

# 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.





Cover: Radioactive Waste Store at Winfrith

# Contents

Foreword	5
Introduction	7
Our Objectives	9
Our Funding	11
Strategic Themes and their Key Activities for 2010/2011	12
Appendix 1 - NDA Sites Location Map	15
Appendix 2 - The Seven Site Licence Companies (SLCs)	16
Appendix 3 - Site Summaries	17
••	17
<ul><li>Sellafield (Calder Hall, Windscale)</li><li>Capenhurst</li></ul>	17
- Chapelinust - Chapelcross	20
- Hunterston A	21
- Oldbury	22
- Trawsfynydd	23
- Wylfa	24
- Magnox North Support Office	25
- Berkeley	26
- Bradwell	27
- Dungeness A	28
- Hinkley Point A	29
- Sizewell A	30
- Magnox South Support Office	31
- Dounreay	32
- Harwell	34
- Winfrith	35
- LLW Repository	36
- Springfields	38
Appendix 4 - NDA Summary (including RWMD)	40
Appendix 5 - Planned Income and Expenditure Summary	43
Appendix 6 - NDA Subsidiary Companies	45
- Direct Rail Services Limited	45
- International Nuclear Services Limited	45
- NDA Properties Limited	46
- Rutherford Indemnity Limited	46
Have Your Say	47
Glossary	51

NDA Business Plan 2010-2013 Published by the Nuclear Decommissioning Authority 2009 Copyright © Nuclear Decommissioning Authority 2009 ISBN 978-1-905985-15-9 EDRMS doc ID: 11510021

### **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

30 November 2009 5

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.

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.

30 November 2009 7

To let us know your views you can:

Visit our website at: <a href="www.nda.gov.uk/consultations">www.nda.gov.uk/consultations</a> Email us at: <a href="mailto:businessplan@nda.gov.uk">businessplan@nda.gov.uk</a>

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 Herdus 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

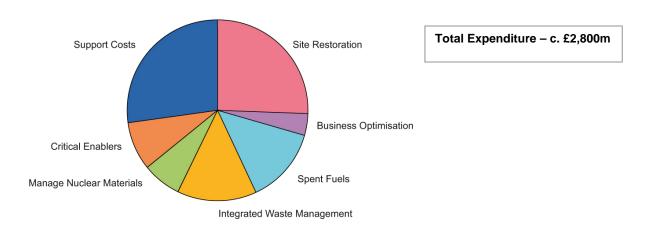
We are developing programmes of work under each of the strategic themes that will collectively cover everything we are here to deliver. Each programme of work will have clearly defined objectives, milestones and end deliverables against which performance can be measured.

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.

	Reduce hazards and liability across our estate:
SITE RESTORATION	<ol> <li>remediate hazardous materials from the legacy of early defence programmes and 1<sup>st</sup> generation reprocessing and waste handling facilities at Sellafield</li> </ol>
	<ol><li>maintain infrastructure and capability across the Sellafield site to ensure ongoing safe and effective performance</li></ol>
	3. decommission redundant facilities at Sellafield
	4. sustain operations of key supporting plants and services at Sellafield
	5. place Magnox reactors into Care and Maintenance
	6. deliver Dounreay Site to an interim end state
	7. take Harwell and Winfrith to site closure
	Maximise commercial value:
BUSINESS OPTIMISATION	8. determine commercial future of Springfields and Capenhurst
OPTIMISATION	9. dispose of NDA assets that are no longer required
	Ensure fuel is reprocessed and managed in a safe and secure way:
SPENT	10. remediate all spent Magnox fuel to a safe and secure state
FUELS	11. maximise revenue from the reprocessing of oxide fuels
	12. place all exotic fuels into a final disposition form
	Implement storage and disposal arrangements:
INTEGRATED	13. deliver a Geological Disposal Facility (GDF)
INTEGRATED WASTE	<ul><li>13. deliver a Geological Disposal Facility (GDF)</li><li>14. management of Low Level Waste (LLW)</li></ul>
WASTE	14. management of Low Level Waste (LLW)
WASTE MANAGEMENT	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW)
WASTE MANAGEMENT  MANAGE NUCLEAR	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW) 16. management of High Level Waste (HLW)
WASTE MANAGEMENT MANAGE	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW) 16. management of High Level Waste (HLW)  Deal with plutonium and uranium:
WASTE MANAGEMENT  MANAGE NUCLEAR	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW) 16. management of High Level Waste (HLW)  Deal with plutonium and uranium: 17. ensure safe, secure management of plutonium stocks
WASTE MANAGEMENT  MANAGE NUCLEAR MATERIALS  CRITICAL	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW) 16. management of High Level Waste (HLW)  Deal with plutonium and uranium: 17. ensure safe, secure management of plutonium stocks 18. optimise the value realisation of uranium stocks
WASTE MANAGEMENT  MANAGE NUCLEAR MATERIALS	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW) 16. management of High Level Waste (HLW)  Deal with plutonium and uranium: 17. ensure safe, secure management of plutonium stocks 18. optimise the value realisation of uranium stocks  Build an effective industry: 19. establish capability within the NDA and the supply chain to deliver our
WASTE MANAGEMENT  MANAGE NUCLEAR MATERIALS  CRITICAL	14. management of Low Level Waste (LLW) 15. management of Intermediate Level Waste (ILW) 16. management of High Level Waste (HLW)  Deal with plutonium and uranium: 17. ensure safe, secure management of plutonium stocks 18. optimise the value realisation of uranium stocks  Build an effective industry: 19. establish capability within the NDA and the supply chain to deliver our mission

