

# NDA Draft Business Plan 2010-2013

# 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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**NDA Draft Business Plan  
2010 - 2013**

## Foreword



Dealing with the challenges of nuclear clean-up and waste management is enormously important for both this and future generations so I was very pleased to be appointed CEO of the NDA in October 2009.

For me, being at the helm for the first time is exciting; I have quickly been able to see the huge challenges ahead and recognise the exceptionally high degree of capability across the estate. I am looking forward to steering the organisation towards achieving our mission. I want to strengthen the culture of relentless performance delivery to develop a clearer and more efficient approach.

At only just “school age” the NDA has already achieved a great deal. The complexities of our estate are now better understood and in much more detail. The estate has now been completely restructured and this has allowed us, through very well managed competitions, to bring in international private sector expertise. Successful decommissioning programmes have already seen the decontamination and demolition of facilities right across the estate, including the Dounreay Criticality Facility – a problem that was once thought impossible to solve.

Building on this platform of significant delivery, we now need to deliver more demonstrable progress so that our achievements are obvious to our stakeholders. One of the most difficult challenges for us is prioritising our work in the context of available funding and, whilst our bias is always towards high hazard reduction activities, we still have some tough decisions to make. For example, we would very much like to accelerate at least some of the Magnox sites into Care and Maintenance but we have to balance this against the high cost of tackling hazards that are a national priority.

Whilst there is so much that we would like to get on with, the implication of operating in a funding constrained environment means that we just can’t do everything. We are therefore exploring and analysing a range of options that will underpin our future strategic approach whilst also helping us to prioritise. In the current economic climate, which has brought increased pressure on public expenditure, it has become even more imperative to channel investments and resources in the right direction. We have been engaging with Government in its Public Value Programme but this comes before another round of spending reviews where the competition for available funds is likely to be tougher than ever before.

The experience that has been gained across the estate over the last few years has led us to refine our approach to business planning and strategy. We have identified six strategic themes under which we will group all of our activities and we have restructured the business plan to reflect this. These strategic themes translate into 21 medium term “strategic objectives” which cover all our major areas of delivery. Viewing our activities through an estate-wide lens will really help when it comes to understanding the impact of different

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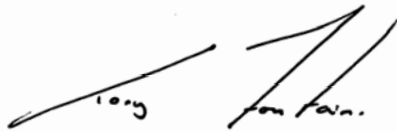
strategic scenarios. It will also help to promote sharing of learning and best practice so that we don't fall into the trap of "reinventing the wheel".

Another major benefit of this approach is that it brings greater clarity to who is doing what. Having clearly defined roles and accountabilities is pivotal to performance management; both we and our stakeholders need to better understand these boundaries of accountability.

Over the period of this plan we will be focussing on hazard reduction; improving project and operational performance; reducing support and overhead costs; improving organisational effectiveness; and improving the robustness of our strategies and developing options.

The new format of this Business Plan makes the NDA's role and interface with our contractors, the Site Licence Companies (SLCs), much more obvious. We manage, incentivise and hold to account the SLCs for all site-based work. In addition we are developing our strategic approach to longer term programmes of work, some of which may be completed by our grandchildren. We are also supporting the Government in policy development, securing ongoing funding and managing the nuclear infrastructure through competitions and capability development.

This draft Business Plan will be the first time that we have shared this approach in detail with external audiences. I will therefore look forward to receiving your views on this and any other aspect of the document.

A handwritten signature in black ink, appearing to read 'Tony Fountain', written over a light blue grid background.

Tony Fountain  
Chief Executive

## Introduction

This draft Business Plan reflects the approved NDA Strategy (2006) and the additional responsibilities we have taken on since then for implementing Government policy on the long-term management of low level and higher activity wastes, and providing oversight to the British Energy nuclear liabilities fund. It sets out our key objectives and plans for delivering our priorities over the next three years. Progress on these activities is reported in our Annual Report and Accounts. We are currently reviewing our Strategy and we will submit a revised Strategy for Ministerial approval early in 2011, following public consultation.

## Our Remit

The NDA is a Non-Departmental Public Body (NDPB) set up under the Energy Act (2004) to ensure that the UK's 19 civil public sector nuclear sites are decommissioned and cleaned up.

Our progress is monitored by the Shareholder Executive on behalf of our sponsoring department, the Department of Energy and Climate Change (DECC) who measure our performance against our Strategy and plans as well as DECC's Departmental Strategic Objective to manage the nuclear liability effectively by:

- a reduction in UK civil nuclear liabilities at least in line with agreed and published NDA business plans
- delivering minimum value for money savings on costs equivalent to 3% per annum averaged over the three year CSR period
- a reduction of the risk associated with high hazards and ensuring radioactive waste continues to be put into a passively safe form

Each of our 19 sites is operated by one of seven Site Licence Companies (SLCs) under contract to the NDA. SLCs are responsible for day-to-day operations and the delivery of site programmes. Parent Body Organisations (PBOs), selected by a competitive process, own the SLCs for the duration of their contract with the NDA.

To support delivery of our remit we:

- work to establish a safe, secure, affordable and innovative market for clean-up and decommissioning
- drive increased performance and value for money for the taxpayer
- maximise revenue from existing commercial assets and operations
- take full account of our socio-economic responsibilities
- actively engage with stakeholders

## Public Consultation Process

The Energy Act (2004) requires us to formally consult on our draft Business Plan. This year we have scheduled an eight week consultation period from 1 December 2009 to 25 January 2010.

After the consultation, we will provide a summary of what you have told us and how we have taken this into account in our planning and final document. We will then submit our Business Plan to the Secretary of State for the Department of Energy and Climate Change (DECC) and to the Scottish Ministers for their approval by 31 March 2010, before publishing our approved Business Plan.



## NDA Draft Business Plan 2010 - 2013

To let us know your views you can:

**Visit our website at:** [www.nda.gov.uk/consultations](http://www.nda.gov.uk/consultations) **Email us at:** [businessplan@nda.gov.uk](mailto:businessplan@nda.gov.uk)

**A response can also be sent by letter or using the response sheets at the back of the document to:**

NDA Business Plan Consultation  
Nuclear Decommissioning Authority  
Herds House  
Westlakes Science and Technology Park  
Moor Row  
CA24 3HU



## **Our Objectives**

### **Mission**

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.

### **Our Approach to Delivery**

Building on our experience of the last few years, we have started to group our work under the following six strategic themes:

- Site Restoration
- Business Optimisation
- Spent Fuels
- Waste Management
- Nuclear Materials
- Critical Enablers

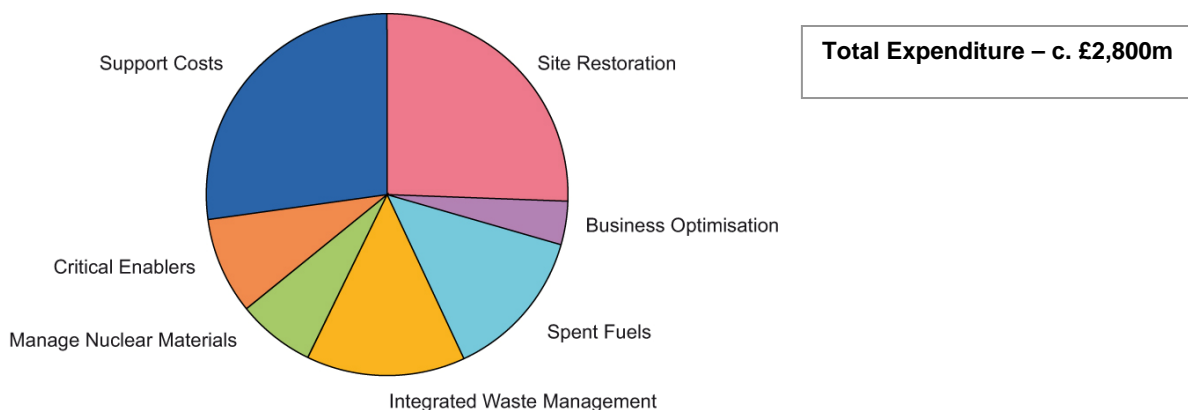
We are developing programmes of work under each of the strategic themes that will collectively cover everything we are here to deliver. Each programme of work will have clearly defined objectives, milestones and end deliverables against which performance can be measured.

This new approach means we can draw on the experience from across the entire estate to focus on new ways of tackling our priorities. This approach will help us in:

- taking a more holistic view of all our activities
- understanding the impact of different strategic scenarios, e.g. deferral or acceleration of work in certain areas
- monitoring and reporting of progress across our estate

Each of our six themes is described in more detail over the next few pages. For each theme we outline key activities and indicate what we intend to spend on each theme during the year.

### **Summary of Total Expenditure for 2010/2011 by Strategic Theme**



## Our Strategic Objectives

The areas of work covered by each of our six strategic themes translate into twenty-one key programmes of work – our 21 “Strategic Objectives”. The matrix below describes each of these objectives and illustrates their grouping by theme.

