Based Incentive
PBO	Parent Body Organisation
PCM	Plutonium Contaminated Material
PCSC	Post Closure Safety Case
PCSPS	Principal Civil Service Pension Scheme
PCSR	Pre-Construction Safety Case Report
PFR	Prototype Fast Reactor
PGDSC	Post Generation Defuelling Safety Case
PIE	Post Irradiation Examination
PNTL	Pacific Nuclear Transport Limited
POCO	Post Operational Clean Out
PSA	Public Service Agreement
PSD	Pond Sludge Drums
PUWER	Provision and Use of Work Equipment
R&D	Research and Development
RAMSAR	A wetland of international importance under the RAMSAR convention
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
RM	Retrieval Machine
RoSPA	Royal Society for the Prevention of Accidents
RPDSC	Re-baselined Post Defuelling Safety Case
RPI	Retail Prices Index

RSRL	Research Sites Restoration Limited
SAC	Special Area for Conservation
SED	Safety and Environmental Detriment
SEEP	Site Environmental Enhancement Plan
SEPA	Scottish Environment Protection Agency
SFL	Springfield Fuels Limited
SGHWR	Steam Generating Heavy Water Reactor
SID	Sodium Inventory Disposal Plant
SILWR	Solid Intermediate Level Waste
SLC	Site Licence Company
SMP	Sellafield Mixed Oxide Plant
SOP	Sales and Operation Plan
SPA	Special Protection Area
SPI	Schedule Performance Index
SPP	Sludge Packaging Plant
SRF	Senior Regulatory Forum
SR	Spending Review
SSA	Strategy Siting Assessment
SSG	Site Stakeholder Group
SSSI	Site of Special Scientific Interest
STEP	Society of Trust and Estate Practitioners
STP	Solvent Treatment Plant
SV	Schedule Variance
TBfD	Technical Baseline for Decommissioning
TDN	Thermal De-nitration
THORP	Thermal Oxide Reprocessing Plant
TRBS	Trinity Retirement Benefit Scheme
TRIR	Total Recordable Incident Rate
TRSDU	Transportable Radioactive Sludge Dewatering Unit
UK GAAP	United Kingdom generally accepted accounting practices.
UKAEA	United Kingdom Atomic Energy Authority
UKNWM	United Kingdom Nuclear Waste Management
VAT	Value Added Tax
VRR	Vitrified Residues Return
VTF	Vitrification Test Facility
VTR	Vitrification Test Rig
WAGR	Windscale Advanced Gas-Cooled Reactor
WEP	Waste Encapsulation Plant
WSA	Western Storage Area
WSI	Waste Substitution Income
WTP	Waste Treatment Plant
WVP	Waste Vitrification Plant

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