# **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.

30 November 2009

# 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**

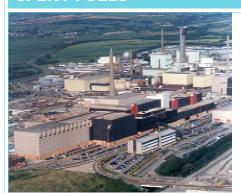


The aim of this theme is to maximise commercial value from our estate. We will focus on determining a commercial future for Springfields and Capenhurst and disposing of NDA assets that are no longer required.

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

30 November 2009

### **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.

# **Appendices**

# **Appendix 1 - NDA Sites Location Map**



30 November 2009 15\_

# **Appendices**

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

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

SITE RESTORATION Continue preparations for retrieval of the inventory

Magnox Swarf Storage Silos – complete concept design and undertake building modification works for the silo direct encapsulation plant

Pile Fuel Cladding Silo - deliver concept design for the retrievals plant

First Generation Magnox Storage Pond - construct buffer tanks to enable sludge recovery

Primary Separation Head End Plant – construct the Separation Area Ventilation Plant to facilitate removal of the stack

Complete improvement works to site electrical distribution system

Retrieve and store sludges from the Pile Fuel Storage Pond

Continue programme of asset care to ensure that ageing infrastructure of plant and buildings remains safe

# **Appendices**

	Generate revenue by reprocessing overseas oxide fuel
INTEGRATED WASTE MANAGEMENT	Receive, vitrify and store Highly Active Liquor (HAL) generated from Thorp and Magnox reprocessing  Export a portion of the vitrified HAL to overseas customers  Ongoing waste treatment activities to support both commercial operations and decommissioning  Commission the Encapsulated Product Store  Construct Evaporator D to provide additional evaporative capacity  Retrieve inventory from the flocculant storage tanks and passivate
MANAGE NUCLEAR MATERIALS	Sellafield MOX Plant – Convert overseas plutonium (Pu) to MOX fuel for export and progress options for future contracts  Complete active commissioning of Sellafield Product Residues Store  Continue the safe storage of uranium
CRITICAL ENABLERS	Sellafield Integrated Change Programme (ICP)  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:  effective working, resource mobility  project delivery improvements  support service efficiency  production optimisation  Commence scenario planning and funding profiling to support the NDA with Strategy Development and readiness for the next Comprehensive Spending Review

# 2010/2011 Regulatory Matters

Regulatory oversight and approval of authorisations for:

- environmental discharges
- decommissioning and demolition

### **Appendices**

### 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

30 November 2009 19

### **Appendices**

### **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 Ac4-214EMC43

### **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 m³) 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

30 November 2009 21

### **Appendices**

### 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

### 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

### **Appendices**

### 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

30 November 2009 23

### **Appendices**

### 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

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

# **Appendices**

# **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

### **Appendices**

### **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

### **Appendices**

### 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

30 November 2009

### **Appendices**

### **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

### **Appendices**

### **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

30 November 2009 29

### **Appendices**

### 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

# **Appendices**

# **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

30 November 2009

### **Appendices**

### **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**

	Description of Activities, whiestones of Performance indicators
SITE RESTORATION	Complete integration and active commissioning of Fuel Cycle Area ventilation system  Complete active commissioning of new rationalised ventilation system at Prototype Fast Reactor (PFR)  Complete 50% of bulk Sodium Potassium (NaK) destruction at Dounreay Fast Reactor (DFR)  Complete Reactor projects amalgamation programme  Optimise Lifetime Plan (LTP) to improve hazard reduction focus and integrated support
INTEGRATED WASTE MANAGEMENT	Complete sanction and validation for Phase 1 of new LLW facility  Complete enabling work for the shaft and silo waste treatment plant  Commence scheme design for the shaft and silo waste treatment plant  Complete Phase 4 Pre Construction Safety Case Review design of Remote Handling  Intermediate Level Waste (RHILW) immobilisation and encapsulation facility  Encapsulate100 m³ of highly active liquors in cement at the Cementation Plant (DCP)  Continue immobilisation, encapsulation and storage of wastes through Dounreay
MANAGE NUCLEAR MATERIALS	Commence removal of irradiated sub-assemblies from PFR Pond
CRITICAL ENABLERS	Continue to progress the Project Management Improvement Programme and Dounreay Management Plan to drive business improvements  Work collaboratively with other SLCs' to achieve early offsite transfer of fuels and to share approaches to decommissioning and portfolio management  Commence scenario planning and funding profiling in advance of Comprehensive Spending Review (CSR) demands to assist NDA estate wide rationalisation

### **Appendices**

# 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	Commence preparations for the removal of Breeder Fuel from DFR Complete grouting of redundant sub sea effluent discharge pipeline and diffuser Complete strip out and decontamination of Post Irradiation Experimentation facility cave structure Commence cleaning and decommissioning of redundant D1209 duct. Continue safe bulk NaK destruction at DFR until programme completion Commence offsite transfer of de-clad breeder fuel from Fuel Cycle Area Drain and decontaminate DFR Pond ready for demolition Demolish Materials Test Reactor (MTR) fuel reprocessing facility to floor slab level Demolish post irradiation examination facility to floor slab level Demolish redundant active laundry to floor slab level Start operation of new site active laboratory replacing D1200 facility Complete next phase of offshore particle retrieval and coverage programme Demolish redundant D1207 LLW facility to slab level
SPENT FUELS	Commence removal of irradiated fuel sub-assemblies from PFR Pond  Continue to liaise with other SLCs to ensure early offsite transfer of fuels to mitigate the long term requirements for onsite storage and security
INTEGRATED WASTE MANAGEMENT	Commence construction of the new Remote Handling Intermediate Level Waste (RHILW) immobilisation, encapsulation and storage facility  Complete enabling works and scheme design for Shaft and Silo Waste Treatment Plant  Start construction of Phase 1 of new LLW facility

30 November 2009

### **Appendices**

### 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 delicence 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

### **Appendices**

### 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

30 November 2009

### **Appendices**

### **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 Final refinement of the Environmental Safety Case prior to submission to EA in May 2011 Initiate a project to significantly improve LLW waste forecasts across the estate 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

Report to Cumbria County Council in line with Vault 9 planning consent to demonstrate diversion of waste through the Segregated Waste Services

Complete Post Operational Clean Out (POCO) of secondary Plutonium Contaminated Material (PCM) facilities

Implement new consignor contracts

Introduce new LLW packaging containers for improved efficiency

Collaborate with other consignors/SLCs to implement national solutions

### 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

# **Appendices**

# 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

30 November 2009

#### **Appendices**

#### **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**

# Transfer the commerci Negotiate a long lease OPTIMISATION Springfields' workforce Transfer the commerci Negotiate a long lease Defer site closure to re

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

Transfer the commercial business and staff from the NDA to Westinghouse

Negotiate a long lease providing an income stream to the NDA

Defer site closure to reduce NDA decommissioning spend on in the near term with no increase in NDA liability

Westinghouse to assume liabilities arising after the date of transfer while the NDA will retain historic liabilities

Westinghouse to have the freedom to invest in the site enabling them to develop a long term employment opportunity

.MANAGE NUCLEAR MATERIALS 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

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

Westinghouse will continue to develop the business opportunities for the site Honour customer contracts for AGR fuel supply, uranium hexafluoride and uranium dioxide products for UK and Overseas customers

Westinghouse will continue to develop the business opportunities for the site

## 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.

# **Appendices**

# 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

30 November 2009 39

## **Appendices**

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

#### **Appendices**

INTEGRATED
WASTE
MANAGEMENT

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

## MANAGE NUCLEAR

Complete draft uranic topic strategy by June 2010

#### NUCLEAR MATERIALS

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:

#### • implement a new UK-wide programme of stakeholder engagement

- · review estate-wide communications and stakeholder engagement capability
- develop stakeholder engagement plans that involve the SLC communications teams as partners

Continue to actively support the agencies and organisations that are accountable for economic development and social regeneration. Specifically we will:

- 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
- support priorities identified by the development organisations, including inward investment opportunities, creation of local jobs and skills development