SITE RESTORATION	<p><b>Reduce hazards and liability across our estate:</b></p> <ol style="list-style-type: none"> <li>1. remediate hazardous materials from the legacy of early defence programmes and 1<sup>st</sup> generation reprocessing and waste handling facilities at Sellafield</li> <li>2. maintain infrastructure and capability across the Sellafield site to ensure ongoing safe and effective performance</li> <li>3. decommission redundant facilities at Sellafield</li> <li>4. sustain operations of key supporting plants and services at Sellafield</li> <li>5. place Magnox reactors into Care and Maintenance</li> <li>6. deliver Dounreay Site to an interim end state</li> <li>7. take Harwell and Winfrith to site closure</li> </ol>
BUSINESS OPTIMISATION	<p><b>Maximise commercial value:</b></p> <ol style="list-style-type: none"> <li>8. determine commercial future of Springfields and Capenhurst</li> <li>9. dispose of NDA assets that are no longer required</li> </ol>
SPENT FUELS	<p><b>Ensure fuel is reprocessed and managed in a safe and secure way:</b></p> <ol style="list-style-type: none"> <li>10. remediate all spent Magnox fuel to a safe and secure state</li> <li>11. maximise revenue from the reprocessing of oxide fuels</li> <li>12. place all exotic fuels into a final disposition form</li> </ol>
INTEGRATED WASTE MANAGEMENT	<p><b>Implement storage and disposal arrangements:</b></p> <ol style="list-style-type: none"> <li>13. deliver a Geological Disposal Facility (GDF)</li> <li>14. management of Low Level Waste (LLW)</li> <li>15. management of Intermediate Level Waste (ILW)</li> <li>16. management of High Level Waste (HLW)</li> </ol>
MANAGE NUCLEAR MATERIALS	<p><b>Deal with plutonium and uranium:</b></p> <ol style="list-style-type: none"> <li>17. ensure safe, secure management of plutonium stocks</li> <li>18. optimise the value realisation of uranium stocks</li> </ol>
CRITICAL ENABLERS	<p><b>Build an effective industry:</b></p> <ol style="list-style-type: none"> <li>19. establish capability within the NDA and the supply chain to deliver our mission</li> <li>20. build and maintain the confidence of our stakeholders</li> <li>21. provide national nuclear infrastructure</li> </ol>

## **Our Funding**

We are funded by a combination of direct Government funding and income from commercial operations. This means that we have to manage a degree of income volatility in order to fund our mission.

### **Commercial Income**

Income from commercial operations has always been uncertain as it relies on ageing facilities and a fragile infrastructure. As expected, this income will decline in future years as commercial operations cease and plants close and enter decommissioning. In the meantime, we will strive to maximise revenue from our existing assets and operations to help fund decommissioning and clean-up. This will include exploring options to extend the generating lives of Oldbury and Wylfa power stations, leasing property and selling land and other assets in response to market interest.

### **Direct Government Funding**

Our budget includes the highest ever level of Government spending on nuclear decommissioning. Nevertheless, there are still emerging cost pressures that need to be managed within the affordability constraints imposed by a tight fiscal environment. We will continue to address these pressures by focussing on the highest hazards and risk and by seeking to reprioritise funding where possible, while ensuring that safe, secure and environmentally responsible site operations are maintained across our estate.

As commercial income declines there will be increasing pressure for additional direct Government funding where expenditure cannot be reduced.

Direct Government funding for 2011 onwards will be agreed during the next spending review and this will be informed by the Public Value Programme (PVP) which we are currently engaging on with the Government. The PVP is expected to be complete by the time this plan is published and the final plan will reflect the outcome of PVP.

### **Planned Income and Expenditure in 2010/2011**

This draft Business Plan sets out our anticipated income and expenditure for 2010/2011 in line with the settlement agreed in the 2007 Comprehensive Spending Review but, as this is the final year of the settlement period, details for the remainder of the three year planning period have not been included.

Our total planned expenditure for 2010/2011 is £2,774 million, of which £1,708 million will be funded by Government and £1,066 million by income from commercial operations. Planned expenditure on site programmes will be £2,564 million, while non-site expenditure is expected to be £225 million. This non-site expenditure includes skills development, Research and Development (R&D), insurance and pensions costs, fees to SLCs, implementing geological disposal and NDA operating costs along with the other activities detailed in Appendix 5.

Note: The NDA is required to achieve value for money savings of at least 9% over the three year settlement period and these savings will need to be found from the planned expenditure.

## Strategic Themes and their Key Activities for 2010/2011

### SITE RESTORATION



**The aim of this theme is to reduce hazards and liability across our estate. Our priority is to remediate hazardous materials in the legacy ponds and silos at Sellafield. We will also decommission redundant facilities at Sellafield whilst maintaining the infrastructure and capability across the site to sustain the operations of key supporting plants and services. Across the rest of the estate we will place Magnox reactors into care and maintenance, deliver Dounreay site to an interim end state and take Harwell and Winfrith to site closure.**

**Approximate total planned expenditure on this theme for 2010/2011 is £710 million. Key deliverables for the year are as follows:**

Magnox Swarf Storage Silos – complete concept design and undertake building modification works for the silo direct encapsulation plant	Sellafield
First Generation Magnox Storage Pond - construct buffer tanks to enable sludge recovery	Sellafield
Complete improvement works to site electrical distribution system	Sellafield
Complete Reactor Buildings preparation for entry into Care and Maintenance	Berkeley
Complete asbestos stripping from 8 of the 16 heat exchangers	Chapelcross
Process 7.5 tonnes of Fuel Element Debris (FED)	Dungeness
Remove, package and dispose of 30 m <sup>3</sup> of asbestos	Hinkley
Complete desludging and retrieval of all Orphan wastes from Cartridge Cooling Pond	Hunterston
Install and commission Cooling Systems	Sizewell
Complete 50% of bulk destruction of sodium potassium coolant (NaK)	Dounreay
Remove designation for eastern area of site	Harwell
Complete demolition of the Eternal Active Sludge tanks	Winfrith

### BUSINESS OPTIMISATION



**The aim of this theme is to maximise commercial value from our estate. We will focus on determining a commercial future for Springfields and Capenhurst and disposing of NDA assets that are no longer required.**

**Approximate total planned expenditure on this theme for 2010/2011 is £106 million. Key deliverables for the year are as follows:**

Determine a commercial future for Springfields that offers the taxpayer best value for money	NDA
Secure a future for Capenhurst that maximises return from NDA's asset holding	NDA

**SPENT FUELS**



The aim of this theme is to ensure fuel is reprocessed and managed in a safe and secure way. We will remediate all spent Magnox fuel to a safe and secure state and place all exotic fuels into a final disposition form. We will continue to use up the existing fuel load at Oldbury and Wylfa. On oxide fuels we will continue to receive and manage fuel from British Energy and seek to maximise value from our spent fuel management contracts.

Approximate total planned expenditure on this theme for 2010/2011 is £380 million. Key deliverables for the year are as follows:

Complete removal of all spent fuel to establish a fuel free verification	Hinkley
Receive and reprocess fuel from Magnox stations in line with the MOP	Sellafield
Secure NII approval for extended generation beyond December 2010	Wylfa
Receive and manage AGR fuel from British Energy fleet	Sellafield
Generate revenue by reprocessing overseas oxide fuel	Sellafield

**INTEGRATED WASTE MANAGEMENT**



The aim of this theme is to implement storage and disposal arrangements for nuclear waste. We will provide cost effective management of waste prior to delivering a Geological Disposal Facility.

Approximate total planned expenditure on this theme for 2010/2011 is £390 million. Key deliverables for the year are as follows:

Complete Strategic Environmental Assessment (SEA) scoping report for geological disposal facility (GDF)	NDA - RWMD
Complete sanction and validation for Phase 1 of new LLW facility	Dounreay
Implementation of the Segregated Waste Services to facilitate the Waste Hierarchy	LLWR
Progress collaboration with other consignors/ SLCs to implement national solutions	LLWR
Retrieve inventory from the flocculant storage tanks and passivate	Sellafield
Safely receive, vitrify and store Highly Active Liquor (HAL) generated from Thorp and Magnox reprocessing	Sellafield

## NUCLEAR MATERIALS



The aim of this theme is to deal with plutonium and uranium. We will ensure the safe, secure management of plutonium stocks and optimise the value of uranium stocks.

Approximate total planned expenditure on this theme for 2010/2011 is £190 million. Key deliverables for the year are as follows:

Complete active commissioning of Sellafield Product Residues Store	Sellafield
Complete shipment of all Magnox Depleted Uranium (MDU) to Capenhurst	Chapelcross
Convert overseas plutonium (Pu) to MOX fuel for export	Sellafield

## CRITICAL ENABLERS



The aim of this theme is to establish capability within the NDA and the supply chain. We aim to build an effective industry to deliver our mission and support the national nuclear infrastructure. We also need to build and maintain the confidence of our stakeholders.