ENABLERS

## **Appendices**

#### 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

# **Appendices**

Appendix 5 – 2010/2011 Planned Income and Expenditure Summary

£m		Decomm & Clean-up Costs		erations sts	Total Cost D	2009/2010 Plan
Sites		A	Running Cost B	Capex C	(A+B+C)	
	Berkeley	20			20	40
	Bradwell	36			36	30
Magnox South	Dungeness A	40			40	37
Limited	Hinkley Point A	38			38	36
	Sizewell A	44			44	38
	Magnox South Support	33			33	32
	Chapelcross	53			53	55
	Hunterston A	47			47	47
Magnox North	Oldbury	1	61	5	67	79
Limited	Trawsfynydd	56			56	50
	Wylfa	1	97	1	99	95
	Magnox North Support	25			25	21
Electricity Trading	Electricity Trading		52		52	58
Research Sites Restoration Ltd	Harwell and Winfrith	62			62	60
Dounreay Site Restoration Ltd	Dounreay	166			166	157
0 11 5 11141	Sellafield and Calder Hall	512	453	226	1,191	1,175
Sellafield Ltd	Capenhurst	19			19	19
	Windscale	23	9		32	32
LLWR Ltd	LLWR	34			34	37
Springfields Fuels Ltd	Springfields	137	207	13	357	328
Nuclear Transport and Contract Management	International Nuclear Services		78		78	78
Non-site expenditure		226			226	284

2848

# **Appendices**

# 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
Total	225.5	285.7

## **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

30 November 2009 45

#### **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

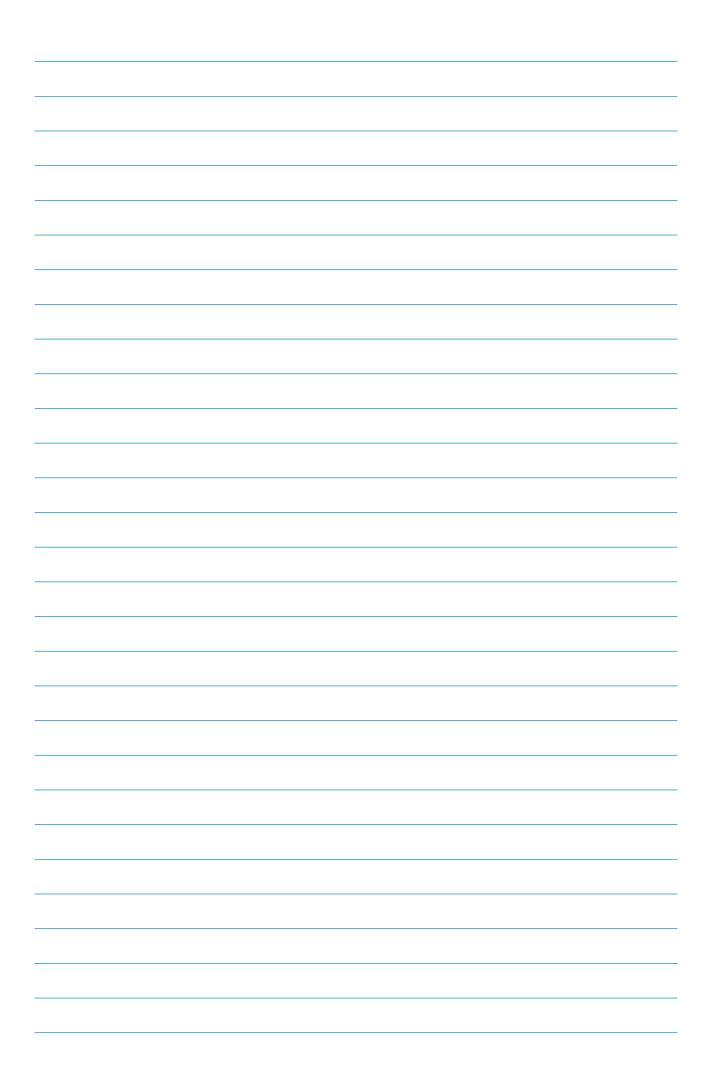
Manage the performance of its investment portfolio with due regard to the overall returns and associated risk assessment