At present, this theme also contains support and overhead costs\*. Approximate total planned expenditure on this theme for 2010/2011 is £240 million with £760 million of support and overhead costs. Key deliverables for the year are as follows:

Develop Stakeholder Engagement Framework	NDA
Assess new opportunities for economic development and social regeneration and secure funding where criteria identified in our Socio Economic Policy have been met	NDA
Deliver Support and Overhead Cost Reduction Programme	NDA
Hold an industry event for the Dounreay Competition	NDA
Carry out a review of the NDA's organisation and implement improvements	NDA
Implement improvement to the performance of major projects across the estate	NDA

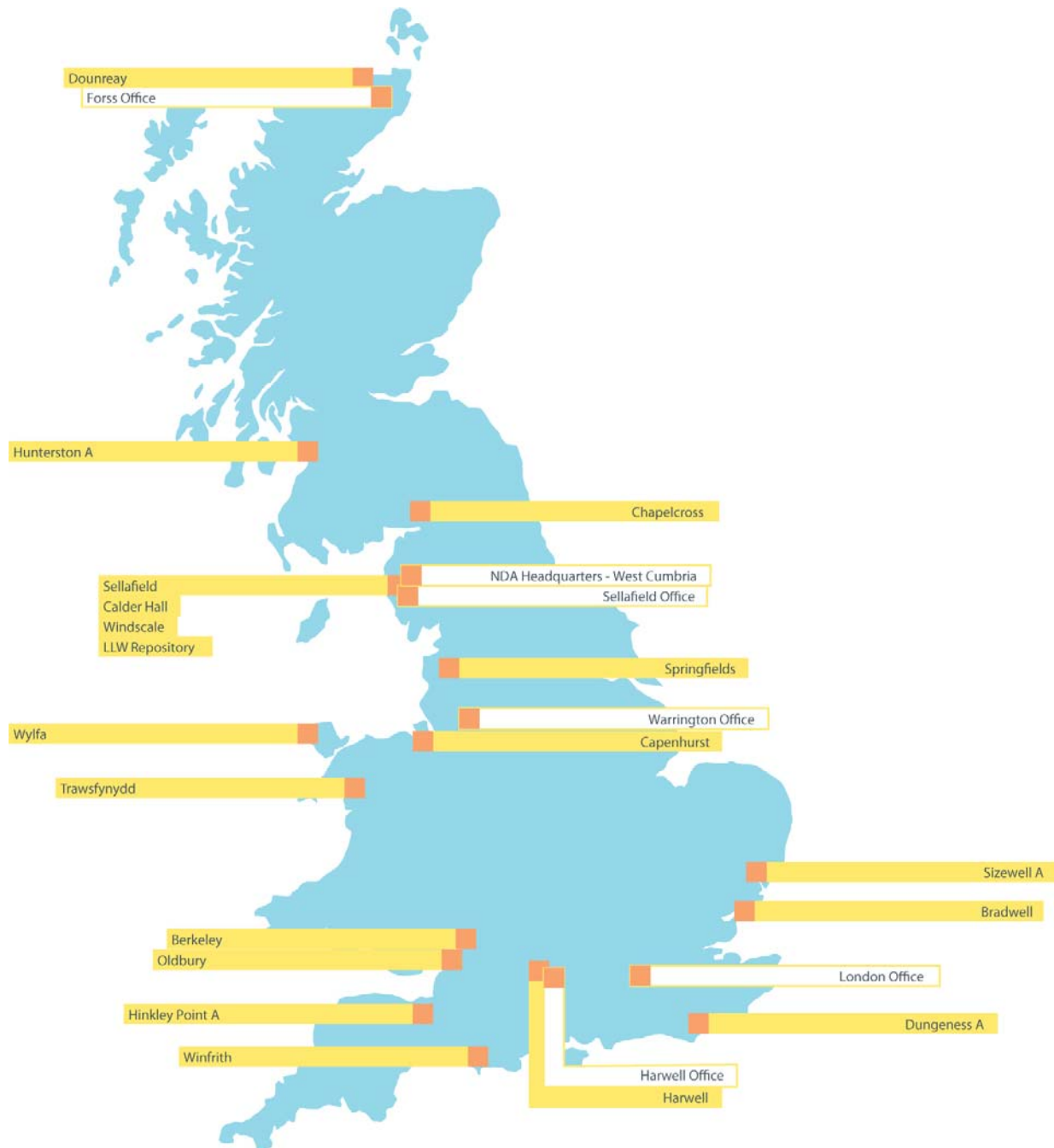
### \*Support Costs

Support costs across the NDA estate comprise those costs not directly related to projects and cover such areas as site services, general support costs and stakeholder costs. The NDA is targeting a reduction in support costs across the entire estate. This will allow us to focus spend on decommissioning and clean-up over a 3 year period commencing in 2010/2011. The reduction targets are challenging: 5% in 2010/11, 10% in 2011/2012, rising to a cumulative saving against current spend of 20% in 2012/2013.

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## Appendices

### Appendix 1 - NDA Sites Location Map



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### Appendix 2 – The Seven Site Licence Companies (SLCs)

<b>Sellafield Limited</b>		Sites	Page
<b>Parent Body Organisation</b> Nuclear Management Partners Limited (NMPL)	<b>Sellafield</b>	17	
	<b>Windscale</b>	17	
	<b>Capenhurst</b>	19	
<b>Magnox North Limited</b>		Sites	Page
<b>Parent Body Organisation</b> Reactor Sites Management Company Limited, which is owned by Energy Solutions Inc.	<b>Chapelcross</b>	20	
	<b>Hunterston A</b>	21	
	<b>Oldbury</b>	22	
	<b>Trawsfynydd</b>	23	
	<b>Wylfa</b>	24	
	<b>Magnox North Support Office</b>	25	
<b>Magnox South Limited</b>		Sites	Page
<b>Parent Body Organisation</b> Reactor Sites Management Company Limited, which is owned by Energy Solutions Inc.	<b>Berkeley</b>	26	
	<b>Bradwell</b>	27	
	<b>Dungeness A</b>	28	
	<b>Hinkley Point A</b>	29	
	<b>Sizewell A</b>	30	
	<b>Magnox South Support Office</b>	31	
<b>Dounreay Sites Restoration Limited</b>		Site	Page
<b>Parent Body Organisation</b> United Kingdom Atomic Energy Authority Limited (UKAEA Limited).	<b>Dounreay</b>	32	
<b>Research Sites Restoration Limited</b>		Sites	Page
<b>Parent Body Organisation</b> United Kingdom Atomic Energy Authority Limited (UKAEA Limited).	<b>Harwell</b>	34	
	<b>Winfrith</b>	35	
<b>Low Level Waste Repository Limited</b>		Site	Page
<b>Parent Body Organisation</b> UK Nuclear Waste Management Limited.	<b>LLW Repository</b>	36	
<b>Springfield Fuels Limited</b>		Site	Page
<b>Parent Body Organisation</b> Westinghouse Electric UK Limited, which is part of the Toshiba Group	<b>Springfields</b>	38	



**Appendices**

**Appendix 3 – Site Summaries**

The following pages outline planned activities for all of our sites.

**Sellafield (including Calder Hall and Windscale)**

Sellafield is a large and complex nuclear chemical facility located in West Cumbria. The site has played a pivotal role within the nuclear industry since the 1940s. Site operations include fuel reprocessing, fuel fabrication and storage of nuclear materials and radioactive wastes. Calder Hall, located on the site, was the world’s first commercial nuclear power station. Generation started in 1956 and ceased in 2003. Windscale, also located on the site, comprises three reactors. Two of the reactors were shut down in 1957 and the third one was closed in 1981. Substantial damage by fire to one of the reactors in 1957 has created significant additional decommissioning challenges.

**Planned expenditure for 2010/2011 – c. £1,200 million**

The Sellafield Life Time Plan (LTP) is in the process of being rebuilt. This includes a review of all dates, outputs and quantities. More detailed information, including milestones for each project, will be available towards the end of January 2010. There may, therefore, be significant changes to the information given below. More detailed performance indicators will become available following this review.

Each of the key activities identified at Sellafield will run throughout the three years of the Business Plan.

**2010 - 2013 Key Activities**

**Description of Activities, Milestones or Performance Indicators**

<p>SITE RESTORATION</p>	<p>Continue preparations for retrieval of the inventory</p> <p>Magnox Swarf Storage Silos – complete concept design and undertake building modification works for the silo direct encapsulation plant</p> <p>Pile Fuel Cladding Silo - deliver concept design for the retrievals plant</p> <p>First Generation Magnox Storage Pond - construct buffer tanks to enable sludge recovery</p> <p>Primary Separation Head End Plant – construct the Separation Area Ventilation Plant to facilitate removal of the stack</p> <p>Complete improvement works to site electrical distribution system</p> <p>Retrieve and store sludges from the Pile Fuel Storage Pond</p> <p>Continue programme of asset care to ensure that ageing infrastructure of plant and buildings remains safe</p> <p>Ongoing decommissioning and demolition of redundant facilities</p>
<p>SPENT FUELS</p>	<p>Receive and reprocess fuel from Magnox stations in line with the Magnox Operating Programme (MOP)</p> <p>Receive and reprocess fuel from British Energy</p>

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	Generate revenue by reprocessing overseas oxide fuel
INTEGRATED WASTE MANAGEMENT	<p>Receive, vitrify and store Highly Active Liquor (HAL) generated from Thorp and Magnox reprocessing</p> <p>Export a portion of the vitrified HAL to overseas customers</p> <p>Ongoing waste treatment activities to support both commercial operations and decommissioning</p> <p>Commission the Encapsulated Product Store</p> <p>Construct Evaporator D to provide additional evaporative capacity</p> <p>Retrieve inventory from the flocculant storage tanks and passivate</p>
MANAGE NUCLEAR MATERIALS	<p>Sellafield MOX Plant – Convert overseas plutonium (Pu) to MOX fuel for export and progress options for future contracts</p> <p>Complete active commissioning of Sellafield Product Residues Store</p> <p>Continue the safe storage of uranium</p>
CRITICAL ENABLERS	<p><b>Sellafield Integrated Change Programme (ICP)</b></p> <p>Deliver the ICP improvement programme through a number of work-streams. Each work-stream will target different improvement areas with the overall aim of accelerating hazard and risk reduction over the mid term. Work streams include:</p> <ul style="list-style-type: none"> <li>• effective working, resource mobility</li> <li>• project delivery improvements</li> <li>• support service efficiency</li> <li>• production optimisation</li> </ul> <p>Commence scenario planning and funding profiling to support the NDA with Strategy Development and readiness for the next Comprehensive Spending Review</p>

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisations for:

- environmental discharges
- decommissioning and demolition

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### Capenhurst

Capenhurst is located near Ellesmere Port in Cheshire. It was home to a uranium enrichment plant and associated facilities that ceased operation in 1982. The main focus for the site during this plan period is to complete waste disposals to the Low Level Waste Repository (LLWR).