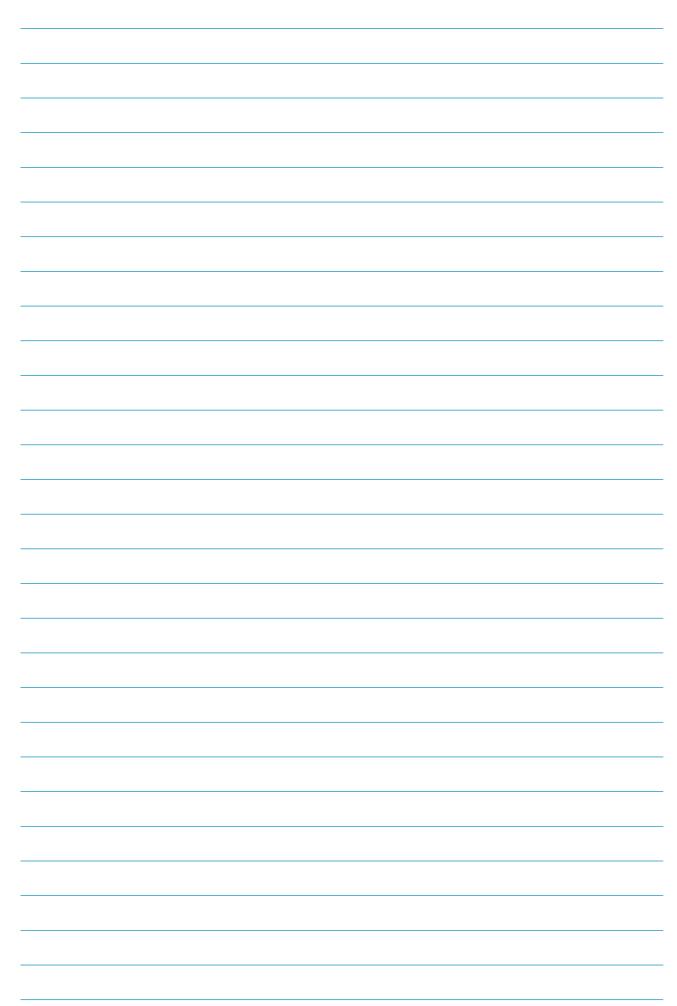
Maintain the quality of service and delivery to the shareholders and clients

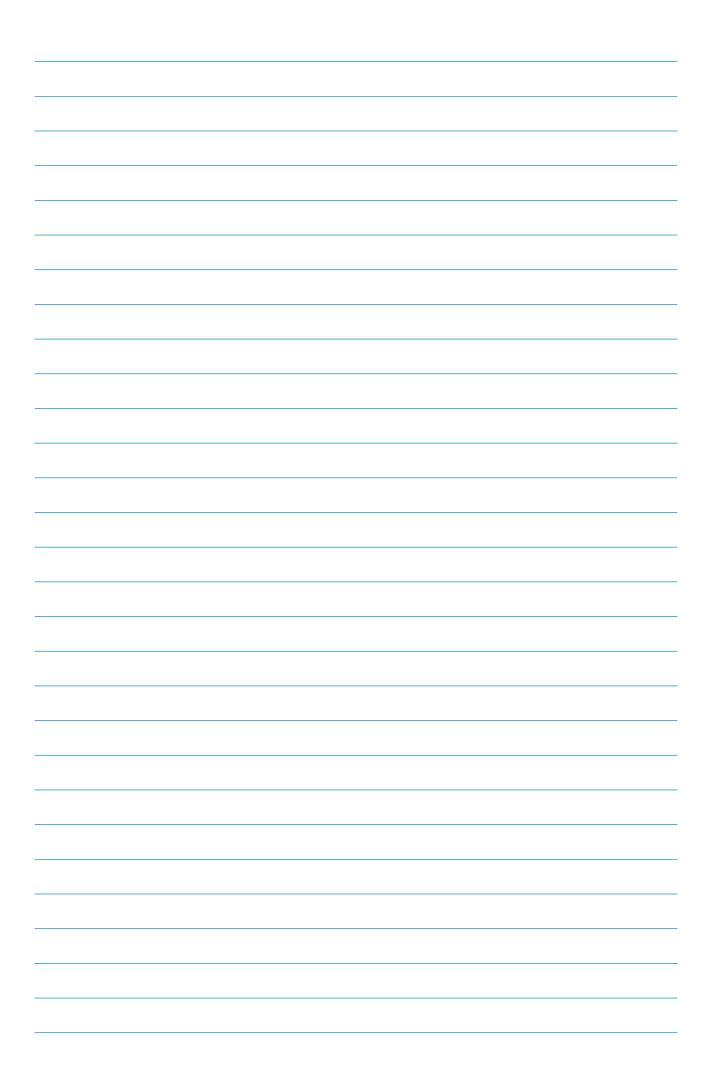
Ensure compliance with Guernsey regulations and changes relating to solvency

Explore opportunities for supporting HMG in relation to the revised Paris/Brussels conventions

Have your say		







# 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		
001111111	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		
liP	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		
INCIN	Journal Otassium Oodam		

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			
VVINIVIIVI	Waste and Nuclear Materials Management		

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