Planned expenditure for 2010/2011 – c. £20 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	Complete waste disposals to the Low Level Waste Repository (LLWR)
INTEGRATED WASTE MANAGEMENT	Continue to process uranic residues Continue to process legacy uranium hexafluoride bottles
MANAGE NUCLEAR MATERIALS	Continue the safe storage of uranium

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisation for:

- environmental discharges

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Demolish the incinerator, subject to future requirements
INTEGRATED WASTE MANAGEMENT	Continue to process uranic residues Continue to process legacy uranium hexafluoride bottles
MANAGE NUCLEAR MATERIALS	Continue the safe storage of uranium

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### Chapelcross

Chapelcross power station is located near Dumfries in South West Scotland. Electricity generation started in 1959 and ceased in June 2004. Following completion of the fuel route commissioning, defuelling commenced in 2009 and is planned to be complete in 2012. Work continues to prepare the site for entry into Care and Maintenance which is currently planned for 2022.

Activity in the period is focussed on the completion of defuelling and the actions associated with Care and Maintenance preparations.

Planned expenditure for 2010/2011 – c. £50 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	Complete asbestos stripping from 8 of the 16 heat exchangers Retrieve and dispatch 54 flasks of stainless steel waste to Sellafield
SPENT FUELS	Continue spent fuel removal in line with the MOP
MANAGE NUCLEAR MATERIALS	Complete shipments of Magnox depleted uranium to Capenhurst

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisations for:

- environmental discharges
- defuelling, decommissioning and demolition

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Continue asbestos removal from heat exchangers and turbine hall Demolish Graphite Handling Facility Design ILW retrieval and storage facilities Complete retrieval of stainless steel waste and dispatch to Sellafield Reduce site LLW inventory
SPENT FUELS	Complete reactor defuelling in line with MOP

## Appendices

### Hunterston A

Hunterston A power station is located in Ayrshire in South West Scotland. Electricity generation started in 1964 and ceased in 1989. Work continues to prepare the site for entry into Care and Maintenance which is planned for 2020. The reactor buildings temporary weather barrier is due to be completed during early 2010.

Activity in the plan period is focussed on completion and commissioning of the ILW store, solid and liquid ILW retrieval and the actions associated with Care and Maintenance preparations.

Planned expenditure for 2010/2011 – c. £50 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

#### SITE RESTORATION

Complete inactive commissioning of ILW Solid Waste Retrieval plant and equipment  
Complete Strategic Review, including BPEO assessment, for Solid ILW Encapsulation  
Complete bulk desludging (31 m<sup>3</sup>) and retrieval of all Orphan Wastes from Cartridge Cooling Pond

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisations for:

- environmental discharges
- decommissioning

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

#### SITE RESTORATION

Active commissioning of the ILW Solid Waste Retrieval plant  
Commence draining of Cooling Pond  
Decontaminate and seal the Pond wall  
Active commissioning of the ILW Liquid Waste Retrieval and Encapsulation Plant  
Active commissioning of the ILW Store

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### Oldbury

Oldbury power station is located in South Gloucestershire. Electricity generation started in 1967 and approval has been secured to extend its operational life to mid 2011. Work is progressing to prepare the site for defuelling which is due to be carried out between 2011 & 2014, with entry into Care and Maintenance planned for 2027.

Activity in the period is focussed on continued generation and the actions associated with preparations for the transition to the start of defuelling.

Planned expenditure for 2010/2011 – c. £70 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SPENT FUELS	Dispatch spent fuel flasks to Sellafield in line with the agreed quarterly flask schedule (annual forecast for all Magnox North sites is 183 flasks) Generate 0.49 TWh of electricity
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### 2010/2011 Regulatory Matters

Post Operation Defuelling Safety Case (PODSC) implementation

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Complete phase 1 delicensing
SPENT FUELS	Nuclear Installations Inspectorate (NII) agreement to Post Operation Defuelling Safety Case Reactor defuelling in line with the MOP
CRITICAL ENABLERS	Commence organisational change programme for decommissioning

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### Trawsfynydd

Trawsfynydd power station is located at Trawsfynydd in Gwynedd, North Wales. Electricity generation started in 1965 and ceased in 1991. Reactor defuelling was completed in 1995. The site continues to prepare for entry into Care and Maintenance planned for 2021, with the completion in 2009 of the recovery of bulk material from the Miscellaneous Activated Components vaults and the relocation of the boiler sections.

Activity in the period is focussed on ILW retrieval and transportation to the recently constructed ILW store.

Planned expenditure for 2010/2011 – c. £55 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

#### SITE RESTORATION

Complete Reactor 1 North Capping roof  
Complete Reactor 2 South Capping roof  
South Fuel Element Debris (FED) retrieval - transport Box 15 to ILW store

### 2010/2011 Regulatory Matters

Safestore height reduction – confirm Best Practicable Environmental Option (BPEO) for Height Reduction project  
License instrument in support of Periodic Safety Review Report

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

#### SITE RESTORATION

Continue solid and liquid ILW retrieval and plant decontamination  
Review the Height Reduction Project  
Complete safestore capping roofs construction  
Continue transferral of waste packages to the ILW store  
Complete construction and inactive commissioning of FED Plant

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### Wylfa

Wylfa power station is located on Anglesey in North Wales. Electricity generation started in 1971 and following extension approval during 2009, is currently planned to cease in December 2010. Defuelling is planned to take place between 2011 and 2015 with entry to Care and Maintenance planned for 2025.

Activity in the plan period is focussed on continued generation, the exploration of the extension of the operational life and the actions associated with preparations for defuelling.

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.

Planned expenditure for 2010/2011 – c. £100 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SPENT  
FUELS

Dispatch spent fuel flasks to Sellafield in line with the agreed quarterly flask schedule (annual forecast for all Magnox North sites is 183 flasks)

Complete Dry Store Cell 4: Damaged Element Recovery Project

Generate 3.06 TWh of electricity up to December 2010

### 2010/2011 Regulatory Matters

NII engagement and acceptance of extended generation at the site

Safety case approvals for Dry Store Cell 4: Damaged Element Recovery Project

Post Generation Defuelling Safety Case (PGDSC) development

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SPENT  
FUELS

Continue electricity generation (subject to approval)

Transport fuel to Sellafield in line with MOP requirements

Reactor defuelling in line with MOP

Return to service of Dry Store Cell 4



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### Magnox North Support Office

Provides management oversight to the Magnox North Sites.

Planned expenditure for 2010/2011 – c. £25 million

### 2010 - 2013 Key Activities

#### Description of Activities

CRITICAL  
ENABLERS

Deliver the Magnox North resource strategy  
Implement the Magnox North Business Improvement Plan  
Support the NDA with scenario planning and funding profiling in readiness for the next Comprehensive Spending Review

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### Berkeley

Berkeley power station is located in Gloucestershire. Generation started in 1962 and ceased in 1989 with defuelling completed in 1992. Work continues to prepare the site for entry into Care and Maintenance which is currently planned for 2026.

Activity in the plan period is focussed on progressing the solution for ILW treatment and other actions associated with entry to Care and Maintenance.

Planned expenditure for 2010/2011 – c. £20 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE  
RESTORATION

Prepare Reactor Buildings for entry into Care and Maintenance  
Progress solution for ILW treatment

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisations for:

- environmental discharges
- decommissioning activities

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE  
RESTORATION

Progress solution for ILW treatment

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### Bradwell

Bradwell power station is located in Essex. Electricity generation started in 1962 and ceased in 2002 with defuelling completed in 2006. Work continues to prepare the site for entry into Care and Maintenance which is planned for 2027.

Activity in the plan period is focussed on ILW treatment and ponds decommissioning as part of the preparation for Care and Maintenance.

Planned expenditure for 2010/2011 – c. £40 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE  
RESTORATION

Commence Pond decommissioning  
Complete Gate 2 review of feasibility studies and preparation of design for the Wet and Solid Waste Retrieval and Processing Facilities  
Progress solution for ILW treatment

### 2010/2011 Regulatory Matters

Regulatory oversight of the preparation and design of the wet and solid waste activities

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

SITE  
RESTORATION

Continue Pond decommissioning  
Progress design and construction of the Wet and Solid Waste Retrieval Facility  
Commence Turbine Hall decommissioning  
Commence removal of plant from the Reactor Building  
Progress ILW treatment

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### Dungeness A

Dungeness A power station is located in Kent. Electricity generating started in 1965 and ceased in December 2006. Reactor defuelling commenced in 2007 and is scheduled to be completed by 2012. Entry to Care and Maintenance is currently planned for 2034.

Activity in the period is focussed on the completion of reactor defuelling, followed by the establishment of fuel free verification and the continuation of programmes associated with Care and Maintenance preparations.

Planned expenditure for 2010/2011 – c. £40 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	Complete installation of Electrical Overlay System (EOS) and isolate the station transformers so that power is then supplied to the site from the EOS Process 7.5 tonnes of Fuel Element Debris (FED) Progress FED dissolution
SPENT FUELS	Continue spent fuel removal in line with the MOP

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of defuelling and decommissioning activities

Regulatory consideration of revised arrangements for compliance with site licence conditions

Removal of reliance upon obsolete Turbine Hall power supplies through EOS

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Assess work for the removal of asbestos from the Boiler House and Turbine Hall Complete characterisation of the site Carry out assessment work to treat ILW at the site Complete FED dissolution through the Magnox Dissolution Plant
SPENT FUELS	Complete spent fuel removal in line with the MOP

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### Hinkley Point A

Hinkley Point A Power Station is located in Somerset. Electricity generation started in 1965 and ceased in 2000, with defuelling completed in 2004. Entry to Care and Maintenance is currently planned for 2031.

Activity in the plan period is focussed on the decommissioning of the ponds, the progression of ILW treatment and other actions associated with preparation for entry into Care and Maintenance.

Planned expenditure for 2010/2011 – c. £40 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	Implement priority activities identified in site Asset Management Plan Remove, package and dispose of 30 m <sup>3</sup> asbestos Continue decommissioning of the cooling ponds and complete skip processing
SPENT FUELS	Remove all fuel off site in line with the MOP to establish a fuel free verification

### 2010/2011 Regulatory Matters

Complete Licence Condition 35 Milestone #1 – all fuel off site

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Continue decommissioning of cooling ponds Continue removal, packaging and disposal of asbestos Complete final off-site treatment/disposal of bulk asbestos Implement priority activities identified in the Asset Management Plan Progress solution for ILW treatment facilities
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### Sizewell A

Sizewell A power station is located in Suffolk. Electricity generation started in 1966 and ceased in December 2006. Defuelling commenced in 2007 and is planned to be completed in 2013, with entry to Care and Maintenance planned for 2034.

Activity in the period is focussed on the completion of defuelling and the actions associated with Care and Maintenance preparations.

Planned expenditure for 2010/2011 – c. £45 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	Install and commission Cooling Systems Commence feasibility studies for treatment of ILW
SPENT FUELS	Continue spent fuel removal in line with the MOP

### 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisations for:

- environmental discharges
- decommissioning

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Complete installation of water and alternative demineralised water supplies Continue removal, packaging and disposal of asbestos Progress ILW treatment solution
SPENT FUELS	Continue removal of spent fuel in line with MOP requirements Complete Defuelling Programme to achieve Fuel Free Verification

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### Magnox South Support Office

Magnox South Support Office provides management oversight to the Magnox South sites.

Planned expenditure for 2010/2011 – c. £35 million

### 2010 - 2013 Key Activities

#### Planned Activities

CRITICAL  
ENABLERS

Continue work on the Decommissioning Strategies project which is looking at developing and implementing technical solutions to waste management that optimise hazard reduction  
Support the NDA with scenario planning and funding profiling in readiness for the next Comprehensive Spending Review

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### Dounreay

Dounreay is located in Caithness on the north coast of Scotland. It was established as a research site in the mid-1950s with fuel production and processing facilities. There were three reactors, the last of which ceased operation in 1994.

Radioactive sodium potassium (NaK) liquid metal is the most hazardous material present on the site. The destruction of this material began in 2008 and is scheduled to be completed by 2012. The other main focus for the site during this reporting period is to prepare for the competition of the PBO, which is due to be completed in 2012.

Planned expenditure for 2010/2011 – c. £170 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	<p>Complete integration and active commissioning of Fuel Cycle Area ventilation system</p> <p>Complete active commissioning of new rationalised ventilation system at Prototype Fast Reactor (PFR)</p> <p>Complete 50% of bulk Sodium Potassium (NaK) destruction at Dounreay Fast Reactor (DFR)</p> <p>Complete Reactor projects amalgamation programme</p> <p>Optimise Lifetime Plan (LTP) to improve hazard reduction focus and integrated support</p>
INTEGRATED WASTE MANAGEMENT	<p>Complete sanction and validation for Phase 1 of new LLW facility</p> <p>Complete enabling work for the shaft and silo waste treatment plant</p> <p>Commence scheme design for the shaft and silo waste treatment plant</p> <p>Complete Phase 4 Pre Construction Safety Case Review design of Remote Handling Intermediate Level Waste (RHILW) immobilisation and encapsulation facility</p> <p>Encapsulate 100 m<sup>3</sup> of highly active liquors in cement at the Cementation Plant (DCP)</p> <p>Continue immobilisation, encapsulation and storage of wastes through Dounreay</p>
MANAGE NUCLEAR MATERIALS	<p>Commence removal of irradiated sub-assemblies from PFR Pond</p>
CRITICAL ENABLERS	<p>Continue to progress the Project Management Improvement Programme and Dounreay Management Plan to drive business improvements</p> <p>Work collaboratively with other SLCs' to achieve early offsite transfer of fuels and to share approaches to decommissioning and portfolio management</p> <p>Commence scenario planning and funding profiling in advance of Comprehensive Spending Review (CSR) demands to assist NDA estate wide rationalisation</p>



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### 2010/2011 Regulatory Matters

- Submit EURATOM Article 37 for LLW facility for consideration
- Explore NII barriers and threats methodology for safety case production to align with low consequence decommissioning approach
- Enhance technical readiness and engineering governance of existing site arrangements
- Progress RSA Authorisation for LLW facility
- Complete Phase 3 of the Environmental Improvement Programme and secure Scottish Environment Protection Agency (SEPA) approval
- Deliver programme improvements for adoption of the gaseous RSA Authorisation

### 2011- 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	<ul style="list-style-type: none"> <li>Commence preparations for the removal of Breeder Fuel from DFR</li> <li>Complete grouting of redundant sub sea effluent discharge pipeline and diffuser</li> <li>Complete strip out and decontamination of Post Irradiation Experimentation facility cave structure</li> <li>Commence cleaning and decommissioning of redundant D1209 duct.</li> <li>Continue safe bulk NaK destruction at DFR until programme completion</li> <li>Commence offsite transfer of de-clad breeder fuel from Fuel Cycle Area</li> <li>Drain and decontaminate DFR Pond ready for demolition</li> <li>Demolish Materials Test Reactor (MTR) fuel reprocessing facility to floor slab level</li> <li>Demolish post irradiation examination facility to floor slab level</li> <li>Demolish redundant active laundry to floor slab level</li> <li>Start operation of new site active laboratory replacing D1200 facility</li> <li>Complete next phase of offshore particle retrieval and coverage programme</li> <li>Demolish redundant D1207 LLW facility to slab level</li> </ul>
SPENT FUELS	<ul style="list-style-type: none"> <li>Commence removal of irradiated fuel sub-assemblies from PFR Pond</li> <li>Continue to liaise with other SLCs to ensure early offsite transfer of fuels to mitigate the long term requirements for onsite storage and security</li> </ul>
INTEGRATED WASTE MANAGEMENT	<ul style="list-style-type: none"> <li>Commence construction of the new Remote Handling Intermediate Level Waste (RHILW) immobilisation, encapsulation and storage facility</li> <li>Complete enabling works and scheme design for Shaft and Silo Waste Treatment Plant</li> <li>Start construction of Phase 1 of new LLW facility</li> </ul>

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### Harwell

Harwell is located in Oxfordshire and was established in 1946 as the UK's first atomic energy research establishment. The majority of the facilities ceased operation in the early 1990s and decommissioning has been ongoing since then with over 100 buildings and facilities removed from the site. The focus for the site during this reporting period is on the recovery and repackaging of historic waste and the safe custody of the remaining facilities.

Planned expenditure for 2010/2011 – c. £40 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE RESTORATION	Remove designation for eastern area of site Recover 600 cans of legacy ILW from the tube stores
INTEGRATED WASTE MANAGEMENT	Continue recovery, processing and packaging of solid ILW

### 2010/2011 Regulatory Matters

Secure agreement for decommissioning programme  
Secure agreement to delicense the eastern area of site

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Care and maintenance of redundant reactors and other facilities
INTEGRATED WASTE MANAGEMENT	Recover, process and package solid ILW

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### Winfrith

Winfrith is located near Poole in Dorset. It was established by UKAEA in 1957 as an experimental reactor research and development site. Decommissioning activities began in the early 1990s and the last reactor was shut down in 1995. All the nuclear fuel and the majority of hazards have now been removed from the site. During the reporting period the site will be focussing on completing some outstanding decommissioning work and ensuring the safe custody of the remaining facilities.

Planned expenditure for 2010/2011 – c. £20 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

SITE  
RESTORATION

Complete demolition of the External Active Sludge tanks  
Complete demolition of the Waste Encapsulation Treatment Plant (WETP)

### 2010/2011 Regulatory Matters

Secure agreement for decommissioning programme

### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE  
RESTORATION

Care and maintenance of redundant reactors and other facilities

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### Low Level Waste Repository

The Low Level Waste Repository (LLWR) is located near Drigg in West Cumbria. The site has operated as a disposal facility since 1959 and remains of strategic importance to all producers of low level nuclear waste (including hospitals and research laboratories) across the UK.

UK Nuclear Waste Management Limited were awarded the PBO contract for LLWR Ltd in March 2008 and since then site activities have focussed on the construction of vault 9, preparation of the Environmental Safety Case and development of the National LLW Strategy. The focus for the site during this plan period will be on the implementation of the National LLW Strategy as well as continuing to develop innovative waste management solutions.

Planned expenditure for 2010/2011 – c. £35 million

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

INTEGRATED WASTE MANAGEMENT	<ul style="list-style-type: none"><li>Final refinement of the Environmental Safety Case prior to submission to EA in May 2011</li><li>Initiate a project to significantly improve LLW waste forecasts across the estate</li><li>Implement Segregated Waste Services to facilitate the Waste Hierarchy and make available to all consigners including metals treatment, combustible waste management and Very Low Level Waste (VLLW) disposal</li><li>Report to Cumbria County Council in line with Vault 9 planning consent to demonstrate diversion of waste through the Segregated Waste Services</li><li>Complete Post Operational Clean Out (POCO) of secondary Plutonium Contaminated Material (PCM) facilities</li><li>Implement new consignor contracts</li><li>Introduce new LLW packaging containers for improved efficiency</li><li>Collaborate with other consignors/SLCs to implement national solutions</li></ul>
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### 2010/2011 Regulatory Matters

Maintain a positive, close working relationship with the Environment Agency to secure approval of the Environmental Safety Case

Work with the planning authorities to explore the viability of expanding the life of the Repository

Engage the planning authorities to review the planning condition placed on the demolition of the PCM facilities

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### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

#### INTEGRATED WASTE MANAGEMENT

Submit Environmental Safety Case (ESC) to EA (EA to complete their review of the ESC during this period)

Implement 54 LLW innovation initiatives

Continue to work collaboratively with consignors/SLCs

Decommission PCM facilities ready for demolition

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### Springfields

Springfields is a nuclear fuel manufacturing site and is located near Preston in Lancashire. The site manufactures a range of fuel products for both UK and international customers.

Planned expenditure for 2010/2011 – c. £355 million

### 2011 - 2013 Key Activities

#### Description of Activities including Milestones or Performance Indicators

<p>BUSINESS OPTIMISATION</p>	<p>The NDA is in advanced discussions with Westinghouse over a deal that would provide excellent value for money for the taxpayer whilst also providing Westinghouse and the Springfields' workforce with the opportunity to develop future business opportunities</p> <p>Transfer the commercial business and staff from the NDA to Westinghouse</p> <p>Negotiate a long lease providing an income stream to the NDA</p> <p>Defer site closure to reduce NDA decommissioning spend on in the near term with no increase in NDA liability</p> <p>Westinghouse to assume liabilities arising after the date of transfer while the NDA will retain historic liabilities</p> <p>Westinghouse to have the freedom to invest in the site enabling them to develop a long term employment opportunity</p>
<p>MANAGE NUCLEAR MATERIALS</p>	<p>The NDA will continue to focus on the processing of historic residues and the decommissioning of redundant facilities, a key focus of which will be the removal of the Magnox fuel line facilities</p> <p>Westinghouse will ensure that Springfields Fuels Ltd continues to honour customer contracts for AGR fuel supply, uranium hexafluoride and uranium dioxide products for UK and overseas customers</p> <p>Westinghouse will continue to develop the business opportunities for the site</p> <p>Honour customer contracts for AGR fuel supply, uranium hexafluoride and uranium dioxide products for UK and Overseas customers</p> <p>Westinghouse will continue to develop the business opportunities for the site</p>

### 2010/2011 Regulatory Matters

Springfields Fuels Limited and the NDA are working closely with the regulators to ensure that a smooth transition is achieved through the change in contractual arrangements at Springfields.

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### 2011 - 2013 Planned Key Site Activities

#### Planned Activities

SITE RESTORATION	Continue the Post Operational Close Out (POCO) and decommissioning of redundant areas
BUSINESS OPTIMISATION	Continue commercial manufacturing activities as described previously
MANAGE NUCLEAR MATERIALS	Continue to clear uranic residues in the enriched uranium recovery plant

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### Appendix 4 - NDA Summary (including Radioactive Waste Management Directorate)

#### Nuclear Decommissioning Authority

Following approval of the Energy Act in July 2004, the assets and liabilities of all the sites included in this Business Plan were transferred to the NDA on 1 April 2005. Our remit has subsequently been widened to include the management of higher activity radioactive wastes. The NDA has seven offices located across the UK with its HQ in Cumbria. (see Appendix 1)

With the delivery of the decommissioning and clean-up programme in the hands of NDA's contractors, the Site Licence Companies, the NDA operates as a strategic authority. Our role is to:

- develop strategies for the delivery of our mission
- manage competitions to ensure that the capabilities of the SLCs are enhanced and developed
- ensure that our strategies are implemented effectively

Our direction setting work falls largely into the following areas:

- developing specific, implementable strategies (many on complex policy related matters such as the disposition of plutonium)
- running of Parent Body Organisation Competitions
- ensuring that the capabilities our sector needs to succeed are in place.

Through our oversight of the entire NDA estate we identify opportunities for improvement and work with our SLCs and others to bring these to fruition using contractual incentivisation where necessary.

Part of our role is also to share best practice and to engage with stakeholders, including affected communities, on the work we are doing and the effect it has on them.

Our focus areas during the period of this plan are Hazard Reduction; Operational Effectiveness and the reduction of Support and Overhead costs; Developing strategies and alternative options to improve robustness of our delivery; and improving the performance of major projects and operations. These focus areas are reflected not only in the deliverables below, but in the SLC deliverables that we have identified for this plan.

#### 2010/2011 Key Activities

##### Description of Activities including Milestones or Performance Indicators

SITE RESTORATION	<p>Complete draft Decommissioning and Clean-Up topic strategy by June 2010</p> <p>Complete draft Land Quality Management topic strategy by June 2010</p> <p>Complete draft Site End States topic strategy by June 2010</p>
BUSINESS OPTIMISATION	<p>Secure a future for Capenhurst that maximises return from NDA's asset holding</p> <p>Determine a commercial future for Springfields that offers optimal value to the taxpayer</p>
SPENT FUELS	<p>Complete draft Oxide Fuel topic strategy by June 2010</p> <p>Complete draft Magnox Fuel topic strategy by June 2010</p> <p>Complete draft Exotic Fuel topic strategy by June 2010</p>



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<p>INTEGRATED WASTE MANAGEMENT</p>	<p>Complete draft Integrated Waste Management topic strategy by June 2010 Complete draft Low Level Waste topic strategy by June 2010 Complete draft Higher Activity Waste topic strategy by June 2010</p>
<p>MANAGE NUCLEAR MATERIALS</p>	<p>Complete draft uranic topic strategy by June 2010</p>
<p>CRITICAL ENABLERS</p>	<p>Host an Industry Event for the Dounreay Competition by July 2010 Carry out a review of the NDA's organisational effectiveness and implement improvements Deliver Support and Overhead Cost Reduction Programme Develop Stakeholder Engagement framework:</p> <ul style="list-style-type: none"> <li>• implement a new UK-wide programme of stakeholder engagement</li> <li>• review estate-wide communications and stakeholder engagement capability</li> <li>• develop stakeholder engagement plans that involve the SLC communications teams as partners</li> </ul> <p>Continue to actively support the agencies and organisations that are accountable for economic development and social regeneration. Specifically we will:</p> <ul style="list-style-type: none"> <li>• assess new opportunities and provide funding where criteria identified in our Socio Economic Policy have been met. Funding may either come directly from the NDA or via the SLCs</li> <li>• support priorities identified by the development organisations, including inward investment opportunities, creation of local jobs and skills development</li> </ul>

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### NDA - Radioactive Waste Management Directorate (RWMD)

Government has made the NDA the implementing organisation, responsible for planning and delivering the geological disposal facility. The NDA's Radioactive Waste Management Directorate (RWMD) is currently running this programme. RWMD is being developed into a competent delivery organisation which is capable of applying for and holding regulatory permissions. In due course, it is intended that RWMD will be established as a wholly owned NDA subsidiary Site Licence Company (SLC).

The programme to deliver geological disposal and provide radioactive waste management solutions covers the following objectives:

- support Government in their Managing Radioactive Waste Safely programme
- develop the specification, design, safety case and environmental and sustainability assessments for the disposal system and obtain regulatory support
- in conjunction with waste producers, identify and deliver solutions to optimise the management of higher activity waste
- develop and maintain an effective organisation and secure resources to deliver the geological disposal facility programme
- obtain and maintain stakeholder support for our activities
- deliver a focused R&D programme to support geological disposal and optimised packaging solutions

We will work closely with communities to deliver geological disposal and we will continue to develop our stakeholder relationships.

### 2010/2011 Key Activities

#### Description of Activities, Milestones or Performance Indicators

#### INTEGRATED WASTE MANAGEMENT

Development of a Geological Disposal Facility (GDF):

- Prepare a peer reviewed generic Disposal System Safety Case (DSSC) by September 2010
- Deliver plans to implement the Public and Stakeholder Engagement & Communications Strategy
- Develop RWMD's project delivery capability as a basis for continued development in subsequent years
- Deliver a robust R&D programme to address uncertainties in the generic DSSC (including issues associated with new build wastes) and engineering design of a GDF

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### Appendix 5 – 2010/2011 Planned Income and Expenditure Summary

£m		Decomm & Clean-up Costs	Total Operations Costs		Total Cost D	2009/2010 Plan
Sites		A	Running Cost B	Capex C	(A+B+C)	
<b>Magnox South Limited</b>	Berkeley	20			20	40
	Bradwell	36			36	30
	Dungeness A	40			40	37
	Hinkley Point A	38			38	36
	Sizewell A	44			44	38
	Magnox South Support	33			33	32
<b>Magnox North Limited</b>	Chapelcross	53			53	55
	Hunterston A	47			47	47
	Oldbury	1	61	5	67	79
	Trawsfynydd	56			56	50
	Wylfa	1	97	1	99	95
	Magnox North Support	25			25	21
<b>Electricity Trading</b>	Electricity Trading		52		52	58
<b>Research Sites Restoration Ltd</b>	Harwell and Winfrith	62			62	60
<b>Dounreay Site Restoration Ltd</b>	Dounreay	166			166	157
<b>Sellafield Ltd</b>	Sellafield and Calder Hall	512	453	226	1,191	1,175
	Capenhurst	19			19	19
	Windscale	23	9		32	32
<b>LLWR Ltd</b>	LLWR	34			34	37
<b>Springfields Fuels Ltd</b>	Springfields	137	207	13	357	328
<b>Nuclear Transport and Contract Management</b>	International Nuclear Services		78		78	78
<b>Non-site expenditure</b>		226			226	284
<b>TOTAL</b>		<b>1,572</b>	<b>957</b>	<b>225</b>	<b>2,774</b>	<b>2,789</b>
<b>Income</b>					<b>1,066</b>	<b>1,156</b>
<b>Net</b>					<b>1,708</b>	<b>1,633</b>

#### Notes:

1. The numbers may not cast exactly due to rounding (all have been rounded to nearest million)
2. Final ASFLs issued in March 2010 may be adjusted to reflect efficiency performance
3. Figures are based on the CSR07 Settlement, actual income may be impacted by changes in forecasts, plant performance, energy prices and emerging pressures
4. Sellafield funding is currently being reviewed in line with revised LTP10 Build

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### 2010/2011 Breakdown of Non-Site Expenditure

Non-Site Expenditure	2010/2011	2009/2010
NDA operating costs	62.5	66.1
Radioactive Waste Management Directorate (RWMD)	21.4	21.4
Socio-economic	5.0	10.0
Skills development	2.6	6.16
Research and development	20.0	33.9
Insurance	27.0	25.0
Pension costs	3.8	39.8
National archive	2.0	2.0
Contractor fees	81.2	81.4
<b>Total</b>	<b>225.5</b>	<b>285.7</b>

# NDA Draft Business Plan 2010 – 2013

## Appendices

### Appendix 6 - NDA Subsidiary Companies

The NDA has a number of subsidiary companies to manage a range of business interests. The following section describes the planned activities for our key operating subsidiaries for the next three years.

#### Direct Rail Services Limited

Direct Rail Services (DRS) Limited was established in 1995 to provide a rail transport service to British Nuclear Fuels Limited (BNFL), its parent company at the time. The key focus for DRS over the next three years is to grow profitably in all strategically identified markets with particular focus on supplying safe, secure and reliable services to the nuclear transport market.

#### 2011 - 2013 Key Activities

Continue to support all NDA facing activities in order to remain the supplier of choice in the nuclear industry and secure DRS' position as leader in the nuclear rail transport market

Identify new business opportunities in the following areas:

- Domestic and specialists freight
- Network Rail
- Passenger and Charter business
- Third Party Maintenance/Resource Hire

Public Relations – Continue to raise the company profile through proactive marketing and communication activities for all business sectors and to all key stakeholders

#### International Nuclear Services Limited

International Nuclear Services (INS) Limited manages a large portfolio of UK and international contracts for nuclear fuel recycling and transport services on behalf of the NDA. INS operates its own subsidiary company, Pacific Nuclear Transport Limited (PNTL), the world's leading shipper of nuclear materials.

Over the next three years INS will increase its focus on the return of vitrified wastes to their country of origin. In addition INS will continue to provide a service to existing international companies whilst also developing opportunities for new commercial business.

#### 2011 - 2013 Key Activities

Continue management of contracts with international customers for spent fuel business

Market MOX fuel to overseas customers

Transport nuclear materials, including spent fuel, MOX fuel and vitrified High Level Waste (HLW) internationally

Renew the PNTL fleet

# NDA Draft Business Plan 2010 – 2013

## Appendices

### NDA Properties Limited

**NDA Properties Limited primarily acts as a property management company for non-operational properties outside the nuclear licensed site boundaries, in accordance with the NDA's Land and Property Management Strategy. Over the next three years, NDA Properties will continue to develop its strategic direction of travel in support of other NDA activities.**

#### 2011 - 2013 Key Activities

Agree leases of nuclear licensed sites in order to transfer property to the company  
Agree facilities management costs on particular properties to define budgets for properties to transfer  
Sell surplus land  
Benchmark occupational costs of Hinton House  
Transfer and manage the Berkeley Centre

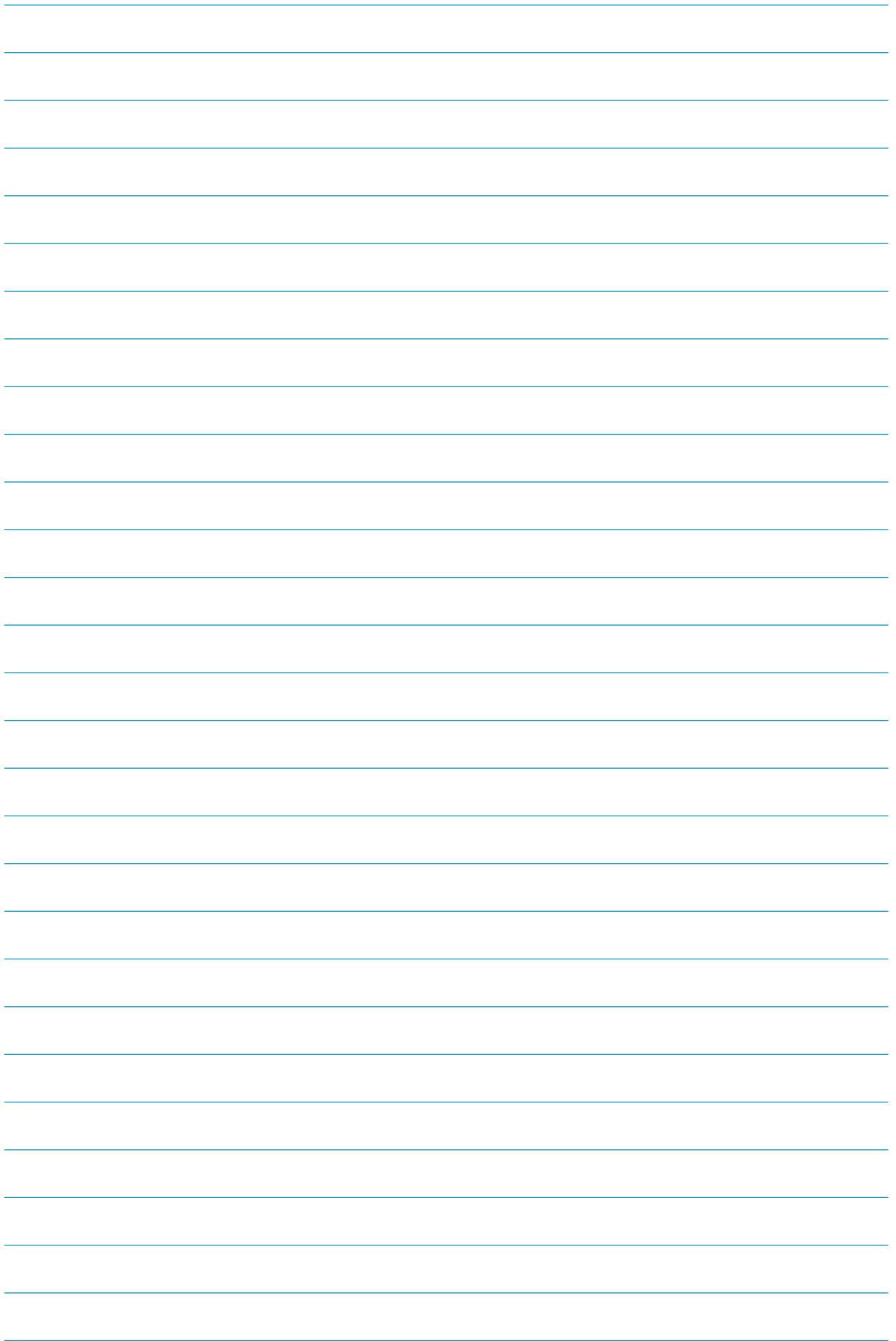
### Rutherford Indemnity Limited

**Rutherford Indemnity Limited is registered in Guernsey and is regulated by the Guernsey Financial Services Commission. The Company provides insurance cover for the NDA and its estate. Over the next three years, Rutherford will continue to focus on the provision of insurance cover, at competitive rates, to support the NDA programme, with particular focus on nuclear liability cover and provision of support for changes arising from expected revisions to the Nuclear Installations Act.**

#### 2011 - 2013 Key Activities

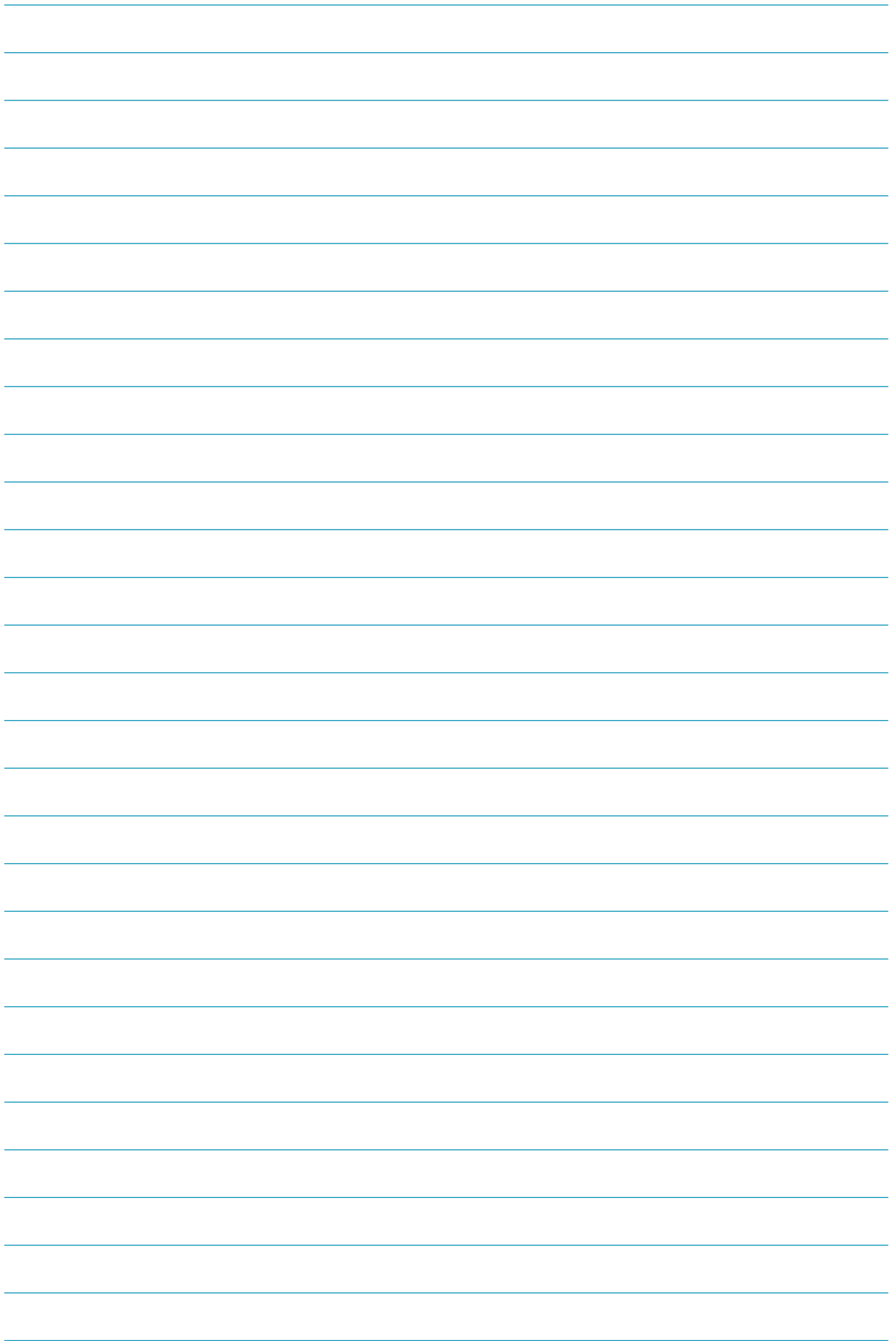
Provide insurance to the NDA to support its estate wide insurance programme  
Receive premiums and paying claims  
Manage its investment portfolio  
Manage the performance of its investment portfolio with due regard to the overall returns and associated risk assessment  
Maintain the quality of service and delivery to the shareholders and clients  
Ensure compliance with Guernsey regulations and changes relating to solvency  
Explore opportunities for supporting HMG in relation to the revised Paris/Brussels conventions











## Glossary of terms

AGR	Advanced Gas-Cooled Reactor
ASFL	Annual Site Funding Limit
BERR	Business, Enterprise and Regulatory Reform
BNFL	British Nuclear Fuels Limited
BPEO	Best Practicable Environmental Option
CCP	Cartridge Cooling Pond
CoRWM	Committee on Radioactive Waste Management
CSR	Comprehensive Spending Review
DCP	Dounreay Cementation Plant
DECC	Department of Energy and Climate Change
DFR	Dounreay Fast Reactor
DRS	Direct Rail Services
DSC	Dry Store Cells
DSSC	Disposal System Safety Case
DSO	Departmental Strategic Objective
DSRL	Dounreay Site Restoration Limited
EFQM	European Foundation of Quality Management
EIAD	Environmental Impact Assessment for Decommissioning
EOS	Electrical Overlay System
ESC	Environmental Safety Case
FED	Fuel Element Debris
GDF	Geological Disposal Facility
HAL	Highly Active Liquor
HALES	Highly Active Liquor Evaporation & Storage
HLW	High Level Waste
HSSSEQ	Health, Safety, Security Safeguards, Environment and Quality
ICP	Integrated Change Programme
iIP	Investors in People
ILW	Intermediate Level Waste
INS	International Nuclear Services
IT	Information Technology
KPI	Key Performance Indicator
LETP	Liquid Effluent Treatment Plant
LLW	Low Level Waste
LLWAM	Low Level Waste Activity Monitor
LLWR	Low Level Waste Repository
LTP	Lifetime Plan
MAC	Miscellaneous Active Component
MDU	Magnox Depleted Uranium
MoD	Ministry of Defence
MOP	Magnox Operating Programme
MOX	Mixed Oxide
MRWS	Managing Radioactive Waste Safely
MXD	Magnox Dissolution Plant
NaK	Sodium Potassium Coolant

NDA	Nuclear Decommissioning Authority
NDPB	Non-Departmental Public Body
NII	Nuclear Installations Inspectorate
NMPL	Nuclear Management Partners Limited
NNA	National Nuclear Archive
NNL	National Nuclear Laboratory
NNR	National Nature Reserve
NSAN	National Skills Academy for Nuclear
NSG	National Stakeholder Group
PBA	Parent Body Agreement
PBO	Parent Body Organisation
PCM	Plutonium Contaminated Material
PCSC	Post Closure Safety Case
PDSC	Post Defuelling Safety Case
PFR	Prototype Fast Reactor
PIE	Post Irradiation Examination
PNTL	Pacific Nuclear Transport Limited
POCO	Post-Operative Clean Out
PODSC	Post Operation Defuelling Safety Case
PRPCC	Partial Relocation of Primary Circuits Components
PSR	Periodic Safety Review
PSWBS	Programme Summary Work Breakdown Structure
PVP	Public Value Programme
R&D	Research and Development
RHILW	Remote Handling Intermediate Level Waste
RM2	Recovery Machine 2
RSRL	Research Sites Restoration Limited
SAC	Special Area for Conservation
SEA	Strategic Environmental Assessment
SGHWR	Steam Generating Heavy Water Reactor
SLC	Site Licence Company
SMP	Sellafield MOX Plant
SPA	Special Protection Area
SPP	Sludge Packaging Plant
SSG	Site Stakeholder Group
SSSI	Site of Special Scientific Interest
THORP	Thermal Oxide Reprocessing Plant
UF6	Uranium Hexafluoride
UKAEA	United Kingdom Atomic Energy Authority
VRR	Vitrified Residue Return
WAGR	Windscale Advanced Gas-Cooled Reactor
WETP	Waste Encapsulation Treatment Plant
WNMM	Waste and Nuclear Materials Management

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